

## IPPC MEPA Audit for DPS Installation: Enemalta Response (May 2011)

Main Permit Section	Sub – section(s)	Details of Non Conformance	Risk Rating	Enemalta Remarks (May 2011)	Action by
<b>1.4 – Overarching Management Condition</b>	1.4.6 & 1.4.7 & 2.12	Junior staff carrying out maintenance/ calibration procedures have received training from staff who had attended original training courses provided by the systems providers but nothing documented and no training records were available	Category 2 Significant	Two Engineers were sent abroad for training direct from supplier. Certificates of this training has been provided. All works by maintenance employees on CEMS is done under the direct supervision of these two engineers.	
	1.4.6 & 1.4.7 & 2.12	Improvements in the recording of calibration and maintenance events needs to be undertaken and these elements relating to the operation of the CEMS should form a crucial element of the EMS system	Category 2 Significant	DPS to include within the EMS an SOP procedure/s for the CEMS operation, maintenance & calibration	within 3 months
	1.4.6 & 1.4.7 & 2.12	A system to record the dates when calibration gases are due to expire needs to be implemented within the EMS to ensure gases are within date and new gases ordered well in advance to ensure gases are always available.	Category 2 Significant	This has been included within recommended SOP..	
<b>1.6 – Operational Changes</b>	1.6.1 & 1.6.2	In 2010 tests using Satamin 3121 additive were undertaken. These tests were not discussed with or agreed with MEPA prior to being undertaken and the MSDS shows this material to be classified as dangerous to the environment	Category 2 Significant	In 2010 a two day trial using Satamin was conducted. Satamin is a combustion improver and trial was carried out to see the effect of this on dust and NOx emissions. DPS will provide further details regarding this test	within 3 months
<b>2.2 – Emissions to Air</b>	2.2.6.5	Enemalta should ensure that the report indicating the technical difficulties in carrying out continuous monitoring from DPS2 & 3, together with their proposed method for complying with the monitoring requirements in the Large Combustion Plants Directive, is forwarded to the Ministry for onward transmission to the Commission as soon as possible, in view of the ECJ ruling on this matter. This report should include an assessment from a suitably qualified structural engineer regards the reasons why	Category 2 Significant	DPS report on technical difficulties to install CEMS on stacks D2 & D3, has already been submitted to the Government Authorities	

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		larger stacks cannot be supported.			
	2.2.7	The emissions report covering the discontinuous testing for dioxins, metals and PAHs contained a number of errors which did not satisfy the requirements of the permit in terms of date of testing after permit issued, sampling periods, standard reference conditions and laboratory accreditation.	Category 2 Significant	DPS shall communicate with the contractor on the problems identified in the report.	within 6 months
	2.2.8.1	A sampling system to allow moisture to be determined continuously is required in order to allow a dry gas volume flow to be calculated and used in the mass release calculations.	Category 2 Significant	Discussions with MEPA are ongoing on this problem as part of the NEC working group.	
	2.2.9.1	Annual releases of SO <sub>2</sub> and NO <sub>x</sub> exceeded the total emission ceiling values in 2010. The mass releases may however have been overestimated using a wet gas flow measurement (see 2.2.8.1 above)	Category 2 Significant	Discussions with MEPA are ongoing on this problem as part of the NEC working group.	
	2.2.9.2.2 & 2.2.9.2.3	No quarterly projection reports were issued in 2010	Category 2 Significant	These will be submitted	within 3 months
	2.2.10.1	The AER was not fully completed for 2010. Although Enemalta may have provided the actual emission data in other returns, the AER Forms S2.4.2.1 & S2.4.2.2 still need to be completed for compliance with this permit condition	Category 2 Significant	We understand that this refers to the 2009 AER (see page 17), where we had indicated that the referred data was submitted in our monthly reporting. However, this data will be submitted and included in the 2010 report.	within 3 months
	2.2.11.1 & 2.2.11.2	CEMS need to be subject to parallel measurements with a reference method at least every year. Original QAL 2 tests were carried out October and November 2008 and the next AST more than a year later (March 2010). This year's AST had been undertaken prior to the audit.	Category 3 Minor	Regular annual measurements will be carried out. The discrepancy noted in the audit was a one off occurrence in order to bring MPS and DPS annual tests at the same time so that only 1 visit by Ecochimica annually is required.	
	2.2.11.1 & 2.2.11.2	Monitoring for SO <sub>2</sub> in the original QAL2 tests was not carried out in accordance with the standard reference method (SRM) stated in Table 2.2.11. Evidence needs to provided that the	Category 2 Significant	DPS to provide evidence from the contractor that the equipment and method actually used (Horiba/UNI 10393:1995) provide	within 3 months

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		method actually used provides the same performance standards as the SRM for compliance with EN 14181.		the same performance standards as the standard reference method EN 14791 for compliance with EN 14181 requirements	
<b>2.9 – Odour</b> <b>2.12 – Management &amp; Technically Competent Person</b>	2.9.1 & 2.12.7	The complaints handling procedure needs to be improved to ensure any complaints relating to environmental issues, including odour, are forwarded to the appropriate regulatory team to log and investigate.	Category 2 Significant	Customer Care report all such complaints to the Regulatory Affairs Office as part of their standard procedure. RAO subsequently report these to the relevant management and monitor follow up actions	
<b>2.5.5 – Discharges to Marine Waters – Other Conditions</b>	2.5.5.8	Tanker connection points are required to have adequate protection coupled with appropriate containment of any spills.	Category 2 – Significant	Actually 2.5.5.8 relates to ‘other materials’ and not to fuel. The IPPC requirement in 2.5.5.5 is that the connections are certified to be leak proof every three years, whereas we carry out such certification annually	
	2.5.1.7	COD has failed the Compliance Limit.	Category 3 - Minor	COD measurement method as per IPPC requirement is not suitable for marine (sea) waters, resulting in meaningless results. Discussions with MEPA are ongoing.	
	2.5.3.4	pH, temperature and AOX have not been recorded to date.	Category 3 - Minor	Plans are in hand to record pH & temperature continuously. AOX (Adsorbable Organic Halides are considered inappropriate and discussions with MEPA are ongoing.	Within 6 months
<b>2.8.1 – Waste Storage &amp; Handling</b>	2.8.1.1	Some of the boiler residue containers were stored in open topped IBCs and steel drums that had been left uncovered and this could potentially give rise to the generation of contaminated dust or wash-out following period of heavy rain.	Category 3 - Minor	DPS shall ensure that such wastes are appropriately covered at all times.	
<b>2.8.2 – Waste Disposal &amp; Recovery</b>	2.8.2.8	As above.	Category 3 - Minor	DPS shall ensure that such wastes are appropriately covered at all times.	
	2.8.2.28	Summary records did not appear to match the actual	Category 4 – No	DPS shall ensure that records are updated &	

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		consignment note records.	environmental effect	cross-referenced appropriately.	
	2.8.2.29	The waste AER had not been completed.	Category 4 – No environmental effect	Data for waste in the AER for 2010 is ready and will be submitted shortly.	Within 3 months
<b>2.5.5 – Discharges to Marine Waters – Other Conditions</b>	2.5.5.9	In addition to the manual checks at transfer and inspections the bulk fuel storage tanks should also be fitted with a high level probe and alarm for hazard warning purposes.	Category 2 – Significant	Currently DPS has a system of alarms based on level transmitters.	
<b>2.11 – Noise and Vibration</b>	2.11.1.1	Full planned preventative maintenance is not established across the site.	Category 3 – Minor	DPS has a maintenance programme to cover major generating equipment. Furthermore major equipment is assigned to the responsibility of a maintenance engineer. Minor equipment is maintained together with the major equipment it serves or on fault.	
	2.11.1.2	The doors to acoustic enclosures were left open which enabled noise breakout which contributes to any overall noise impact at local noise sensitive receptors.  Roller shutter doors were left open enabling noise breakout from the building and contributing to the noise impact at local noise sensitive receptors.	Category 3 – Minor	DPS shall introduce appropriate measures so that acoustic enclosures and doors are always closed	Within 3 months
	2.11.1.4	2.11.1.4 No periodic checking of environmental noise levels.	Category 3 – Minor	DPS will study the possibility of introducing periodic noise checks at particular points around the installation.	Within 3 months
	2.11.3	No periodic checking of environmental noise levels to ensure that background noise levels are not exceeded by 5dB.	Category 3 – Minor	An annual noise survey by third party inspector is already being carried out.	
	2.11.4	No annual environmental noise surveys have been carried out to date.	Category 3 – Minor	A Noise Survey was carried out in 2008 at IPPC application stage. Following issue of permit in March 2010	

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				surveys were carried out in 2010 & in 2011 and records are available.	
<b>2.12 – Management (Maintenance)</b>	2.12.5	The current levels of planned maintenance at the site do not cover all plant areas and therefore cannot accurately show compliance.	Category 2 – Significant	DPS has a maintenance programme to cover major generating equipment. Furthermore major equipment is assigned to the responsibility of a maintenance engineer. Minor equipment is maintained together with the major equipment it serves or on fault.	
	2.12.6	Written maintenance programmes have not been developed to cover all aspects of plant at the site	Category 2 – Significant	DPS has a maintenance programme to cover major generating equipment. Furthermore, major equipment is assigned to the responsibility of a maintenance engineer. Minor equipment is maintained together with the major equipment it serves or on fault.	
<b>2.13 – Energy Efficiency</b>	2.13.2.1	Existing maintenance inspections and procedures do not fully meet the requirements of this clause.	Category 3 – Minor	Same as above	
	2.13.2.5	A formal energy audit of the installation should be undertaken. The information obtained would provide the baseline for the implementation and maintenance of the energy efficiency plan and could be managed through the EMS. Energy audit will also assist with compliance to 2.13.2.2/ 2.13.2.3/ 2.13.2.4.	Category 3 – Minor	This recommendation does not form part of the permit, however it will be considered.	within 1 year
<b>1.5 – Improvement Programme</b>	1.5.1 - Ref 3	Failure to submit land-monitoring data (Site Condition Report) within the specified timescale.	Category 3 – Minor	This is part of the Decommissioning plans requirement.	within 6 months
	1.5.1 – Ref 4	Failure to submit ‘Outline Decommissioning Plan’ within the specified timescale.	Category 3 – Minor	Plans for the issue of an appropriate tender for expert consultants on the subject commenced in 2008. 1 <sup>st</sup> tender issue (GN/MPS/T/80/2008) resulted in no bidders resulting in a 2 <sup>nd</sup>	
<b>2.16 – Closure &amp; Decommissioning</b>	2.16.1	Failure to submit ‘Outline Decommissioning Plan’ within the specified timescale.	Category 3 – Minor		

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	2.16.3	Failure to submit land monitoring data (Site Condition Report) as specified within this section of the permit.	Category 3 – Minor	revised tender (RFP GN/MPS/T/6/2010) being issued. Following the necessary approvals from Dept of contracts, the tender was awarded in March 2011. Work is in now progress and discussions with MEPA are also ongoing.	

### Additional Observations by Auditors, which have not been listed as non-conformities

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<b>7.3 (IPPC 2.3) – Emissions to Sewer</b>	2.3	Enemalta are currently compliant with respect to section 2.3 – Discharges to Sewer of the IPPC Permit. However, the Sewer Discharge Permit does stipulate additional operating conditions that are required by no later than the 4th February 2012, failure to implement these conditions would also represent a non-conformance with the IPPC Permit.	No non-conformances were identified during the audit.	The Sewer permit is renewed annually. DPS will sample & test sewage discharge (as was done for the application) at the renewal stage of the permit.	
<b>7.5 (IPPC 2.5) - Emissions to Marine environment</b>	Discharge from point 4	When reviewing the drainage plan DPS/XZ/45 it was also noted by site representatives that the location of some of the drainage pipes were not marked such as the connection from the HFO tank farm to the HFO tank farm separator	No non-conformances were identified during the audit.	checks on drawing will be carried out.	within 3 months
<b>7.9 (IPPC 2.9) - Odour</b>	compliance summary	It is recommended that the Operator consider the implementation 'odour management procedures' as a standardised method of handling any future complaints they may receive with respect to odour generated from on-site sources. This procedure should form part of the EMS.	No non-conformances were identified during the audit.	Enemalta shall consider how best to implement this recommendation.	within 6 months

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<b>7.10 (IPPC 2.10) – Emissions to land</b>	Bulk storage & fuel transfer	Pipework routed outside of bunded areas (gasoil storage tanks) with penetration of contained surfaces. The bunds of both the HFO and gasoil tanks at some point have both had pipelines placed through the bund wall and not over it (albeit seals have been put in place)	No non-conformances were identified during the audit.	The design & construction of fuel pipelines from storage tanks were carried out according to good engineering practice.	
<b>7.14 (2.14) – Accident prevention &amp; control</b>	Compliance summary	Enemalta have produced a Safety Report and Emergency Plan in relation to the obligations stipulated within the COMAH Regulations. The Emergency Plan has, as BAT requires, been introduced as the requirements for Accident Prevention & Control in relation to IPPC. <i>However, the nature and content of the COMAH documentation should be subjected to a separate formal audit to identify compliance or any non-conformances in relation to both the IPPC and COMAH regimes.</i>	Only upon completion of a formal compliance audit, undertaken by competent experts with respect to the Control of Major Accident Hazards, will it be possible to confirm any non conformances in relation to section 2.14 – Accident Prevention and Control of the IPPC Permit.	The Safety Report, Emergency Plan and other related documentation are regularly audited by the competent authorities, namely the OHSA, MEPA & CPD. Hence, we do not see scope for additional auditing.	

***Other Minor Observations:***

Page 11 of IPPC Audit Report:

- Environmental Policy Manual should read ***Environmental Management System Manual***
- Environmental Aspects Assessments (direct & indirect) should read ***Environmental Aspects Registers*** (direct & indirect).