



EnerSys Newport
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Annual Review of Scorecard Environmental Business Objectives for 2015

In 2015 three top level environmental objectives were identified as drivers for the company's management systems covering Environmental issues. These were:

- **Scrap reduction < 2.7% cost of production**
- **Energy reduction: 3% electricity use reduction in comparison with 2014 (KwH of electricity used/Ah of the blocs through formation).**
- **Regulatory Compliance: No environmental breaches**

The scrap reduction target was met with only two months, May and June being above budget. However, both the energy reduction and regulatory targets were not met. Electricity consumption figures were above target for 9/12 months. This has not been helped by the downturn in production. Also two environmental breaches occurred in 2015, so the regulatory compliance target was missed. These are the A4 grey oxide blower breach in January 2015 and the resin fire in Stores on November 14th. See section 12 for more details.

Annual Review of Environmental Issues 2015

1. Environment, Health and Safety Department Resource

As of early 2016, the EHS department has merged with the Quality department. EHS team members, will become cross functional in taking on all aspects of EHS, and will now be area based as follows:

- **Metallics** – Peter Dunn
- **Blocs** – Joel Goodchild
- **Logistics** – Paula Terrett
- **Technical** – Gavin Thomas / James Chivers

Quality staff will also be trained in EHS skills so that they become multi skilled across the QEHS function.

As of December 31st 2015 there were 365 EnerSys employees across Stephenson St and Nashmead. Generally both sites work a two shift pattern, with some variations, for example hybrid shifts etc. Neither site operates a 24/7 shift pattern following a downturn in orders towards the end of 2015.

2. Training – Environmental training has taken place at different levels throughout 2015. As follows:

- **Waste Duty of Care** – Completed by Chemtech for 4 employees.
- **Carriage of Dangerous Goods** – Completed by Chemfreight DGT for 10 employees.
- **ISO 14001:2015 Update** – Completed by TSW for 9 employees
- **Sustainability Training** – Completed by Ramboll Environ for 24 employees
- New starters receive environmental training as part of their induction. This is currently delivered via a VOCAM Environmental Awareness video with question and answer sessions.



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3. **Communication and Complaints from External** We have not made or received any official complaints about our neighbours regarding their working practices over 2015. Communication on an informal basis between EnerSys and Tradebe continues to be in place.

4. **Emergency Preparedness and Response**

From a Seveso/COMAH perspective we now carry less than 100 tonnes of lead on site and are therefore out of the scope of COMAH. This has been achieved by tighter oxide management, increased waste removal trips and the slowing down of production volumes. We continue to monitor all lead inventory closely.

We are required to provide an updated accident management plan to NRW by May 31st and it was agreed with EMEA group that it would be best practice to follow the COMAH MAPP approach for writing the accident management plan.

The emergency services were required on site in November to react to the stores fire caused by overheated resin. The exact cause of the overheating is believed to be due to an electrical fault in the cabling to a heater and the forensic insurance expert has not communicated any more exact root cause. In order to prevent reoccurrence a purpose built chemical storage cabinet suitable for storing all resins and glues has been purchased which will be positioned outside the Waste Management Area. This will be installed in March 2016.

5. **Changing Circumstances**

Over 2015 the order book has declined resulting in two rounds of redundancies totalling 130 people losing their jobs. At the end of 2015 the order book did not show any signs of returning to previously seen levels. The plant was running at approximately 11000blobs per week at year end.

6. Legislation Changes

Legislative review was carried out in May 2015 by external consultants. Findings and actions are below. Next annual legislative review will be May 2016.

Legal Register Actions May 2015			
Number	Classification	Finding	Corrective Action
1	Major	Review the Site Condition Report to ensure that it has been updated with current operational processes on site.	Completed and submitted - next due in 4 years so 2018
2	Major	The site should develop a plan to manage runoff water produced when the fire service extinguishers a fire. Please refer to PPG 18 Managing fire water and major spillages.	This will be included within the Accident Management Plan, submission date May 31st 2016.
3	Major	As required by the permit IC9 the site should develop a flood risk plan by assessing the risk of flooding and adopting appropriate measures to reduce the risk of contaminated flood water.	Flood Conditions Report and Assessment completed in 2015. Assessed as low risk in report. Passed to insurers.
4	Major	An air conditioning inspection should be undertaken every 5 years if it is proven that the comfort cooling capacity exceeds 12kW.	Completed - Maintenance arranged with specialist contractor. Annual inspections also completed.
5	Minor	The site should undertake a documented formal review of BAT and BREF guidance and industry best practice in order to identify areas where BAT is not being applied and to inform the improvement plan for the site as to new techniques that can be adopted. This is a requirement of 4.1.6.	BAT Conclusions and Lead and Tin section has been reviewed by P. Terrett and A. Bentley. Need to document the review.
6	Minor	EnerSys should continue to revisit the COMAH issue and reconsider whether registration is required. This review should include discussions with the Industry Body as to a common approach to COMAH in the battery	Lead inventory is now consistently less than 100 tonnes so not covered by Seveso.
7	Minor	To ensure the site is always compliant with duty of care, the site should review the waste table quarterly to see which licences and annual waste transfer notes are out of date.	Being completed every 3 months and included within the procedure.
8	Minor	The site should review the EWC and ensure the correct EWC code is being	To be done annually, next due 2016.
9	Improve	Ensure run time measuring is made more accurate through using electric sub meters.	Unable to do, not all equipment has electric sub metering so need to continue using hourly run meters.
10	Improve	The ISO14001 monitoring procedure is robust in terms of the monitoring required for the permit. However, it does not address monitoring of Packaging Regulations.	Included within the procedure in table format
11	Improve	EnerSys should consider undertaking more regular internal audit of legal compliance areas. This would include waste, refrigerants, packaging, CCA, permit, monitoring etc.	Complete - audit schedule has been changed to review legal compliance documents once a year, not every 3 years
12	Improve	EnerSys should look to undertake duty of care audits at contractor site, looking at hazardous wastes first.	Included within Supplier Audit procedure, waste duty of care visits are completed.

7. **EHS Sub-Committee Performance** – The plant EHS committee met on ten occasions in 2015. The sub-committees have met throughout 2015 also. However, some have been sporadic and this needs to improve in 2016. EHS sub committee meeting occurrence will form part of the Plant Meeting discussions. The sub-committees also complete their own fortnightly walk around using the high level audit sheet. The results of the two poorest scoring high level audits are discussed at the plant meeting. The target score for all audits is 90% or above.

- 8. ISO Audit Actions** – An ISO14001 (Environmental) audit was completed on the 28th to the 30th of September. In summary the auditors raised five category 3 findings (observations) and one category 2 finding (minor non conformance).

The findings are as follows:

Finding Ref.	Clause Ref.	Finding	Category Code
JLSM1501	4.4.6	A couple of used old trays have been stored outside on the ground without any facility to prevent contamination of the sewer due to rain.	02
JLSM1502	4.3.1	Consider to review the fire risk assessment to include ATEX directive requirement for activities which use gases	03
JLSM1503	4.4.6	The status of paper separators waste, labelled as Hazardous signs when arrived new, which is not considered as hazardous waste	03
JLSM1504	4.5.1	The site manages a lot of environmental metrics and environmental data. Site would consider developing more detailed analysis process to strengthen continuous improvement. As example, water consumption per ton of production	03
JLSM1505	4.3.2	Consider early adoption of the new ISO 14001 standard requirement for Life Cycle Analysis in the Design and Development activities	03
JLMS1506	4.4.6	Consider to include the 400l Methanol Mixture storage in the retention bunds periodic check and protecting the rainwater drain next to that storage.	03

The next audit in September 2016 will be carried out against the new version of the 14001 standard (2015). We will then have a list of actions necessary to comply with the new requirements and a further two years to close them all out. The four areas of most change are:

- **Demonstrating Environmental leadership and commitment from the top of the organisation.**
- **Understanding the business context – internal and external factors that will affect the business eg. Economic, technological or legal and the risks and opportunities they pose.**
- **Communication with stakeholders – customers, neighbours, employees.**
- **Lifecycle perspective – from Design to End of Life Treatment and Disposal.**

9. Natural Resources Wales (NRW) Actions

New site inspector Rebecca Green was appointed to oversee our site.

10. Internal Audit and Corrective Actions – Eight internal audits were completed on environmental procedures in 2015. Thirteen environmental corrective actions were raised in 2015, including those relating to findings of ISO 14001 audits as detailed above.

11. Improvement Projects – Eighteen new projects were raised in 2015. These were:

Improvement Project	No.
Energy Lighting Replacement LED	<u>193</u>
External Chemical Storage	<u>192</u>
Front Office Boiler Replacements	<u>191</u>
DSEAR (ATEX) Assessments	<u>190</u>
Sustainability Training	<u>189</u>
Lead Inventory Control to less than 100 Tonnes (Seveso/COMAH)	<u>188</u>
Marketing/Branding Exercise at EnerSys Newport	<u>187</u>
10 year 35°C FT Telecom Battery (EU-15-019)	<u>186</u>
High Cyclic FT telecom Battery (EU-15-020)	<u>185</u>
LEV Improvements	<u>184</u>
Reduction in Opportunity for Fugitive Emissions C1	<u>183</u>
Improvement to Road Markings on Site	<u>182</u>
Improved Fencing to Sub Stations on Site	<u>181</u>
5S Stores (Warehouse)	<u>180</u>
ESOS Energy Audit	<u>179</u>
Interceptor Discharge to Controlled Water Improvements	<u>178</u>
Lead Storage Canopy	<u>177</u>
Mezzanine Floor Clear Up	<u>176</u>
Improvements to Ladder Control	<u>175</u>
Supplier IMS System Improvements - Questionnaire & Audits	<u>174</u>
Introduction of Racking Inspections	<u>173</u>

12. Specific Environmental Issues –

Permit Reporting

- **Air Emissions** – The annual ambient lead in air for the downstream monitor of the site over 2015 was 0.19ug/m³ (within the consent limit of 0.25ug/m³). The upstream monitor measured an average of 0.07ug/m³ over 2015. Both results are lower than those reported in 2014.

There were two breaches in 2015. The first breach occurred in January and was caused by A4 (grey oxide blower). This breach occurred due to wires of the metal filter bag frame breaking and piercing filter bags. The filter bags were subsequently changed (which usually occurs on a four month PPM basis). An additional instruction has been added to the check sheet that contractors use to assess the filter bags and associated equipment when they complete the four month PPM. All of the

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information was reported to the regulator Natural Resources Wales (NRW) on a Schedule 1 Notification and they accepted the corrective actions we had put in place.

The second breach was caused by the Fire in Stores which occurred on November 14th. NRW were informed of the fire immediately by Emergency Services and came to site the following week to view the seat of the fire and to assess how we were managing the aftermath. Again a Schedule 1 notice was submitted. NRW requested a copy of the final investigation report which was provided. They accepted our corrective action to purchase a purpose built chemical storage cabinet and to position it outside of the Stores building.

- **Emissions to Sewer and Controlled Waters** – There were no emissions to controlled waters (reen) outside of the consent limits. A test conducted by DETS for sewer emissions was below the consented pH of 6.0 and this was reported to Welsh Water. All of Welsh Waters own sample results were within their consent limit, as were our internal sample results. In future NRW have requested that any results outside of the parameters on the consent be reported to them as the regulator as well as Welsh Water, this had not been the previous understanding. This has now been agreed with our NRW Inspector and will be done for 2016 onwards.
- **Groundwater** - Testing was completed on April 23rd 2015 and results showed that only one groundwater sample was above the European Quality Standard (EQS) for lead of 25ug/l. This was situated behind Pasting at the rear of the site (BH01) and measured 100ug/l. CAR14/15E was raised to cover this issue reinforcing that no lead bearing equipment should be stored outside. Groundwater testing across site is completed annually so will next be completed in April 2016 and the results submitted to NRW by June 30th 2016.
- **Soil sampling** - will take place in 2017 as part of the Industrial Emission Directive requirements.

ESOS – Energy Savings Opportunities Scheme Audit completed and submitted by December 5th.

Numerous energy saving opportunities for Stephenson Street and Nashmead sites were identified by RUMM and EnerSys during the audit process. These are driving the energy reduction projects for 2016 across site. Also key to energy improvement in 2016 will be behaviours – turning equipment off and ensuring the shutdown lists are being followed. These opportunities have arisen again as we are no longer running 24/7.

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The historical permit variation changes, proposed acid dilution plants, consent limit change for A4 lead emissions, changes to stack emission testing frequencies for the oxide mills and addition of chips into the concast process will form the basis of the permit variation to be submitted in 2016. This has taken longer than anticipated due to the downturn in production volumes and the reduction in Engineering projects initially proposed for the Newport site.

So, Environmental priorities for 2016 are:

1. No environmental compliance issues – breaches in 2016.
2. Approval of permit variation – historical changes, stack emission testing frequency changes, consent limit change for A4 grey oxide blower stack, addition of two acid dilution plants, new chips into concast process.
3. Energy reduction projects following on from ESOS audit completed by RUMM – Engineering projects across sites and employee energy behaviour.
4. Scrap and waste reduction.
5. 14001:2015 Audit September 2016. Transition to new requirements.

Paula Terrett
February 29th 2016