

27th January 2015

EPR Permit Ref: BS3905IP. Tata Steel Strip Products UK, Llanwern Works
Re: Permit Condition: 4.1.4. EMS Summary of progress against targets 2014

The following items comprise the improvement projects, which were in effect during 2014, as part of the ISO14001 Objectives, Targets & Programme(s) clause. These fall under the general headings: Compliance, CO₂, Waste, Complaints (and Other), which reflect, and support the high-level company strategy for sustainability, as outlined in the Tata Steel Environmental Policy

[1] Complaints & Air Quality

In contrast to some other Tata steelworks sites, the issues of complaints & air quality have not been a significant issue for Llanwern in recent years. As such, there were no improvement projects identified in this category

[2] Compliance

EPR Compliance [Target – achieve CCS Band B]

Against a CCS baseline of: 30, 29, 8.9, and 16.6 since 2010, a target was set to achieve an annual tally of <10 points, and therefore achieve the CCS compliance Band B. The focus areas of concern were identified as: Suspended Solids in effluent, breakdown of monitoring equipment, HCl to atmosphere (Pickle Lines), and failure to analyze effluent laboratory samples. In each case key tasks were identified, the completion of which are believed to have been instrumental in achieving the annual tally of 4.3 points (TBC)

Installation & upgrade of pH & Turbidity CEM's

In preparation of the IED, and following an effluent monitoring review, it was proposed that the monitoring infrastructure be upgraded to include a number of Turbidity & pH monitors at strategic locations, such that operational impact on these parameters could be better determined. This is an ongoing project, however, to date, units have been installed / upgraded at: the lagoon 14 consent point, and Drain 8, with further installations underway / scheduled. Once complete, an additional feature of these units will be; ease of data access, and commonality of spares

Reservoir Cleaning

For the purpose of both process integrity, and to help minimize the risk of process water system contamination, a cleaning exercise of the Waltwood reservoir (the Llanwern site process water supply) was initiated. To date, 1 of the 3 reservoir cells has undergone cleaning & maintenance, which should serve to minimize potential sediment & biological matter ingress into the site process water system, thereby reducing the risk of consequential impacts which this can cause

Replacement EUETS Metering Devices

It has proven to be a challenging exercise to maintain a Natural Gas metering system, in order to satisfy the requirements of the Phase III EUETS scheme. The main issues being the variable fuel usage in line with site production, this being more difficult to measure than steady state type processes. As such, an exercise is ongoing, to move away from individual metering of processes, and instead use the site incoming (invoice), meter, and deduct the gas used by 3rd parties

[3] CO2 Reduction**Zodiac Furnace Enhancements**

An improvement opportunity was identified to modify the analysis & control of furnace post combustion airflow, in order to achieve optimal combustion conditions (i.e. increase in combustion efficiency). Another associated benefit of this upgrade is; reduced levels of un-burnt fuel gas & CO in the exhaust stream, which could also impact on plant integrity by ensuring that combustion does not take place in a non-combustion zone

Slab Reheat Furnace Efficiency

The largest consumer(s) of Natural Gas on the Llanwern site are the 'Slab Reheat Furnaces' located in the Hot Mill. Therefore, the efficiency of these units is very important to both: production cost viability, and resource usage, including the associated combustion emissions. Various design & thermal efficiency improvements around these furnaces have yielded an energy performance, better than the 1.61 GJ/t class leading target

[4] Waste Management**Increased Recycling Performance**

As per previous years, the annual waste-recycling target for 2014, was increased by an additional 5%. This value being a measure of how much recyclable waste is segregated from the 'general waste' stream, rather than the waste being sent for landfill disposal. Due to the activities of the site Waste Management Group, in conjunction with a re-scoped contract with waste management contractor Veolia, the level achieved for the calendar year 2014 was 46.3% Vs the 40% stretch target

Hot Mill Scale Area

Due to the limited disposal / recycling routes for the various scales arising from the Hot Mill process, the requirement for segregation of the scale types has become increasingly important. As such the segregation practices in the holding area(s) mean that's scale arisings can more readily be internally recycled via steelmaking operations, and / or sold to third parties for alternative recycling

[5] 'Other' Improvement Projects**Legionella Management System**

Within the latter part of 2014, a TSSP UK legionella group was formed, and new standards defined for the legionella management programme. This subsequently resulted in the commencement of a programme to comprehensively review & assess the management practices of Cooling Towers, and upgrade in accordance with new standards. This will continue into 2015

Training & Awareness

During 2014, an ambitious task was embarked upon, to link the Safe Working Procedures (Competency & Development Plan), with the operational controls associated with

environmental aspects. As this project covers the site workforce, and many thousands of procedures, the project timescale spans several years, however the overall benefits being that the environmental controls are more visible, and will sit alongside those of quality & safety in a single integrated system

BES6001

During 2014, Tata Steel UK successfully achieved certification to the BES6001 Sustainability Standard. This is effectively to demonstrate that steel products that are destined for the construction sector, can be shown to have been: sourced (raw material extraction), and manufactured in an ethical manner, with due consideration to the environment

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