

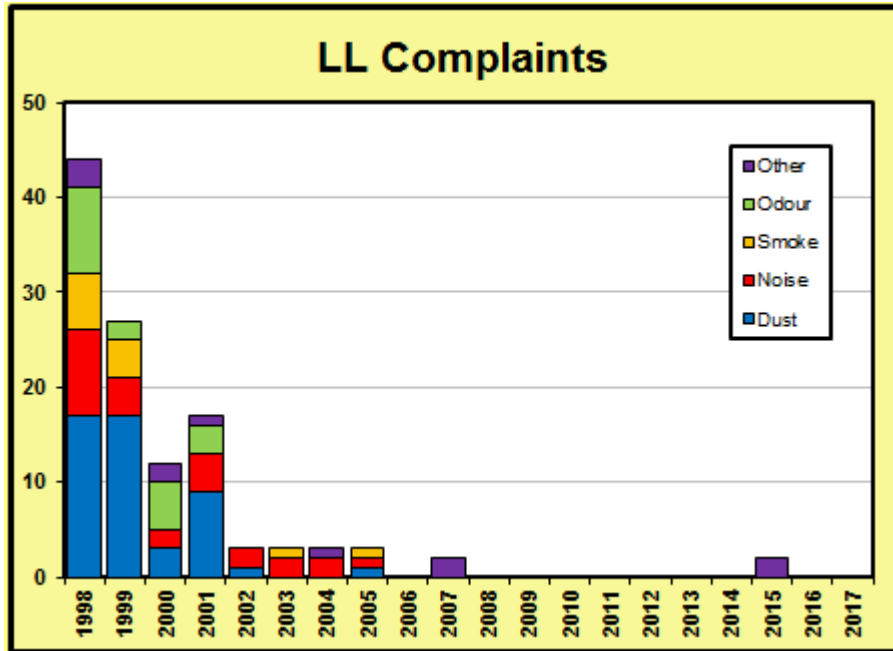
**EPR Permit Ref: BS3905IP. Tata Steel Strip Products UK, Llanwern Works  
Re: Permit Condition: 4.1.4. EMS Summary of progress against targets 2014**

The following items comprise the improvement projects, which were in effect during 2017, 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

14<sup>th</sup> February 2018

## [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

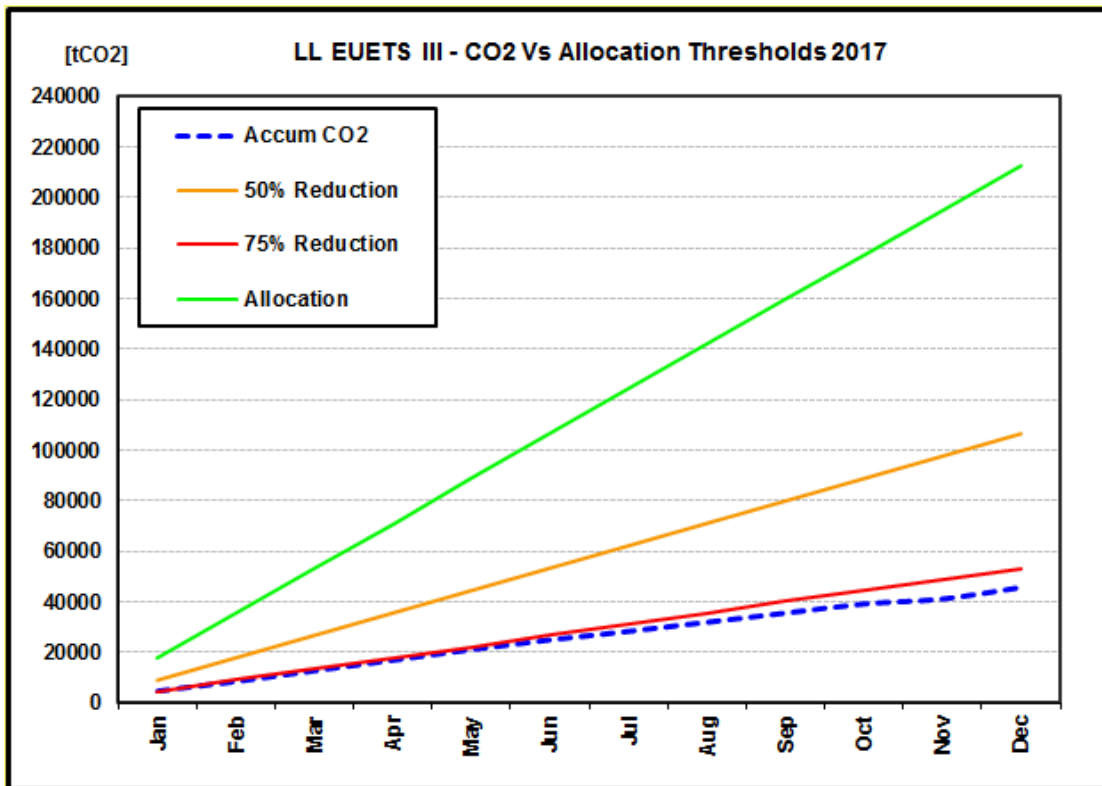
### EPR Compliance [Target – achieve CCS Band B]

At the time of writing this report, there were no CCS points issued to Llanwern site for 2017.

### [3] CO2 Reduction

Zodiac electricity and gas usage

	15/16 Actual	16/17 Actual	AP 17/18	Act Y.T.D
Electricity kw/t	76.2	74.2	79	77.6
Gas GJ/t	1.3	1.1	1.13	1.07



### [4] Waste Management

The annual waste-recycling target was set at 50%, our annual performance resulted in 32% being recycled. We saw an increase in general waste for 2017, this was mainly contributed by significant projects and improvements that took place on site throughout 2017.(e.g. roof repairs, AFL installation, zodiac enhancement projects.)

The period of January to March 2017, a significant proportion of our general waste stream was diverted from landfill, to an energy process. Since April 2017 all of our general waste is sent to an energy recovery process.

The working relationship with site Waste Management Group remains positive. Contract scope was reviewed and renewed in April 2017 with Veolia.

## [5] 'Other' Improvement Projects

The main focus in 2017 was the enhancements to the ZODIAC strip steel galvanising plant during November 2017 and the installation of a new auto-finishing production line within the cold mill.

### CHEMCOATER INSTALLATION - ZODIAC

REACH legislation dictated a requirement to remove the use of hexavalent Chromium. Alternative phosphate based passivation chemical will soon be in place. The newly installed 'Chemcoater' is currently still at commissioning stage. Implementation of this new technology results in a cleaner process with a significant reduction in hazardous waste. Environmental testing proves low impact product which can be vented to atmosphere. Thus chromate particulate sampling will no longer be a requirement on the permit BS3905IP.

### FURNACE & COOLING TOWER UPGRADE - ZODIAC

Strategic project to deliver growth in the automotive sector to key customers by increasing the furnace heating and cooling capacity of the ZODIAC production line from 500KT/Annum to 600KT/Annum. Energy efficiency considered in all aspects of the project e.g. Heat Recuperation, new radiant tubes, motors specification IE3. Cooling tower fans and water distribution increased, repairs and replacements carried out on cladding, timber, air inlet screens, packing etc, in line with L8 compliance.

### Zodiac Improvement In Nat Gas Post Upgrade.

Pre Upgrade (Jan 1 st 2017 – Nov 5 th inc) = **1.09 GJ/T**

Post Upgrade (Dec 1 st 2017 – Jan 21 st 2018 inc ) = **1.03 GT/T**

### AUTO FINISHING LINE (AFL) – COLD MILL

New production/inspection line installed to optimize improvements on yield. Will enable us to remove sub-prime material and weld coils together to provide max coil weights for the customer. Coils greater than 1640mm wide will no longer have to be sent to Port Talbot for re-processing going forward, thus saving on additional transportation.