

**EPR Permit Ref: BS3905IP. Tata Steel Strip Products UK, Llanwern Works
Re: PPC Permit Condition 4.1.5 – “fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall be sent to the Environment Agency (Natural Resources Wales) detailing such releases and the measures taken to reduce them”**

Introduction

This report serves to identify & assess the fugitive release potential associated with the Llanwern Steelworks operations, in line with the ‘Fugitive Emissions’ section of the Environment Agency Guidance document: ‘H1 Annex A – Amenity & Accident Risk From Installations and Waste Activities’. Where applicable an Aspect score is given, which is an indication of overall risk, as evaluated by the Llanwern site ISO14001 Aspects & Impacts evaluation process

31st January 2024

Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the Overall Risk
What is the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk. If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
[1] To Air						
Dust from roads	Local roads, community, adjacent on/off site business's	Wind blown dust	Provision of Road sweepers and / or Water Suppression on unmaded roads. Tarmac of commonly used roads Tata UK complaints & investigation procedure would apply in event of an incident	LOW It is possible that dust may be mobilised by vehicles using unmaded roads	LOW Nuisance, and potential harm from respirable dusts, however remoteness & quantities involved, mean this impact is considered minimal	LOW
Particulates from Slab Yards operation	Local roads, community, adjacent on/off site business's	Wind blown dust	Aspect has been suspended due to mothballing of this operation	LOW At this stage, as the hot mill has been mothballed, the slab yard is not in use therefore no exposure	MED There is potential for appreciable dust release if not controlled.	LOW
Oil Mist from the Cold-Rolling operation	The surrounding area, including, land & water	Atmospheric dispersion	An oil separator has been in use since 2006. The operation & associated controls are owned by the 'Continuous Mill & Further Process' dept	LOW The Cold Mill oil separator has a very basic principle of operation, and so it is very unlikely that a failure can occur	MED A release of oil to atmosphere could cause a noticeable level of contamination to immediate surroundings, including land and water	LOW

Acid (storage) vapour release	Persons & plant [in close proximity]	Vapour cloud arising from spillage, or tank filling (minimal release)	Sealed Tanks. Scheduled Maintenance. Significant investment over recent years to improve acid storage and secondary containment. Works area responsible: 'Pickle Lines'	LOW Exposure of any appreciable quantity would only occur in the event of a serious spillage type scenario i.e. not a likely occurrence. Also it would likely affect the local area only	LOW The consequence to persons is High, but in the context of Environmental Risk, this is considered to be Low	LOW
Acid (pickling) vapour release	Local community, adjacent on / off site business's, and nearby SSSI's	Atmospheric dispersion	Acid fume is collected via extraction system, and scrubbed prior to point source discharge Monitoring for HCl is conducted on a quarterly basis Works area responsible: 'Pickle Lines'	LOW This item relates to a release from point source(s) outside of routine parameters. Improvements made in recent years. No issues encountered within last 3 years. HCL emissions compliant.	MED Dispersion modelling has not identified a significant impact, however potential consequences are noted in the rating	LOW 2021 A7 emission point redirected to A6 emission point. A6 received a comprehensive maintenance overhaul before recommissioning.
Metallurgical fumes from Scale-breaking at Pickle Line	Nearby community, and general air quality	Atmospheric dispersion	Atmospheric dispersion Bag Filter plant installed in 2009, and the emissions monitored as per EPR requirements Works area responsible: 'Pickle Lines'	LOW No plant failure, or other compliance issues to date	LOW Prior to fitment of abatement plant, the dust impact was limited to immediate area only, and not of great significance	LOW
Metallurgical fumes from Strip Welding – Cold Mill	Nearby community, and general air quality	Atmospheric dispersion	Bag Filter plant in operation, and the emissions monitored as per EPR requirements Works area responsible: 'Cold Mill'	LOW No recent plant failure, or other compliance issues to date.	LOW impact limited to immediate area only.	LOW

Air Conditioning – inadvertent release of gas	Established as ODS, and GHG	Atmospheric dispersion	Inventory of F' Gas systems. Frequency leak checks, inspections & maintenance carried out by approved certified contractor. Works area responsible: 'Energy & Utilities'	MED	LOW Overall impact is considered to be Low based on capacities of units in use	LOW
[2] To Water						
Pollutants released to effluent system Numerous storage facilities of PPL (Potentially Polluting Liquids)	Severn Estuary via W1 consent point	Effluent & Drainage System	Secondary containment and interceptors in place. Storm water pump house can cease pumping to estuary. Environmental Contingency Plan in effect Owned by respective works area	LOW Incidents of serious tank and / or bund failures, are not a frequent occurrence. Acid containment integrity has been improved in recent year.	HIGH Some chemicals (notably acids and oils) have the potential to cause appreciable harm to the environment	MED
Pollutants (pH, oil & solids) released to effluent system From Process	Severn Estuary via W1 consent point	Effluent & Drainage System	Process effluents have local abatement systems Monitoring takes place on both continuous & daily spot sampling. Weekly composite sampling regime as per permit requirements	HIGH There have been a number of instances whereby out-of specification effluent samples have had to be notified. Mainly for suspended solids. Particularly following high rainfall periods.	MED Impact considered to be limited due to nature of receiving waters from off site influences, although oil (for example) could have a more serious impact	MED

			Environmental Contingency Plan in effect				
			Owned by respective works area				
[3] To Land							
Unauthorised Waste Deposition to Land	Land & Groundwater /Surface-Water contamination	N/A	Control of wastes in accordance with Waste Management compliance & procedures Security patrols. Owned by respective works area	MED Instances of fly-tipping have been reported both in and around land owned by Tata, including public incidents. Each incident is investigated to ascertain source, and reported to Local Authority when appropriate.	MED	MED	MED
Theft / vandalism related releases e.g. draining of transformers to remove copper	Land & Groundwater / Surface-Water contamination	Direct discharge to ground, and associated ground / surface waters	Security arrangements are in effect for the site, site waters have detection measures. Approved oil management contractor based on site.	LOW No recent incidents	MED Some transformer units are quite large, and can contain appreciable quantities of oil. Transformers not in operation have been drained of oil.		MED

