Wychavon District Council

Permit to Operate

Environmental Permitting (England and Wales) Regulations 2016

<u>Installation address</u>
Strickland Tracks Ltd.
Heath Park
Cropthorne
Pershore
WR10 3NE
Permit Reference: 23/00269/B

Contact Details:
Worcestershire Regulatory Services
Wyre Forest House
Finepoint Way
Kidderminster
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Brief Description of the installation regulated by this permit

Coating of Metal and Plastic, as prescribed in Schedule 14 and Section 6.4 of Part 2 of Schedule 1 of the Environmental Permitting (England & Wales) Regulations 2016.

Strickland Tracks receive all components from suppliers with a primer or base coat that includes the core corrosion inhibiters for the paint system. Strickland Tracks assemble each track system and then prepare for topcoat application.

The preparation process requires hand sanding of the primered surfaces to ensure it is smooth and adhesion of the topcoat is optimised. The track system is then cleaned using rags and thinners to ensure no contaminates such as oil and grease remain.

Around 90% of track systems are finish coated with a quick drying, high solid solvent based single pack alkyd topcoat, within an enclosed spray booth. The spray technique in operation is currently air-atomised spraying (Conventional).

From February 2023 electrostatic spraying will be implemented to vastly improve transfer efficiency of the process. Tracks will hang for around 30 seconds to 1 minute to gas off before leaving the spray booth. The track system is then placed on the ground to air dry before pre-despatch inspection and shipping. The enclosed spray room has a slight negative pressure to optimise extraction through the filters and into two stacks that vent to atmosphere. The new tooling to convert to electrostatic painting was ordered on 25th January 2023 and is expected to be fully functional within two weeks. During testing a 40% improvement in transfer efficiency was observed and the requirement for aerosol cans for touch ups or stripe coating was greatly reduced.

An open spray booth for coating of small parts and aftermarket components is used infrequently, this booth is in operation for approximately 30 minutes to 1 hour per day and is exhausted via two stacks to atmosphere.

Approximately 8% of tracks manufactured are sprayed in a 2-pack topcoat that contains isocyanates. Post application, these tracks are left to vent the remaining airborne particulates from application for 1-2 minutes in the enclosed spray booth before being transferred to the oven where they continue their curing process in an enclosed space with a chimney to

atmosphere. 2% of tracks manufactured are coated in a 2-pack acrylic topcoat that does not contain isocyanates, these are processed in the same way as the other 8% of tracks with 2-pack paint.

When carrying out colour changes or flushing lines, waste paint is collected in a tin and then processed through our solvent recovery machine to ensure it can be re-used in our processes. The retained solvents are used to clean and flush lines. Other wastes from the process include booth filters which are allowed to vent before moving to general waste, aerosol cans that are emptied, crushed and then recycled along with paint tins that are allowed to dry before being recycled.

Site location and layout plans are attached and form part of the permit.

Permit issued under the Environmental Permitting (England & Wales) Regulations 2016.

Permit Number
23/00269/B

Wychavon District Council ("the Regulator") in exercise of its powers under Regulation 13 of the Environmental Permitting (England & Wales) Regulations 2016 hereby permits:

Strickland Tracks Ltd. (the Operator")

Whose registered office is:

Bay 2 / Unit 5 The Heath Works, Main Road Cropthorne, Pershore, Worcestershire, WR10 3NE.

Registered No. 03477947

To operate an installation at:

Heath Park, Cropthorne, Pershore, WR10 3NE

To the extent authorised and subject to the conditions of the permit the above named company is permitted to operate a metal/plastic coating process.

Signed …… Date: 13.02.2023

Mr. S R Williams
An Authorised Officer of the Council

PERMIT CONDITIONS

This permit is issued subject to compliance with the following conditions listed below.

Emission Limits, Monitoring and other Provisions

1. All releases to air, other than condensed water vapour, should be free from persistent visible emissions.

2. All emissions to air should be free from droplets.

3. There should be no offensive odour beyond the site boundary, as perceived by the regulator.

4. All spray-booths should be continuously monitored to indicate their performance, by using equipment such as a pressure drop indicator.

5. The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records shall be:

   - kept on site
   - kept by the operator for at least two years; and
   - made available for the regulator to examine

6. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator should.

   - investigate immediately and undertake remedial action
   - adjust the process or activity to minimise those emissions; and
   - promptly record the events and action taken

7. The regulator must be informed without delay if there is an emission that is likely to have an effect on the local community.

8. The VOC waste gas, VOC fugitive and isocyanate emission limits detailed in SE Box 5 and Table 4.1 shall be complied with. Extractive monitoring shall be undertaken at least every 12 months.

9. The operator shall inform the regulator at least 7 days before any periodic monitoring exercise to determine compliance with the emission limit values. The operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

10. The results of non-continuous emissions testing shall be forwarded to the regulator within 8 weeks of completion of the sampling.

11. Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated by the operator as soon as the monitoring data has been obtained the operator shall:

    - Identify the cause and take corrective action;
    - Clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken;
    - Re-test to demonstrate compliance as soon as possible; **and** inform the regulator of the steps taken and the re-test results.

SE Box 5 - Waste gas and fugitive emission limits and requirements (Article 59 and Annex VII Parts 2 & 3)				Monitoring
For all activities using the waste gas and fugitive emission limits and requirements				
Row	**VOC in waste gases**	**Emission limits / requirement**	**Fugitive emission values**	
1	**Coating installations** Solvent consumption 5 – 15 tonnes	VOC expressed as total mass of organic carbon	25% of organic solvent input	**Abated releases:** Continuous monitoring and recording **PLUS** Manual extractive testing **Unabated releases:** Manual extractive testing
	Waste gases from oxidation plant used as abatement	50mg C/Nm^3		
	Any other waste gases	100mg C/Nm^3		
2	**Coating installations** Solvent consumption 15 tonnes or more	VOC expressed as total mass of organic carbon	20% of organic solvent input	
	Waste gases from oxidation plant used as abatement	50mg C/Nm^3		
	Waste gases from drying processes	50 mg C/Nm^3		
	Any other waste gases	75 mg C/Nm^3		
Operators who were permitted to use an emission figure of 150mg/Nm^3 until 1 April 2013 may find that using the reduction scheme is the best way of achieving compliance thereafter.				

Table 4.1 - Emission limits, monitoring and other provisions for non-VOC releases					
Row	**Substance**	**Source**	**Emission limits/provisions**	**Type of monitoring**	**Monitoring frequency**
1	Carbon Monoxide	Oxidation plant	100 mg/Nm^3 as a 30-minute mean for contained sources	**Catalytic oxidiser** Monitoring and recording	Continuous
				Plus	
				Manual extractive testing	Annual
		From turbines, reciprocating engines or boilers used as VOC abatement equipment	500 mg/Nm^3 at 5% oxygen dry gas, as 30-minute mean for contained sources	**All other types of abatement** Manual extractive testing	Annual
2	Particulate matter	New spraybooths	50 mg/Nm^3 as 30-minute mean for contained sources	By guarantee supplied by the spray booth constructor	
		All other processes	50 mg/Nm^3 as 30-minute mean for contained sources	**Or**	
				Manual extractive testing	Annual
3	Oxides of Nitrogen (measured as nitrogen dioxide)	Oxidation plant	100 mg/Nm^3 as a 30-minute mean for contained sources	Manual extractive testing	Annual
		From turbines, reciprocating engines or boilers used as VOC abatement equipment.	500 mg/Nm^3 as 30-minute mean for contained sources		
4	Isocyanates	All processes / activities using isocyanates	0.1mg/Nm^3 as a 30 minute mean for contained sources excluding particulate and expressed as NCO.	Manual extractive testing	Annual
5	Sulphur dioxide	All activities using heavy fuel oil or other residual type /comparable Quality Protocol Processed Fuel Oil	1% wt/wt sulphur in fuel	Sulphur content of fuel is regulated under the Sulphur Content of Liquid Fuels Regulations	
		All activities using gas oil / comparable Quality Protocol Processed Fuel Oil	0.1% wt/wt sulphur in fuel		

The reference conditions for limits in SE Box 5 and Table 4.1 are: 273.1K, 101.3kPa, without correction for water vapour content, unless stated otherwise.

Determination of Solvent Consumption

12. The operator shall construct an annual inventory of solvent use within the installation.

    The inventory shall be carried out by recording:

    - The mass of organic solvent contained in coatings, diluents and cleaners in the initial stock (IS) at the start of the accounting period; plus
    - The mass of organic solvent contained in coatings, diluents and cleaners in the purchased stock (PS) during the accounting period.
    - Minus the mass of organic solvent contained in coatings, diluents and cleaners in the final stock (FS) at the end of the accounting period.

    Total Organic Solvent Input (I_1) = IS + PS – FS

    The inventory shall specifically and separately identify any VOC carrying any Hazard Statements detailed in condition 13.

    Having calculated total solvent input (I_1), the operator shall then calculate solvent consumption by subtracting from the input figures any solvent that is sent out for recovery.

    Hence: C (consumption) = I_1 – O_8 (recovered solvent but not as input into the process/activity)

    The inventory, consumption data, fugitive emission calculation and the outcome from the review of the Environmental Management System shall be submitted to the regulator for the previous calendar year annually by the 1st February.

13. At no time shall the operator introduce any substance or preparation into the installation that is labelled with the Hazard Statement H340, H350, H350i, H360D, H360F, H341 or H351, without the prior written consent of the regulator.

<u>Control Techniques</u>

14. All potentially odourous waste should be stored in suitable closed containers.

15. Storage of coating materials should be within a bunded area and the bunding should

    - Completely surround the storage containers
    - Be impervious and resistant to the liquids in storage; and
    - Be capable of holding 110% of the capacity of the largest storage container.

16. Coatings containing VOC should be stored in closed storage containers.

17. Emissions from the mixing or transfer of materials should be adequately contained, preferably by the use of closed transfer systems.

18. Cleaning operations involving organic solvents should be reviewed at least every two years and the report on the conclusions forwarded to the regulator.

19. Application of cleaning solvents should be carried out using enclosed cleaning systems, wherever possible.

20. Suitable organic solvent containment and spillage equipment should be readily available in all organic solvent handling areas.

21. Stacks or vents should not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception of a cone which may be necessary to increase the exit velocity of the emissions.

22. A high standard of housekeeping should be maintained.

Management

23. Training of all staff with responsibility for operating the process should include:

    - Awareness of their responsibilities under this permit; in particular how to deal with conditions likely to give rise to VOC emissions, such as in the event of spillage
    - Minimising emissions on start-up and shutdown
    - Action to minimise emissions during abnormal conditions.

24. The operator should maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents should be made available to the regulator on request.

25. A record of maintenance should be made available for inspection by the regulator.

26. If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary the permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

27. The operator shall use the best available techniques for preventing, or where this is not practical, reducing emissions from the installation.

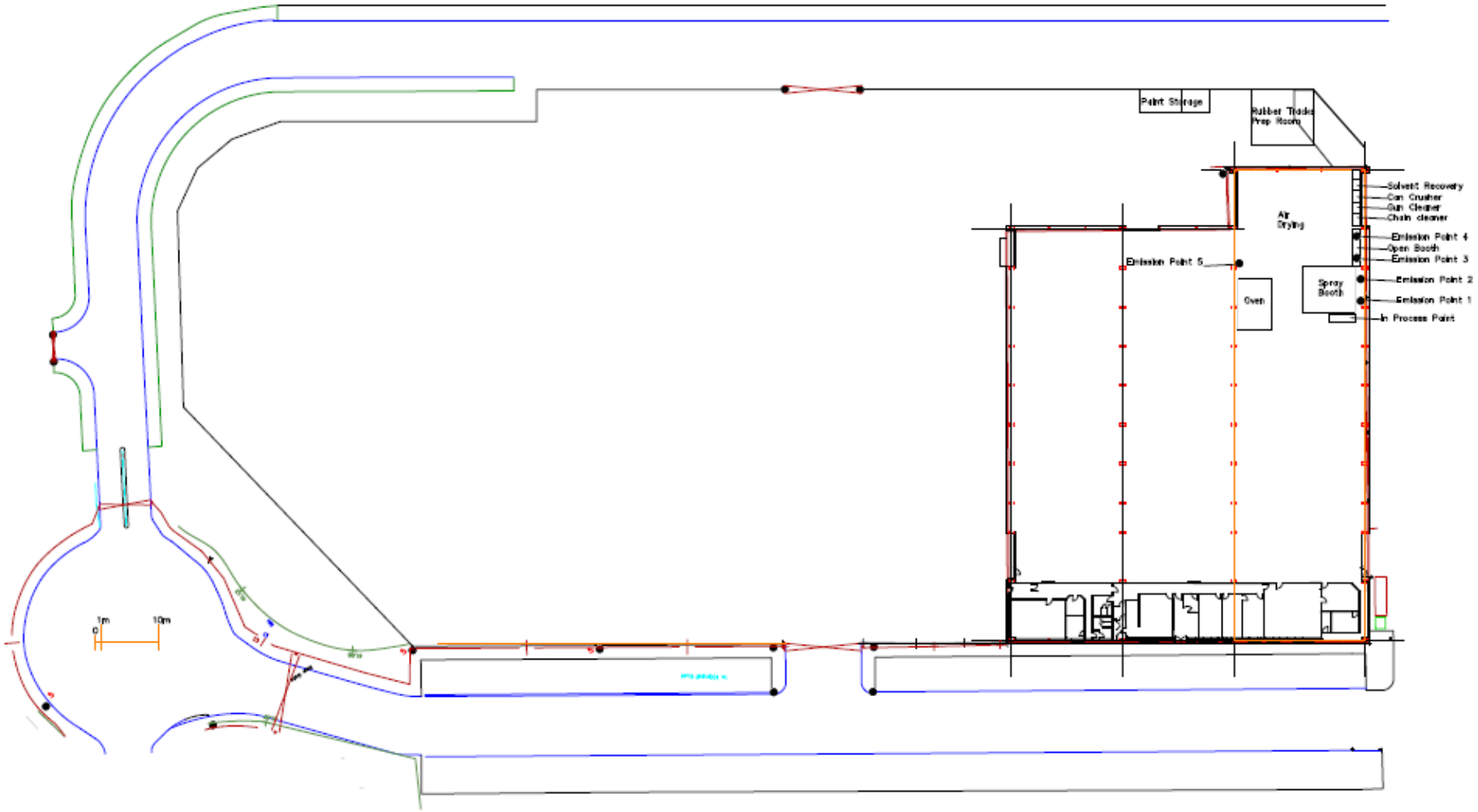
28. An appropriate Environmental Management System shall be implemented and reviewed annually.

References

1. The Secretary of State's Guidance PG 6/23(11) Revised June 2014 Coating of Metal and Plastic Processes.

2. The Secretary of State's General Guidance Manual on Policy and Procedures for A2 and B installations.

Site Location Plan Showing the site boundary outlined in Red



Site Layout Plan showing VOC emission points and Curing Oven emission point