

SCR evaluation

Name of activity, address and NGR	Sherwood Park Dyehouse. Sherwood Park, Annesley Woodhouse, Nottingham, Nottinghamshire, NG15 0RS. NGR of the centre of the site is SK 4497 3531. Environmental Permit Surrender Reference is EPR/BS9334IR/S005.
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Document reference, date and version of application SCR	'Site Condition Report Sherwood Park Industrial Estate Project No. 73.1490.01' dated July 2002 prepared by Carl Bro Group Limited, Leeds. 'Site Condition Report at Surrender, Autofil Yarns Limited EPR/BS9334IR/V004' dated 03/04/2017. 'Autofil Yarns Limited – Sherwood Park Dyehouse, Annesley Woodhouse, Nottingham, BG15 0RS. Surrender Site Condition Report' dated 30 March 2017.
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1.0 Site details	
Has the applicant provided the following information as required by the application SCR template?	
Site plans showing site layout, drainage, surfacing, receptors, sources of emissions/releases and monitoring points.	
The Operator provided a Site Condition Report (SCR) at the time the original application was made. Drawings and plans were provided by the Operator and reviewed and accepted by the Environment Agency at the original application stage.	

2.0 Condition of the land at permit issue	
Has the applicant provided the following information as required by the application SCR template?	
<p>a) Environmental setting including geology, hydrogeology and surface waters.</p> <p>b) Pollution history including:</p> <ul style="list-style-type: none"> • pollution incidents that may have affected land • historical land-uses and associated contaminants • visual/olfactory evidence of existing contamination • evidence of damage to existing pollution prevention measures. <p>c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available)).</p> <p>d) Has the applicant chosen to collect baseline reference data?</p>	
<p>A Conceptual Site Model (CSM) was provided in the original application SCR from July 2002. The site is located at Sherwood Park in Nottingham and has an approximate area of 3.2Ha. The majority of the site was occupied by the main dyehouse facility with an area of about 700m³ used for an energy centre. The remainder includes a surface water balancing pond, hardstanding and grassed areas that are not part of the main permitted installation site. The site is at approximately 160m AOD, is relatively flat and gently slopes from the west to the east.</p> <p>Historically, the site was undeveloped until the mid 1990s when the agricultural land was developed for textile production as per the current site usage. Land use surrounding the site has included quarrying, lime kilns, coal mining, residential and highways.</p> <p>The underlying geology of the site is likely to consist of Made Ground comprising sandy silty clays overlying Superficial Deposits comprising low permeability soft silty sandy gravelly Glacial Till over a Lower Magnesian Limestone bedrock, a major aquifer. The site does not lie within a groundwater source protection zone.</p> <p>Cuttail Brook is about 300m to the south and flows in a north-westerly direction into the River Erewash about 2km north of the site. There are three man-made catchment ponds along the channel of Cuttail Brook on the Industrial Estate. One pond is within the Autofil Yarns boundary and the other two ponds are located at the adjacent Kodak site. Kodak have a license to abstract surface water from the two ponds for their process.</p>	

2.0 Condition of the land at permit issue
Has the applicant provided the following information as required by the application SCR template?
Environmental Permit EPR/BS9334IR was granted in 2004 and had an intrusive ground investigation undertaken in order to provide baseline data for characterising the site (Carl Bro July 2002). Soil, groundwater and gas samples were taken and analysed for specific determinands. No contamination was found. These tests were not repeated at any point during the lifetime of the permit.

3.0 Permitted activities	
Has the applicant provided the following information as required by the application SCR template?	Response (Specify what information is needed from the applicant, if any)
a) Permitted activities. b) Non-permitted activities undertaken at the site.	
<p>The site pre-treated, dyed and dried fibres for use in the automotive industry and the Environment Agency determined that the Installation comprised a Section 6.4 Part A (1) (b) activity for dyeing textiles in plant with a treatment capacity of more than 10 tonnes per day.</p> <p>Directly Associated Activities at the site included raw materials handling and storage, finished product handling and storage, waste handling and storage, yarn preparation and dyeing, yarn steaming from steam generated on site in an energy centre (2x gas fired boilers at 6.8MWth each), waste and process effluents, and water treatment for boilers (water softening). Waste generated on site included effluents, chemical and dye containers, yarn and tubes, and packaging.</p> <p>The effluent drainage system comprised underground heat reclamation tanks, a cooling effluent header tank and underground buffering tanks. Site runoff from building rooves and hardstanding areas entered Cuttail Brook via a balancing pond. There is a discharge to sewer of process effluents from the site under consent from Severn Trent Water. This is still in place and the effluent discharged continues to be sampled and monitored by both the site and Severn Trent Water.</p>	

3.0(a) Environmental Risk Assessment
The H1 environmental risk assessment should identify elements that could impact on land and waters, cross- referenced back to documents and plans provided as part of the wider permit application.
The Environment Agency reviewed the Operator's environmental risk assessment (H1) at the time of the original permit determination and accepted the H1 as satisfactory.

3.0(b) Will the pollution prevention measures protect land and groundwater?
Are the activities likely to result in pollution of land?
It was concluded that there was little likelihood of pollution arising from the installation's operation provided that it was operated and maintained correctly. There were no direct discharges of hazardous substances or non-hazardous pollutants to groundwater from the site.
To ensure the continued effectiveness of pollution prevention measures to protect the land the Operator was required to implement and operate under a Site Protection and Monitoring Programme (SPMP).
For dangerous and/or hazardous substances only, are the pollution prevention measures for the relevant activities to a standard that is likely to prevent pollution of land?
N/A.

Application SCR decision summary	Tick relevant decision
Sufficient information has been supplied to describe the condition of the site at permit issue	Yes.
Pollution of land and water is unlikely	Yes.
Date and name of reviewer:	Liz Ebbs (NPS) – 06/07/2017.

Operational phase SCR evaluation template

4.0 Changes to the activities	
Have there been any changes to the following during the operation of the site?	Response (Specify what information is needed from the applicant, if any)
a) Activity boundaries b) Permitted activities c) "Hazardous pollutants" used or produced.	
There have been no changes in the permitted activities during the lifetime of the permit. Whilst the site has expanded no increase in the site boundary occurred under the IPPC or EPR permitting regimes. No hazardous pollutants were used on the site during the lifetime of the permit. Key chemicals included acetic acid, thiourea dioxide, sodium acetate, sodium hydroxide, sodium chloride and hydrocarbon fuels and oils.	

5.0 Measures taken to protect land	
Has the applicant provided evidence from records collated during the lifetime of the permit, to show that the pollution prevention measures have worked?	
Appropriate management systems and structures were in place with a management system (ISO14001) providing adequate records on the measures taken to protect land, air and water. The main operations were all within buildings with sealed drainage systems. Dyes were stored in powdered form in a dedicated chemicals store, bulk liquids (acetic acid, sodium chloride and caustic soda solution) in bunded dedicated tanks and other oils and chemicals in manufacturer supplied IBCs within the chemicals store. Chemical store drainage was directed to effluent tanks on site.	

6.0 Pollution incidents that may have impacted on land and their remediation	
Has the applicant provided evidence to show that any pollution incidents which have taken place during the life of the permit and which may have impacted on land or water have been investigated and remediated (where necessary)?	
The main production activities on the site were the Yarn Production Area and the Dyehouse. Three incidents were identified as potentially releasing pollutants into the environment: <ul style="list-style-type: none">➤ steam valve failure caused a fire and subsequent release of sulphur residues within the Dyehouse building (1997)➤ major spill of formic acid from faulty supply line into containment bund. Some acid leached through an unlined back wall of the bund and entered into the Dyehouse (2000).➤ potential trade effluent discharge to ground from defective underground tank. Three yearly inspection revealed cracks in the fibreglass lining exposing the concrete casing behind. Defect repaired whilst plant was shutdown with no evidence of breach of concrete casing (2014) All recorded incidents during the life of the site were reviewed (including those listed above) and none were found to have impacted on the state of the soil or groundwater. The site was more or less all within buildings. There was one storage tank outside on a concreted surface; they had a good management system in place and we have no reason to suspect that there has been any deterioration of the site during its use.	

7.0 Soil gas and water quality monitoring (where relevant)	
Where soil gas and/or water quality monitoring has been undertaken, does this demonstrate that there has been no change in the condition of the land? Has any change that has occurred been investigated and remediated?	
Soil and groundwater monitoring and/or testing was carried out for the original application. The results and findings were presented in the report 'Site Condition Report Sherwood Park Industrial Estate Project No. 73.1490.01' dated July 2002 prepared by Carl Bro Group Limited, Leeds.	

Surrender SCR Evaluation Template

8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

The following report and information were submitted by the Operator as part of the surrender application:

- 'Autofil Yarns Limited – Sherwood Park Dyehouse, Annesley Woodhouse, Nottingham, BG15 0RS. Surrender Site Condition Report' dated 30 March 2017. Appendix D – Decommissioning supporting documentation. Appendix E – Avoidance of pollution supporting documentation.

Bulk manufacturing has been gradually transferring overseas since August 2015 with all bulk manufacturing ceasing at the Sherwood Park site from November 2016. The permitted activities have ceased and the site has been decommissioned with regards to the scheduled activities. Autofil Bulgaria Branch (Sinterama Bulgaria) has taken over all the yarn manufacturing with the export of the textile machinery, compressor, control cabinets and panels, trolleys, pallet truck, stacker, autoclave, yarns etc to Bulgaria in August 2015. The yarn dyeing is now undertaken by Sinterama in Italy. The decommissioned dyeing machinery was still at the Sherwood Park site and will either be sold on for reuse or sold for scrap.

As well as the emissions to water and sewer (refer to Section 3.0), several emission points to air will remain as follows:

- A1 and A2 - steam boilers, emissions from the Energy Centre Roof
- A33 - steam vent condensate recovery system from the main factory roof
- A34 - steam vent from boiler recovery system from the Energy Centre Roof
- A36 - air blast cooler at the rear of the Energy Centre
- Various – from processes as and when the development machines are run.

During a site inspection, yarn manufacturing area was completely empty as the equipment and machines had been decommissioned and moved to either Bulgaria or Italy. All production planning and accounting work for the Bulgarian office are still being done from the UK office.

Seven decommissioned bulk dyeing machines were on site at the time of the inspection pending a decision by the site to either scrap or sell them. Texturising machines and large compressors were decommissioned and removed from site. The flues which ran to the roof were removed and the emission points no longer used. In the dye house, sample dyeing machines are being used as yarn manufacturing and dyeing for development work that is still taking place. Only one of two boilers is being used to supply steam for treating the yarn. The floor was inspected and appeared to be in good condition with no visible damage or cracks.

9.0 Reference data and remediation (where relevant)

Has the applicant provided details of any surrender reference data that they have collected and any remediation that they have undertaken?

N/A.

10.0a and 10b Statement of site condition

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

The permitted scheduled activities have been removed from the installation therefore the site no longer falls under Environmental Permitting Regulation. However, as discussed in Section 8.0 and the decision document, the site has not been fully decommissioned as it will be operating under threshold for development purposes. The Environment Agency confirms that the permitted Sherwood Park Dyehouse installation has been returned to a satisfactory state.

Surrender SCR decision summary	Tick relevant decision
Sufficient information has been supplied to show that pollution risk has been removed and that the site is in a satisfactory state – accept the application to surrender the permit.	✓
Date and name of reviewers: Liz Ebbs (NPS) – 06/07/2017. Edidiong Akinyede (Area) – 24/07/2017.	

