

# POLYNT COMPOSITES ENVIRONMENTAL PERMIT APPLICATION

## Site Condition Report

Prepared for: Polynt Composites Limited  
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## CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1.1	Sources.....	1
1.2	Present Use of the Site.....	1
1.2.1	Site Location.....	1
1.2.2	Current on-Site Land Use.....	2
1.2.3	Current Surrounding Land Use.....	2
1.3	Environmental Setting .....	2
1.4	Hydrogeology.....	3
1.5	Hydrology.....	3
1.5.1	Surface Water.....	3
1.5.2	Flood Risk.....	4
1.5.3	Sensitive Ecological Receptors.....	4
1.6	Environmental Record Review .....	4
<b>2.0</b>	<b>POLLUTION HISTORY .....</b>	<b>4</b>
2.1	Pollution Incidents .....	4
2.2	Historic Site Activities.....	5
2.3	Historic Offsite Activities.....	5
2.4	Baseline Data .....	5
2.4.1	Environmental Permit Surrender Former EP EPR 3135FV .....	7
<b>3.0</b>	<b>PERMITTED ACTIVITIES .....</b>	<b>7</b>
3.1	Proposed Part A(1) Permitted Activities .....	7
3.1.1	Installation Activities .....	7
3.1.2	Specified Waste Management activities.....	8
3.1.3	Directly Associated Activities .....	8
3.2	Non-Permitted Activities.....	8
<b>4.0</b>	<b>CURRENT BASELINE SITE CONDITIONS.....</b>	<b>8</b>
4.1	Environmental Monitoring and Compliance .....	11
4.2	Operation of the Installation and Management System .....	11
4.3	Environmental Risk Assessment.....	12
4.4	SCR Updates.....	12

## DOCUMENT REFERENCES

### TABLES

Table 1 Surrounding Land Uses .....	2
Table 2 Comparison of 2010 & 2015 Groundwater Monitoring Results (Arkema 2016).....	6
Table 3 Production Output.....	7
Table 4 Waste Storage, Recovery and Disposal .....	8
Table 5 Main Stages in Preparing a Baseline Report.....	9

### APPENDICES

Appendix SCR1: H5 Template
Appendix SCR2: Arkema 2016 Site Protection and Condition Report
Appendix SCR3: Correspondence with the EA

## 1.0 Introduction

SLR Consulting Ltd (SLR) has been instructed by Polynt Composites UK Ltd (Polynt) to prepare an Environmental Permit (EP) application for the Stallingborough manufacturing plant operated by Polynt Composites Ltd, Laporte Road, Stallingborough, hereafter referred to as 'the Site'.

The Site currently operates under a Part B Environmental Permit (ref. EP/2016003/V1) issued by the Local Authority under the Environmental Permitting (England and Wales) Regulations (EPR) 2016 (as amended) for Section 6.5 Part B (a)(i) the manufacturing or formulating printing ink or any coating material. The Site now requires an EP issued by the Environment Agency (EA) under the EPR for Section 4.1 Part A(1)(a)(ii) producing organic chemicals such as organic compounds containing oxygen for the proposed purpose of manufacturing of the Potassium 2-Ethylehexanoate in Isopropanol (KEH in IPA) product. Context and Objectives of the Site Condition Report

This Site Condition Report (SCR) has been prepared in accordance with the Environment Agency's (EA) Site Condition Report H5 guidance with regards to the requirements of a baseline report to meet the requirements of Article 22 (2) of Industrial Emissions Directive (IED). A completed H5 template is included as appendix SCR1.

The purpose of the SCR at the application stage is to describe and record the condition of the area of land to be used for the Part A(1) activity at the time of making the Environmental Permit (EP) prior to commencement of any operations. The SCR will provide a point of reference and baseline environmental data so that when the EP is surrendered it can be demonstrated that there has been no deterioration in the condition of the land as a result of the proposed operations and to ensure that the condition of the land is in a 'satisfactory state' on surrender of the EP.

### 1.1.1 Sources

This SCR is based upon information presented in the following report:

- Arkema (2016). Site Protection and Condition Report. Arkema Coatings Resins Ltd. Ref ARL/004/JC dated 24 August 2016 (refer Appendix SCR2).

The Arkema 2016 SCR report outlines the condition of the Arkema Coatings Resins Ltd site in 2016 at the time of the surrender of permit No. EPR 3135FV.

The Arkema site closure resulted in the cessation of all Part A(1) permitted activities as the reactor building and all associated equipment i.e., cooling tower; raw material storage tanks; solvent recovery; thermal oxidiser and heat generators were demolished. The structures demolished were taken down to slab level and there was no breaking of the concrete or hardstanding areas during demolition.

It is noted that the proposed new EP boundary (refer Drawing 002) is relatively small and does not cover the whole former Arkema site; just the western area of the former reactor building.

It is considered acceptable to utilise the Arkema 2016 report as the basis of this report since the former reactor building was demolished to ground level in 2016 and this area has not been in operation since.

The Environment Agency accepted the permit surrender of former permit EPR 3135FV on 21 December 2016 (refer Appendix SCR3).

## 1.2 Present Use of the Site

### 1.2.1 Site Location

The site is located at Polynt Composites UK Ltd, Laporte Road, Stallingborough, with Grimsby approximately 6 km southeast along the A180 and the Port of Immingham approximately 1.6km west of the site, as shown on Drawing

001. The National Grid Reference (NGR) for the centre of the site is TA 21300 15100. The proposed environmental permit boundary is shown in Drawing 002.

### 1.2.2 Current on-Site Land Use.

The Part B EP at the Stallingborough site is an installation which occupies approximately 8.1 acres (3.3 hectares), which comprises of production facilities, maintenance facilities, warehousing, laboratory and technical service building, waste storage area and a redundant Biological Effluent Treatment Plant. The site layout is shown on Drawing 003.

It is understood that prior to 2016 the area within the new Part A(1) EP boundary formed part of the reactor building of the former Arkema site. The reactor building was fully decommissioned and demolished to slab level in accordance with a site closure plan. Permit EPR/3135FV was successfully surrendered on 21 December 2016 (refer Appendix SCR3). It is understood that no activities have taken place in the area defined by the new installation EP between 2016 and 2021.

### 1.2.3 Current Surrounding Land Use.

A summary of the immediate surrounding land use is provided in Table 1:

**Table 1 Surrounding Land Uses**

Direction	Land-Use
North	Agricultural land with the Humber Estuary 330m beyond.
East	North Beck Drain 95m east and Tronox industrial site 280m east.
South	Laporte Road, agricultural land and P D Ports delivery company 140m southwest.
West	Agricultural land, woodland, open ground with the Associated Petroleum Terminals facility located 350m northwest. 170m northwest there is a parcel of land that comprises small reservoirs and/or ponding of water which is likely to be from anthropogenic activity.

## 1.3 Environmental Setting

Information for the Environmental Setting was mainly taken from the Arkema (2016) Site Protection and Condition Report.

The following sources of publicly available information was also reviewed:

- The Multi-Agency Information for the Countryside (MAGIC)<sup>1</sup>
- GOV.UK Long Term Flood Risk<sup>2</sup> Map.
- HSE COMAH 2015 Public Information Search<sup>3</sup>.

<sup>1</sup> Multi-Agency Information for the Countryside – Available at: <http://www.magic.gov.uk>, accessed September 2021.

<sup>2</sup> GOV.UK. Long Term Flood Risk Accessed at: [Learn more about flood risk - GOV.UK \(flood-warning-information.service.gov.uk\)](https://www.gov.uk/flood-warning-information-service), accessed September 2021.

<sup>3</sup> HSE COMAH 2015 Public Information Search. Accessed at: [COMAH 2015: Search \(hse.gov.uk\)](https://www.hse.gov.uk/comah2015/). Accessed September 2021.

The following geology was encountered at the site:

- Superficial deposits: Tidal Flat Deposits/ Marine and Estuarine Alluvium comprising Clay and Silt.
- Bedrock geology: Flamborough Chalk Formation, described as a white, well bedded, flint free chalk with common marl seams, recorded thicknesses range from 160m to 265m.

Beach and Tidal Flat Deposits (Undifferentiated) comprising Clay Silt and Sand are present 260m to the northeast of the site corresponding with the estuary coastline. No faults are located within 1km of the site.

## 1.4 Hydrogeology

The Multi-Agency Information for the Countryside (MAGIC)<sup>4</sup> website classifies the aquifers underlying the site as:

- Superficial deposits: unproductive.
- Bedrock: Principal Aquifer.

The Groundwater Vulnerability layer on the MAGIC map reveals that the site lies within a groundwater vulnerability area classified as medium - high.

The site lies within a zone 3 (total catchment) source protection zone. A groundwater source protection zone (Zone 2) outer zone is located approximately 800m to the west of the site with the inner zone (Zone 1) a further 500m west.

Groundwater beneath the site is assessed under the Environment Agency River Basin Management Plan (RBMP) 2009, Groundwater as:

- 'Quantitative quality': poor.
- 'Chemical quality': poor (deteriorating).

The Arkema (2016) noted the following licensed groundwater abstractions were identified in the vicinity of the site in 2016:

- Associated British Ports Private Water Undertaking: Raw Water Supply 900m west.
- Hydro Fertilisers Ltd Chemicals: Process Water 1.4km west.
- Associated British Ports Transport: General Washing 1.4km west.
- Associated British Ports Private Water Undertaking: Process Water 1.4km west.
- J D Mccarthy General Farming and Domestic 1.8km south.

Arkema (2016) identified that the site's environmental sensitivity with respect to groundwater is considered to be low, as the underlying Principal Aquifer is likely to be protected from site potential derived contamination by the intervening low permeability superficial deposits.

## 1.5 Hydrology

### 1.5.1 Surface Water

The closest surface water feature in the vicinity of the new Part A(1) installation EP boundary is:

- North Beck Drain approximately 95m east. This drain flows northeast past the site and discharges into the River Humber 330m north-east.

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<sup>4</sup> Multi-Agency Geographical Information for the Countryside Map, available at [www.magic.defra.gov.uk](http://www.magic.defra.gov.uk), accessed in September 2021.

## 1.5.2 Flood Risk

The plant is included in a flood exposure area. There is a local flood alert warning programme.

The GOV.UK long term flood risk map indicated that the site, including the area of the new Part A(1) installation EP is at medium risk of flooding from rivers or the sea. This means that each year this area has a chance of flooding of between 1% and 3.3%. This takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped or fail.

The site is not considered to be at risk from surface water flooding.

## 1.5.3 Sensitive Ecological Receptors

The majority of the banks of the River Humber are of ecological importance and are classified as a Site of Special Scientific Interest (SSSI), Special Protection Area (EU designation) and a Ramsar site (EU designation). These classifications do not apply immediately in the vicinity of Immingham Docks and the site but refer to areas located along the northern shore of the River Humber and from approximately 800m south-east of the site.

## 1.6 Environmental Record Review

A search of the HSE Control of Major Accident Hazards (COMAH) database revealed the following COMAH facilities within 1km of the site:

- Approximately 150m west. Air Products (BR) Limited. Lower tier. Chemical manufacture, production and or disposal.
- Approximately 350m northwest. Associated Petroleum Terminals. Upper tier COMAH site. Fuel storage and distribution.
- Approximately 450m southeast. Tronox Pigment UK Limited. Upper tier COMAH site. Production of inorganic chemicals.
- Approximately 950m west. Immingham Dock. Lower tier COMAH site. Production or storage of fertiliser.

The site is located within an industrial area and there are no fuel stations within 500 m of the site.

There are no current or historic landfills or lagoons within the Part A(1) installation boundary.

## 2.0 Pollution History

### 2.1 Pollution Incidents

The Arkema 2016 report (refer Section 6 of Appendix SCR2) outlines spillages of hazardous liquids that are reported to have occurred at the Arkema site between 2006 and the permit surrender in 2016.

All of these spillages were contained on site, and none resulted in impacts to the soil and groundwater of the site. Arkema did not have a major emergency on site that resulted in a fire or the use of firefighting water or foam between 2006 and 2016.

It is noted that only two of the reported spillages were recorded for the reactor building:

- 2013. Reactor Three Product Leak (Approximately 200Kg). A blocked valve had been removed from the reactor following shutdown maintenance and not replaced. The spill was located within the reactor building; contained on site with no external impacts and cleaned up.



- 2012. Whilst sending a batch from blender 9 the retaining bolt on the cuno filter stripped the nut of its thread causing a spillage. The spillage was located within the reactor building; contained on site with no external impacts other than fugitive volatile organic compounds (VOC's). The spill was cleaned up.

## 2.2 Historic Site Activities

The site history for the whole Polynt site from approximately 1967 to 2016 is presented within the Arkema (2016) report (Appendix SCR2). The site was developed in the late 1960s and resin manufacture commenced on site in 1967. Extra reactors and blenders were added between 1973 and 1976. Further blending operations were added in 1991 and 1995. A drum filling building was added in 1984. Each of these production developments has resulted in associated storage tanks and other infrastructure installation.

It is noted that the EP boundary for the new Part A(1) installation EP application (refer Drawing 002) covers the western portion of the former reactor building only. Five reactors were present historically within the reactor building to produce base resin. Historically, the following activities were undertaken in the reactor building:

- Structural resins were manufactured in reactors 1 and 2.
- Coating resins are manufactured in reactors 3, 4 and 5.

The manufacturing process within the reactor building comprised a batch process in which glycols or organic acids (structural) or glycols, natural oils and organic acids (coatings) were mixed and heated to react. The end product was then dissolved in either styrene or white spirit in one of thirteen blenders.

The whole site was fully decommissioned and demolition works were completed as of October 2015. A site closure plan was in place to ensure that all sources of pollution risk from Arkema activities would be removed, and the decommissioning activities would have no impact on the land. During this time the reactor building was decommissioned and demolished to slab level. Permit EPR/3135FV was successfully surrendered on 21 December 2016 (refer Appendix SCR3). It is understood that no activities have taken place in the area defined by the new installation EP between 2016 and 2021.

## 2.3 Historic Offsite Activities

Surrounding land uses identified within 250m have included:

- A warehouse 100m southwest from pre 1972 to present (currently associated with PD Ports).
- A chemical works 110m northeast pre 1972 to approximately 2006.
- An unspecified works 170m northwest pre 1978 to present (currently associated with small reservoirs and/or ponding of water).
- Associated petroleum terminal 330m northwest.

## 2.4 Baseline Data

Arkema Innovative Chemistry produced a Site Protection and Condition Report (SPCR) for the Stallingborough site in August 2016 (reference ARK/004/JC) as presented in Appendix SCR2. The SPCR was produced to demonstrate the condition of the land prior to the surrender of EP EPR 3135FV; which incorporated the following elements prior to surrender:

- S4.1 A1 (c) producing polyester resins.
- S4.1 A1 (d) producing polyester resins incorporating TDI; and
- S5.3 A1 (c)(i) aerobic treatment of waste waters.

The Arkema report was prepared to demonstrate that Arkema had protected soil and groundwater during the lifetime of EP EPR 3135FV.

As part of the former EP submission works the following report was prepared:

- WSP Parsons Brinckeroff (WSP). Ground Condition Report. Report No 70013935-10447(5) January 2016.

WSP undertook an assessment of current ground conditions and prepared a conceptual site model to assist with the EP surrender. In September 2015, WSP collected groundwater samples from nine of the existing boreholes and completed gas monitoring on one occasion. To inform the conceptual site model, supplementary hydrogeological information was collected using baro and level loggers. The results from the 2015 groundwater monitoring were compared to those obtained in 2010 (Table 2 below). With the exception of glycol, aromatic hydrocarbons (C12-16) and benzene, all analytes were recorded at lower concentrations in 2015 when compared to 2010.

**Table 2 Comparison of 2010 & 2015 Groundwater Monitoring Results (Arkema 2016)**

ANALYTE	MAXIMUM 2010 µG/L	MAXIMUM 2015 µG/L	LOCATION(S) FAILING SCREENING 2010	LOCATION(S) FAILING SCREENING 2015	COMMENTS
Diethylene glycol	14,000	30,900	BH01	BH03	Testing in 2010 comprised Glycerine. BH01 recorded concentrations at less than the detection limits in 2015.
TPH Aliphatic C8 - C10	26,000	1,150	BH03, BH04, BH06	BH03	No speciation of TPH in 2010, the maximum result is used as guide only.
TPH Aliphatic C10 - C12	26,000	2,540	BH03, BH04, BH06	BH03	
TPH Aromatic C8 - C10	26,000	5,650	BH03, BH04, BH06	BH03, BH04, BH06	
TPH Aromatic C10 - C12	26,000	1,700	BH03, BH04, BH06	BH03, BH06	
TPH Aromatic C12 - C16	12,000	14,300	BH03, BH05, BH06	BH03, BH04	
Benzene	3.4	6.76	BH03, BH04, BH06	BH03, BH04	It is noted that BH06 is recorded at less than the detection limits, however, the detection limits was raised in this sample to 10ug/l.
Ethylbenzene	6100	<1	BH04	None	All samples less than detection limits in 2015.
Isopropyl benzene	64	6.58	BH03, BH04, BH06	BH05	All samples recording elevated concentrations in 2010 are less than detection in 2015.
1,3,5-Trimethylbenzene	840	53.1	BH03, BH04, BH05, BH06	BH03, BH04, BH06	BH05 is recorded at less than the detection limited in 2015.
1,2,4-Trimethylbenzene	1300	41.5	BH03, BH04, BH06	BH05, BH06	BH03 is recorded at less than the detection limited in 2015.
Naphthalene	58	2.49	BH03, BH04, BH06	BH04	BH03 and BH06 record concentrations at less than the detection limits. It is noted that the detection limit in BH06 is raised to 10 ug/l.
m,p-Xylene	16,000	303	BH04, BH06	BH06	In 2015, concentrations exceeds Surface Water WQS only.
o-Xylene	4,500	184	BH06	BH03, BH06	In 2015, concentrations exceeds Surface Water WQS only.

Aromatic Hydrocarbons (C12-16) were recorded at slightly higher concentrations within the same order of magnitude and overall, the total hydrocarbon results decreased from 2010 to 2015. Benzene had marginally increased from 2010 to 2015. These increases were within the uncertainty of laboratory analysis and groundwater sampling and do not represent certainty that an increase in actual concentration has occurred.

It is noted that glycol was recorded locally at higher levels in BH03. Glycol was considered unlikely to pose a risk to controlled waters or human health.

#### 2.4.1 Environmental Permit Surrender Former EP EPR 3135FV

The WSP report was reviewed by the Environment Agency (EA) Lincolnshire and Northamptonshire Area groundwater and contaminated land Technical Specialist. Following review, the EA accepted the conclusions made and approved the surrender of the permit at area regulatory level.

The decision was made based on the following:

- All process equipment and tanks were removed;
- The drainage system was repaired and cleaned;
- There was only a minor increase in groundwater contamination for one determinand that could be attributed to the permitted activities;
- The groundwater sensitivity of the site is low due to the underlying clayey drift deposits;

### 3.0 Permitted Activities

#### 3.1 Proposed Part A(1) Permitted Activities

Polynt are proposing to install a new process vessel for the manufacture of Potassium 2-Ethylehexanoate in IPA (KEH in IPA) product. The process vessel will be heated by a temporary steam boiler to produce organic chemicals containing oxygen. Proposed new equipment includes:

- Installation of new 17.5 tonne capacity process vessel and associated building to house the vessel.
- Use of new temporary diesel fired steam boiler of 0.9 MWth output.
- Variable Speed Drive agitator, 3m<sup>3</sup> receiver, condenser, agitator and four pumps.

The proposed changes will allow the site to increase its overall production output as shown in Table 3.

**Table 3 Production Output**

Product	Customer validation (Metric tonnes / 3 years)	Contingency unit (Metric tonnes / annum)
Potassium 2-Ethylhexanoate (KEH in IPA)	17.5	1,156

##### 3.1.1 Installation Activities

The primary purpose of the development is to produce organic compounds containing oxygen for the proposed purpose of manufacturing of the Potassium 2-Ethylehexanoate in Isopropanol (KEH in IPA) product. As such, it is considered that the installation would be regulated under the following primary activity listed in Schedule 1 Part 2 of the Environmental Permitting (England & Wales) Regulations 2016 (as amended) ('the EPR'):

- *Section 4.1 Part A(1) (a)(ii) – organic compounds containing oxygen (for example alcohols, aldehydes, ketones, carboxylic acids, esters, ethers, peroxides, phenols, epoxy resins);*

This EP application will not alter the Part B activities carried out on the Site, but will allow for the installation of a new 22m<sup>3</sup> process vessel and new reactor building to accommodate it, along with a diesel fired 0.9MWth temporary steam boiler for heating the reaction vessel as a separate activity.

### 3.1.2 Specified Waste Management activities

The categories of waste, storage arrangement on site, and recovery/disposal options are detailed in Table 4 below.

**Table 4 Waste Storage, Recovery and Disposal**

Waste Material	Storage Arrangements	Disposal or Recovery
<b>Wastes from on-site processes</b>		
Wet Isopropyl alcohol IPA	Intermediate bulk containers (IBC)	Recovery
Packaging - IBC's	IBC	Recovery
Packaging - Bags	Baled	Disposal / Recycled
Used filter papers	Filter papers	Disposal

The waste management activities to be carried out at the site are detailed below:

- R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

### 3.1.3 Directly Associated Activities

The following directly associated activities will be undertaken at the site:

- Generation of heat for use within process reactions using temporary steam boiler (1x0.9MWth).

## 3.2 Non-Permitted Activities

There will be no non-permitted activities taking place at the Part A(1) site.

## 4.0 Current Baseline Site Conditions

Paragraph 2 of Article 22 of the IED states that:

*'Where the activity involves the use, production or release of relevant hazardous substances and having regards to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7<sup>th</sup> January 2013.*

*The baseline report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities.*

*The baseline report shall contain at least the following information:*

*Information on the present use and, where available, on past uses of the site; and*

*Where available, existing information on soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.'*

Set out below are details of how Polynt Composites have met the requirements of Article 22 of the IED at the EP application stage.

Since 2016, and the demolition of the former reactor building; the EP boundary area has comprised a cover of concrete at slab level. This current land use is considered unlikely to comprise a significant contamination source.

**Table 5 Main Stages in Preparing a Baseline Report**

Stage	Activity	Objective	How Polynt Composites has met the requirement
1	Identify which hazardous substances are used, produced or released at the installation.	<p>Determine whether or not hazardous substances are used, produced or released in view of deciding whether a baseline report is required.</p> <p>If yes: produce a list of all potential hazardous substances.</p>	<p>A list of potentially hazardous substances used, produced or released under operation of the former Arkema facility and its associated Part A(1) activities (former EP EPR 3135FV) is listed below.</p> <p><b>As a result of historical land use:</b></p> <ul style="list-style-type: none"> <li>- Diethylene glycol</li> <li>- Total petroleum hydrocarbons (TPH) (aliphatic C8-C12)</li> <li>- TPH (aromatic C8-C16)</li> <li>- BTEX</li> <li>- Isopropyl benzene.</li> <li>- 1,3,5 trimethylbenzene</li> <li>- 1,2,4 trimethylbenzene</li> <li>- Naphthalene</li> <li>- Glycols</li> <li>- Natural oils</li> <li>- Organic acids</li> <li>- Styrene</li> <li>- White spirit (hydrocarbons, n-alkanes, isoalkanes and cyclics)</li> </ul> <p>Asbestos</p> <ul style="list-style-type: none"> <li>- Semi Volatile Organic Compounds (SVOCs)</li> <li>- Volatile Organic Compounds (VOCs)</li> </ul> <p><b>As a result of the operation of the new process vessel:</b></p> <ul style="list-style-type: none"> <li>- Isopropyl alcohol</li> <li>- Potassium 2-Ethylehexanoate</li> <li>- Isopropanol</li> <li>- Diesel (TPH carbon fraction C8-C12)</li> </ul>

Stage	Activity	Objective	How Polynt Composites has met the requirement
2	<p>Identify which of the hazardous substances from Stage 1 which, according to the evaluation by suitably qualified and experienced persons, as a result of their hazardousness in respect to toxicity, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater.</p> <p>Discard those hazardous substances that are incapable of contaminating soil or groundwater. Justify and record the decisions taken to exclude certain hazardous substances.</p>	<p>To restrict further consideration to only the <b>relevant</b> hazardous substances that are capable of contaminating soil or groundwater in view of deciding on the need to prepare and submit a baseline report.</p>	<p>All of the substances detailed above would be capable of contaminating soil and groundwater if there were no mitigation measures in place at the Installation.</p> <p>However, mitigation measures proposed for the site (please refer to the Environmental Risk Assessment (ERA) and BAT-OT submitted with this EP application) will ensure that no contamination occurs as a result of the proposed activities to be undertaken at the site.</p>
3	<p>For each relevant hazardous substance brought forward from Stage 2, identify the actual possibility for soil or groundwater contamination at the site of the installation, including the probability of releases and the consequences of releases, taking particular account of:</p> <ul style="list-style-type: none"> <li>- the quantities of each hazardous substance concerned;</li> <li>- how and where they are stored;</li> <li>- how they are to be transported around the installation</li> <li>- how they are used</li> <li>- where they are emitted</li> <li>- measures that have been and, for new installations, will be adopted to protect soil and groundwater at the installation.</li> </ul>	<p>To identify which of the hazardous substances from Stage 2 represent a potential pollution risk at the site based on the likelihood of emissions of such substances occurring.</p> <p><b>These are the 'relevant' hazardous substances for which information must be included in the baseline report.</b></p> <p>Note: Where it is found that, due to the quantities of the hazardous substances used, produced or released, that there is <b>no possibility of soil and groundwater contamination a baseline report does not need to be prepared or submitted</b>. However, in those cases it is expected that a record of such a decision, including the reasons for the decision, will be made and held by the competent authority.</p>	<p>As detailed in Stage 2, mitigation measures will be in place to protect the groundwater, surface water and soil within the installation permit boundary from contamination.</p> <p>The mitigation measures to be employed at the site are fully outlined in the ERA and BAT-OT submitted with this EP application. Please refer to these documents for full details of how the Installation will be operated to protect against fugitive emissions to water and land.</p>
4	<p>Provide site history.</p>	<p>Identify potential sources which may have resulted in the relevant hazardous substances identified in Stage 3 being present on the site of the installation.</p>	<p>Please refer to Section 2 of this SCR for details of past land use, historic pollution incidents and baseline data.</p>
5	<p>Identify the site's environmental setting.</p>	<p>Determine where hazardous substances may go if emitted and where to look for them. Also identify</p>	<p>Please refer to sections 1.2, 1.3, 1.4, 1.5 and 1.6 of this SCR for details of</p>

Stage	Activity	Objective	How Polynt Composites has met the requirement
		the environmental media and receptors that are potentially at risk and where there are other activities in the area which release the same hazardous substances and may cause them to migrate onto the site.	present environmental settings and the site's surroundings.  Please refer to the ERA included with this EP application.
6	Use the results of Stages (3) to (5) to describe the site, in particular demonstrating the location, type, extent and quantity of historic pollution and potential future emissions noting the strata and groundwater bodies likely to be affected by those emissions – making links between sources of emissions, the pathways by which pollution may move and the receptors likely to be affected.	Identify the location, nature and extent of existing pollution on the site and to determine which strata and groundwater bodies might be affected by such pollution.  Compare with potential future emissions to see if areas are coincident.	Please refer to Appendix SCR2, Arkema 2016 Environmental Site Protection and Condition Report.  Please refer to the ERA included with this EP application.  Drawing 003 illustrates the site layout plan.
7	If there is sufficient information to quantify the state of soil and groundwater pollution by relevant hazardous substances on the basis of Stages (1) to (6) then go directly to Stage 8. If insufficient data exists, then intrusive investigation of the site will be required in order to gather such information.	Collect additional data as is necessary to allow a quantified assessment of soil and groundwater pollution by relevant hazardous substances.	The existing ground investigation studies as referenced in section 2.4 of this SCR enable the quantification of the state of the ground by relevant hazardous substances for the site.
8	Produce a baseline report for the installation that quantifies the state of soil and groundwater pollution by relevant hazardous substances.	Provide a baseline report in line with the IED.	Provided with this table and SCR.

## 4.1 Environmental Monitoring and Compliance

Monitoring of point source and fugitive emissions throughout the lifetime of the Part A(1) installation will be undertaken in line with the conditions outlined within the EP.

Reporting of emissions will be undertaken in line with the conditions outlined in the EP.

## 4.2 Operation of the Installation and Management System

The process vessel will be managed by technically competent personnel in accordance with procedures and the Environmental Management System (EMS). This will ensure good practice and minimise environmental risk throughout the operation.

### 4.3 Environmental Risk Assessment

As required by EA guidance, an ERA has been undertaken and is included as part of the Part A(1) EP application.

The ERA is provided with the Part A(1) EP application and is an assessment of the risks to the environment and to human health that may be associated with the proposed operations at the site. The ERA reviews a 1km radius from the site's Part A(1) EP boundary for potentially sensitive receptors of ecological importance along with features such as sites of cultural and natural heritage. A radius of 500m from the site's EP boundary has been adopted for all other potentially sensitive receptors (for example, residential, commercial, industrial, agricultural and surface water receptors).

### 4.4 SCR Updates

Polynt Composites will maintain the SCR over the lifetime of the Part A(1) installation to detail potential or recorded change to the condition of the site.



## APPENDIX SCR1: H5 TABLE

1.0 SITE DETAILS	
Name of the applicant	Polynt Composites UK Ltd
Activity address	Laporte Road, Stallingborough, DN41 8DR
National grid reference	TA 21300 15100

Document reference and dates for Site Condition Report at permit application and surrender	<ul style="list-style-type: none"> <li>Arkema (2016). Site Protection and Condition Report. Arkema Coatings Resins Ltd. Ref ARL/004/JC dated 24 August 2016.</li> </ul>
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Document references for site plans (including location and boundaries)	Drawing 001 Site Location Plan Drawing 002 Environmental Permit Boundary Drawing 003 Site Layout Drawing 004A Site Setting Local Receptors Drawing 004B Cultural and Natural Heritage
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**Note:**

In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form, then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: <ul style="list-style-type: none"> <li>• geology</li> <li>• hydrogeology</li> <li>• surface waters</li> </ul>	Please refer to sections 1.3, 1.4 and 1.5 of the SCR for details of the environmental settings (geology, hydrology, hydrogeology) of the site and its surroundings.
Pollution history including:	Please refer to sections 2.0 of the SCR for details of the pollution incidents, potentially polluting activities, historical land uses and evidence of

<ul style="list-style-type: none"> <li>• pollution incidents that may have affected land</li> <li>• historical land-uses and associated contaminants</li> <li>• any visual/olfactory evidence of existing contamination</li> <li>• evidence of damage to pollution prevention measures</li> </ul>	<p>existing contamination of the site and, where appropriate its surroundings.</p>
<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p>	<p>Please refer to section 2.4 of the SCR for a summary of Ground Investigations</p>
<p>Baseline soil and groundwater reference data</p>	<p>Appendix SCR2: Arkema (2016). Site Protection and Condition Report. Arkema Coatings Resins Ltd. Ref ARL/004/JC dated 24 August 2016.</p>
<p><b>Supporting information</b></p>	<ul style="list-style-type: none"> <li>• SCR – Ref: 410.12276.00001/SCR</li> <li>• ERA – Ref: 410.12276.00001/ERA</li> <li>• Appendix SCR2: Arkema (2016). Site Protection and Condition Report. Arkema Coatings Resins Ltd. Ref ARL/004/JC dated 24 August 2016</li> <li>• Appendix SCR3: Environment Agency correspondence regarding surrender of former permit EPR 3135FV on 21 December 2016</li> </ul>

### 3.0 Permitted activities

<p>Permitted activities</p>	<p>Please refer to section 3.0 of the SCR for a description of the proposed permitted activities for the site.</p>
<p>Non-permitted activities undertaken</p>	<p>Not applicable.</p>
<p>Document references for:</p> <ul style="list-style-type: none"> <li>• plan showing activity layout; and</li> <li>• environmental risk assessment.</li> </ul>	<p>Drawing 001 Site Location Plan          Drawing 002 Environmental Permit Boundary          Drawing 003 Site Layout          Drawing 004A Site Setting Local Receptors          Drawing 004B Cultural and Natural Heritage          ERA – Ref: 410.12276.00001/ERA</p>

**Note:**

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as ‘dangerous’ under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater, we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	If yes, provide a plan showing the changes to the activity boundary.
Have there been any changes to the permitted activities?	If yes, provide a description of the changes to the permitted activities
Have any ‘dangerous substances’ not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	If yes, list of them
<b>Checklist of supporting information</b>	<ul style="list-style-type: none"> <li>• Plan showing any changes to the boundary (where relevant)</li> <li>• Description of the changes to the permitted activities (where relevant)</li> <li>• List of ‘dangerous substances’ used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)</li> </ul>

5.0 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you cannot, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
<b>Checklist of supporting information</b>	<ul style="list-style-type: none"> <li>• Inspection records and summary of findings of inspections for all pollution prevention measures</li> <li>• Records of maintenance, repair and replacement of pollution prevention measures</li> </ul>

## 6.0 Pollution incidents that may have had an impact on land, and their remediation

Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you cannot, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you have been there.

Checklist  
supporting  
information

of

- Records of pollution incidents that may have impacted on land
- Records of their investigation and remediation

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## 7.0 Soil gas and water quality monitoring (where undertaken)

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

Checklist supporting information	of	<ul style="list-style-type: none"><li>• Description of soil gas and/or water monitoring undertaken</li><li>• Monitoring results (including graphs)</li></ul>
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# APPENDIX SCR2: ARKEMA 2016 SITE PROTECTION AND CONDITION REPORT

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## APPENDIX SCR3: CORRESPONDENCE WITH THE EA

## EUROPEAN OFFICES

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