

Permitting decisions

Standard rules permit – SR2009 No2 – Low impact Part A installation

We have decided to grant the permit for Narla Engineering operated by Narla Engineering & Imports Limited.

The permit number is EPR/WP3008PH.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account.

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Non-technical summary

The installation carries out metal finishing. Operations include finishing of investment castings, forgings for gas turbines and medical implants.

Products are nickel plated, ground, polished and chemically processed using approved materials, to specified dimensions, verified using in-house and customer supplied jigs and gauges and retaining all customer identification systems according to customer specification.

A permit is required for the chemical milling process which uses acids of hydrogen fluoride, hydrogen chloride or other hydrogen halides as the etchant. Chemical milling and finishing take place in treatment vats/tanks.

This activity falls under the following Industrial Emissions Directive (IED) Schedule 1 listed activity description:

Section 4.2 Part A(1)(b): manufacturing activity which is likely to result in the release into the air of any hydrogen halide (other than the manufacture of glass or the coating, plating or surface treatment of metal) or which is likely to result in the release into the air or water of any halogen or any of the compounds mentioned in paragraph (a)(vi) (other than the treatment of water).

The volume of the vats employed for use in the surface treatment activities (excluding those used for chemical milling) is approximately 16m³. This falls below the IED Schedule 1 listed activity (Section 2.3 Part A(1)(a)-surface treating metals) threshold for the surface treatment of metals at 30m³.

There is an emission point which vents the building where the chemical activities take place. Abatement is in the form of emission reduction at source to protect the work force and reduce the amount of contact with chemical fumes and condensation. The depth of the solutions are kept as low as possible, and the tanks are maintained at room temperature which helps to minimise evaporation.

The emissions released have been screened out as insignificant using the H1 assessment tool.

The activities at the installation fall under the 'Low Impact' criteria (see Key issues section below).

Key issues of the decision

A) Low impact criteria

Our guidance to Part B3 of the Application form sets out the following criteria which must be met for the installation to qualify as having a low impact:

1) Management techniques

All of the criteria described below must be met without having to rely on significant management effort. In other words, the installation intrinsically must have only a low environmental impact, including under start up, shut down, or abnormal operating conditions.

The Applicant confirmed that they are in the process of obtaining ISO14001:2015 accreditation. They have an Environmental Management System (EMS) which is due to be audited by an assessor.

We agree that due to the nature of the activities taking place, the operation of the installation is not reliant upon significant management effort.

2) Aqueous waste

The installation must not release more than 50 m³ per day of water from process activities conducted at the installation giving rise to effluent. No account need be taken of the volume of water exported from the installation as product. Characterise and quantify any aqueous effluents released from the installation on a daily basis and provide justification that the installation releases no more than 50 m³ per day of water from process activities.

The Applicant confirmed that the installation produces approximately 11m³ of process effluent per day. This is either disposed of in the foul sewer under the Yorkshire Water discharge consent (provided in Appendix 2 of the Application) or sent to the on-site water treatment plant for treatment and re-use back into the process.

We are satisfied that this criteria is met.

3) Abatement systems / releases to air

The installation must comply with the criteria in this guidance without having to rely on active abatement for releases to the environment outside of any buildings. Releases must not be dependent on continuing or correct operation of equipment, where failure of active pollution prevention systems could result in an unacceptable external release. For example, if the installation depends on active abatement in the form of scrubbers, filters or electrostatic precipitators to achieve the releases to the environment set out in this guidance, it is unlikely that it can be treated as having only a low potential for impact. However, abatement systems installed solely for the protection of workers (where abatement is not to attenuate external environmental releases) need not be included in this assessment.

The Applicant confirmed that the chemical processing shop at the installation consists of four processing areas, each of which is dedicated to a material and/or component type.

The four areas are:

Titanium area (A)

Components are dipped in one or more acid tanks in order to achieve the required surface finish.

All chemical tanks in this area utilise plastic balls (coffles) as an aid to fume suppression, and are fitted with secure lids.

When not in use, all tanks are left at room temperature to reduce emissions.

Nickel base and steel area (B)

This line consists of a number of small tanks in which small cast components are dipped.

All acid tanks are fitted with secure lids, and only heated when required.

“4 Tank” line (C)

This area is dedicated to larger steel and nickel based parts. Both surface treatment and dimensional processing are occasionally carried out here when the tanks available on the “B” line are of insufficient size.

All tanks are covered and are only heated periodically.

Nickel plating

The plating tank itself is normally maintained at working temperature in order to prevent solution crystallisation.

The nature of the plating work requires a typical cycle time of around two hours. This allows the cover to be left on the tank at all times, except for two or three short periods during each working day to facilitate loading/unloading.

Commercial demand for this type of process has reduced considerably in recent years, resulting in prolonged periods of inactivity.

The combination of operating under cover and the use of eductor agitation (as opposed to air agitation) ensures minimal release of any atmospheric pollutants.

We agree that the processes described above do not have to rely on active abatement to minimise releases of emissions to the external atmosphere. The controls in place are primarily to protect the workforce within the internal environment, i.e. keeping chemicals at room temperature where possible and using coffles to minimise surface area and restrict evaporation.

4) Groundwater Regulations

There must be no planned or fugitive emission from the permitted installation into the ground, or any soak away. This does not preclude the discharge of clean rain water run-off into soak aways.

The Applicant confirmed that the only discharge permitted is clean rain water run-off to the external combined sewer. The installation is located on impermeable surface (concrete & tarmac surface).

Chemicals are stored in a dedicated impermeable bunded area which is inspected on a daily basis to ensure integrity.

Other chemicals are stored on drip trays which are emptied of rain water on a regular basis to ensure capacity is not compromised.

Waste water/chemicals are either discharged to foul sewer (under the Yorkshire Water discharge consent) where applicable, stored for removal off site, or directed to the on-site water treatment plant where water is treated and re-used in the process.

No discharges are made to ground, and there are no soak aways located on site.

We are satisfied that this criteria is met.

5) Waste production

The installation must not give rise to more than one tonne of Directive waste or 10 kg of hazardous waste per day, averaged over a year, with not more than 20 tonnes of Directive waste or 200 kg of hazardous waste being released in any one day.

The Applicant confirmed that the installation does not produce a significant amount of waste per annum.

They produce approximately one tonne of directive waste per month.

The chemical milling activities give rise to approximately 50m³ of chemical waste per year which is classed as hazardous. 47m³ of this waste is treated on-site in the water treatment plant where water is reprocessed where possible, and the remainder discharged to foul sewer under the Yorkshire Water discharge consent. The hazardous waste destined for disposal off-site is liquid that cannot be treated on site in the water treatment plant and requires off-site disposal. Approximately 3m³ of hazardous water per year is removed from site using authorised waste contractors.

This means that averaged over a year there is no more than 20 tonnes of Directive waste or 200 kg of hazardous waste being released in any one day.

We are satisfied that this criteria is met.

6) Energy consumption

The installation must not consume energy at a rate greater than 3 MW or, if the installation uses a combined heat and power installation to supply any internal process heat, 10 MW. These limits apply to the sum of energy imported as electricity and produced on site through the combustion of fuels.

The installation peak energy consumption is approximately 250 kVA (0.25 MW).

We are satisfied that this criteria is met.

7) Accident prevention

There must be satisfactory containment measures in place to prevent fugitive emissions to surface water, sewer or land and ensure that these are adequately maintained at all times. This requirement applies to all substances present on site and in any quantity.

The response to this was provided in Appendix 4 of the Application, 'Chemical spill procedure' and 'Environmental spill response'.

We are satisfied that this criteria is met.

8) Noise

There must be only a low potential for causing offence due to noise. An installation will not be considered as a low impact installation if it may give rise to noise noticeable outside the installation boundary.

The Applicant confirmed that noise is not deemed an issue from the installation. The majority of activities giving rise to noise take place indoors (use of polishing machines, working with metal, extractors).

The use of plant (forklift truck), may give rise to minimal noise outside the warehouse, however this is only used when required, and kept well maintained.

These activities do not cause significant noise beyond the site boundary.

We are satisfied that this criteria is met.

9) Emissions of polluting substances

Justify that there will be no likelihood of a release to the environment of any particular substance from the whole installation at a rate greater than that determined as insignificant as set out in our guidance note.

The Applicant provided an assessment of emissions using our H1 assessment tool. Worst case emissions monitoring data was used from the stack testing of the chemical milling process.

The chemical milling process is not continuous. The emissions were entered into the H1 assessment, along with the estimated times of use during a standard working year.

The long and short term process contributions for hydrogen chloride, hydrogen fluoride and nitrogen monoxide, have been assessed as having insignificant impacts when compared against all the relevant environmental standards. A screenshot from the tool is provided below:

Number	Substance	Long Term	Short Term	Long Term			Short Term		
		EAL	EAL	PC	% PC of EAL	> 1% of EAL?	PC	% PC of EAL	> 10% of EAL?
		µg/m3	µg/m3	µg/m3	%		µg/m3	%	
1	Hydrogen chloride	-	750	0.0642	-		6.27	0.835	No
2	Hydrogen fluoride (as	16.0	160	0.117	0.731	No	6.16	3.85	No
3	Nitrogen monoxide (N	310	4,400	0.728	0.235	No	71.0	1.62	No

We are satisfied that this criteria is met.

10) Odour

There must be only a low potential for giving offence due to odour. An installation will not be considered as a low impact installation if it may give rise to an offensive smell noticeable outside the Installation boundary. This requires the exercise of judgement, taking account of any history of odour complaint from the installation and whether this class of activity is known by experience to give rise to smells.

The Applicant confirmed that odour is not a significant issue at the installation. All stored chemicals are in sealed containers which do not give rise to odours. Open containers of chemicals are only found within the warehouse, and doors and exits are sealed to prevent escape of emissions/odours.

We are satisfied that this criteria is met.

11) Compliance history

If any of the following enforcement actions have taken place at the same installation under the same management (and where appropriate, have not been overturned on appeal), then it will not normally be considered further as a low impact installation:

Prosecution, formal caution, suspension notice, enforcement notice relating to an actual or potential environment incident.

The Applicant confirmed that no enforcement actions have taken place at the installation under the current management. This is evidenced in Appendix 10 of the Application. The Applicant have complied with a Yorkshire Water discharge consent since January 2010 with no non-compliances.

We are satisfied that this criteria is met.

B) Standard rules permit SR2009 No2 – Low impact Part A installation

The Applicant has applied for a SR2009 No2 permit. In order to satisfy the conditions of this permit the following criteria must be met:

- 1) The activities are not carried out on or immediately adjacent to a European Site¹, Ramsar Site, Site of Special Scientific Interest (SSSI), National Nature Reserve, Local Nature Reserve or Ancient Woodland; and
- 2) There is no direct discharge of aqueous waste within 10km upstream of a European Site, Ramsar site or a SSSI, within 100 metres upstream of a National Nature Reserve, Local Nature Reserve or Ancient Woodland,
or within a National Park.
- 3) The only wastes allowed to be accepted as part of the operation of the installation are spent ion exchange resins.
- 4) The rules do not apply to installations with more than one operator.

We are satisfied that these criteria are met.

Decision checklist

Aspect considered	Decision
Receipt of application	
Standard rules criteria check	The application meets the criteria for the standard rules applied for, refer to Key issues section above.
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website.
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports. In this report they confirmed that a drainage survey of the foul sewers was carried out and minimal issues were raised with the infrastructure. It did identify some areas in the drainage run requiring urgent repair.
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Growth Duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to

Aspect considered	Decision
	<p>grant this permit. The conditions imposed under the permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution and are based on our risk assessment undertaken at the time the Rules were made.</p> <p>Application of the Rules to this activity promotes economic growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>

Consultation

The following summarises the responses to our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

We did not receive any responses.