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M&I Materials Ltd Wolfmet - Environmental Permit Application

M&I Materials Limited, Wolfmet, Units 1 – 2, Westpoint Enterprise Park, Manchester, M17 1QS.

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Contents

M&I Materials Limited, Wolfmet, Units 1 – 2, Westpoint Enterprise Park, Manchester, M17 1QS	0
Non-Technical Summary.....	1
1 What activities are you applying to Operate?	1
1a Type of Activity.....	2
2 Emissions to Air, Water and Land	3
Table 2 Emissions.....	3
3 Operating Techniques.....	3
3a Technical Standards.....	3
Process Overview	3
Process Wastewater	6
Waste Storage	6
3b General Requirements	6
3c Types and Amounts of Raw Materials	6
3d Management Systems.....	7
4 Monitoring	8
4a Describe the measures you use for monitoring emissions.....	8
4b Point source emissions to air only.....	8
5 Environmental Impact Assessment.....	8
5.1 5a Have your proposals been the subject of an EIA under Council Directive 85/337/EEC?	8
6 Resource Efficiency and Climate Change	8
6a Describe the basic measures for improving how energy efficient your activities are	8
6b Provide a breakdown for any changes to the energy your activities use up and create	8
6c Have you entered into, or will you enter into, a climate change levy agreement? If not, describe the specific measures you use for improving your energy efficiency.....	9
6d Explain and justify the raw and other materials, other substances and water that you will use.	9
6e Describe how you avoid producing waste in line with Council Directive 2006/12/EC on waste.....	9
7 Environmental Risk Assessment.....	10
Management techniques	10
Aqueous waste:.....	10
Abatement systems/releases to air:	10
Groundwater regulations:	10
Waste production:	10
Energy consumption:	11
Accident prevention:	11
Noise:.....	11
Emissions of polluting substances:.....	11

Odour:.....	11
Compliance history:	12
Appendix 1 – Landmark Envirocheck Report	13
Appendix 2 – Site Map	14
Appendix 3 - Wolfmet Materials Inventory & RHS Screening	15
Appendix 4 – Drainage Map	16
Appendix 5 – M&I ISO 14001 2015 Certificate.....	17

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Non-Technical Summary

M&I Materials Ltd are making an application to the Environment Agency (EA) for a Standard rules SR2009 No 2: low impact part A installation to cover the relocation of the Wolfmet Process to a new location. The new M&I Materials Wolfmet Installation will be located at Units 1 – 2, Westpoint Enterprise Park, Manchester, M17 1QS. The existing Wolfmet process is currently operating at the M&I Hibernia Way site and is subject Standard rules SR2009 No 2: low impact part A installation permit EPR/BP3930JC.

The application seeks to permit the process under 2.2 Part A (1) (a) Non-ferrous Metals. Wolfmet manufacture is a powder metallurgy process which involves the mixing of precise amounts of raw material in the form of tungsten and other secondary alloying powders to produce a homogeneous blend and applying exacting temperatures at different stages to create specific alloys. The process involves:

- Powder mixing
- Pressing
- Forming
- Sintering
- Machining
- Storage of raw materials and wastes
- Quality control

Emissions to air from the process consist of exhaust air from LEV extraction which is in place on powder mixing areas for the protection of employees, and the furnaces. There are no emissions of effluent, noise or odour, and the likelihood of fugitive emission to air and water is very low as the process operates entirely within the building.

A small number of raw materials are used in the process, consisting of metal powders. Any other stored materials will be associated with onsite engineering and maintenance activities, these not considered part of the permissible process. Rejected products and powders collected in LEV systems can generally be reused and wastes from the process are minimal consisting mainly of raw materials packaging. The process uses energy in the form of electricity to power machinery and furnaces, with a small amount of gas being used to ignite burn offs from the furnaces.

The process is considered to meet the Low Impact criteria. After the permissible part of the process has completed, machining of finished parts may take place, producing coolant and swarf waste. While this waste stream goes above the Low Impact criteria for hazardous waste production, it is not considered part of the permissible process.

The process will be covered within the scope of M&I's ISO 14001:2015 certification. As the following report sets out, the magnitude of risk to human and environmental receptors from planned and fugitive emissions to air, and fugitive emissions of/to noise, odour, groundwater, and surface water, from the relocated Wolfmet Process are deemed to be insignificant or not applicable. The process will operate in accordance with all principals that constitute a Low Impact Installation, as set out in Section 7.

1 What activities are you applying to Operate?

Table 1a Types of Activities

Schedule 1 listed activities			
Installation Name	Schedule 1 References	Description of the activity	Description of Existing Activity

M&I Materials Wolfmet Production	2.2 A (1) (a)	Non-ferrous metals; producing from raw materials by metallurgical activities.	Powder metallurgy process to generate tungsten alloy Wolfmet products.
Directly associated activities			
Name of DAA	Description of the DAA (please identify the schedule 1 activity it serves)		
Receipt and storage of raw materials	Receipt and storage of raw materials prior to use on site.		
Storage of waste products	Segregation and storage of waste pending disposal/recovery off-site		

1a Type of Activity

M&I currently operate the existing Wolfmet facility at the Hibernia Way site (subject Standard rules SR2009 No 2: low impact part A installation permit EPR/BP3930JC) for the production of tungsten alloy components. The operator is applying for a new permit to account for the re-location of its production process from its current facility at Hibernia Way to a new site at Units 1 – 2, Westpoint Enterprise Park, Manchester, M17 1QS. It has been determined that the relocated operations will continue to require EPR authorisation. The Wolfmet process qualifies based on the interpretation of the EPR schedule qualification criteria below and summarised in the following paragraphs for reference in the permit determination process:

Non Ferrous Metals Section 2.2. Part A(1)(a)

Unless falling within Part A(2) of this Section, producing non-ferrous metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic activities.

The Wolfmet process generates a composite material of tungsten grains held in an alloy matrix of nickel, copper or iron which meets the regulators interpretation of what is meant by the 'producing non-ferrous metals' that is usable in a metallurgical sense. The operator accepts that this is the criteria set out within RGN 2 – *Understanding the meaning of Regulated Facility*, Note 2.2.3. The Wolfmet products therefore meet the definition of a 'non-ferrous metal' in that it does not contain iron (ferrite) in appreciable amounts.

Liquid phase sintering (the process of adding an additive to the powder which will melt before the matrix phase), has previously been determined by EA to be a metallurgical process that involves heat (meeting note 2.2.4 of RGN 2). Tungsten, Chromium, Molybdenum metal powder, Iron Powder, Nickel powder and Copper powder meet the definition of 'secondary raw materials' i.e. 'material arising from the production or use of metals, metal compounds, or products comprising or containing metallic components.'

Other than the mixing of the powders prior to sintering and raw materials and waste storage there are no other directly associated activities on site. It should be noted that the tungsten components are not all machined on-site with the option for 3rd party machining for customers undertaken downstream of the manufacturing activities undertaken at the M&I facility. The machine shop part of the site is also used for other processes apart from that associated with the Wolfmet products. There is therefore deemed to be a technical break in the process at the end of the sintering stage.

2 Emissions to Air, Water and Land

Table 2 Emissions

POINT SOURCE EMISSIONS TO AIR					
Emission Ref.	Point	Parameter	Concentration	Unit	Source
A1		Exhaust Air	N/A	N/A	Storage area LEV
A2		Exhaust Air	N/A	N/A	Storage area LEV
A3		Exhaust Air with wax vapour	N/A	N/A	Furnace Vent
POINT SOURCE EMISSIONS TO WATER (OTHER THAN SEWERS)					
N/A					
POINT SOURCE EMISSIONS TO SEWERS, ETP'S OR OTHER TRANSFERS OFF SITE					
N/A					
POINT SOURCE EMISSIONS TO LAND					
N/A					

3 Operating Techniques

3a Technical Standards

Table 3 Technical Standards

Description of the Schedule 1 Activity or DAA	Relevant Technical Note	Guidance	Document Reference
Production of Non-Ferrous Metals Section 2.2	EPR 2.03 How to Comply Non-Ferrous Metals and the Production of Carbon and Graphite		Best Available Techniques (BAT) Reference Document for the Non-Ferrous Metals Industries, 2017

Process Overview

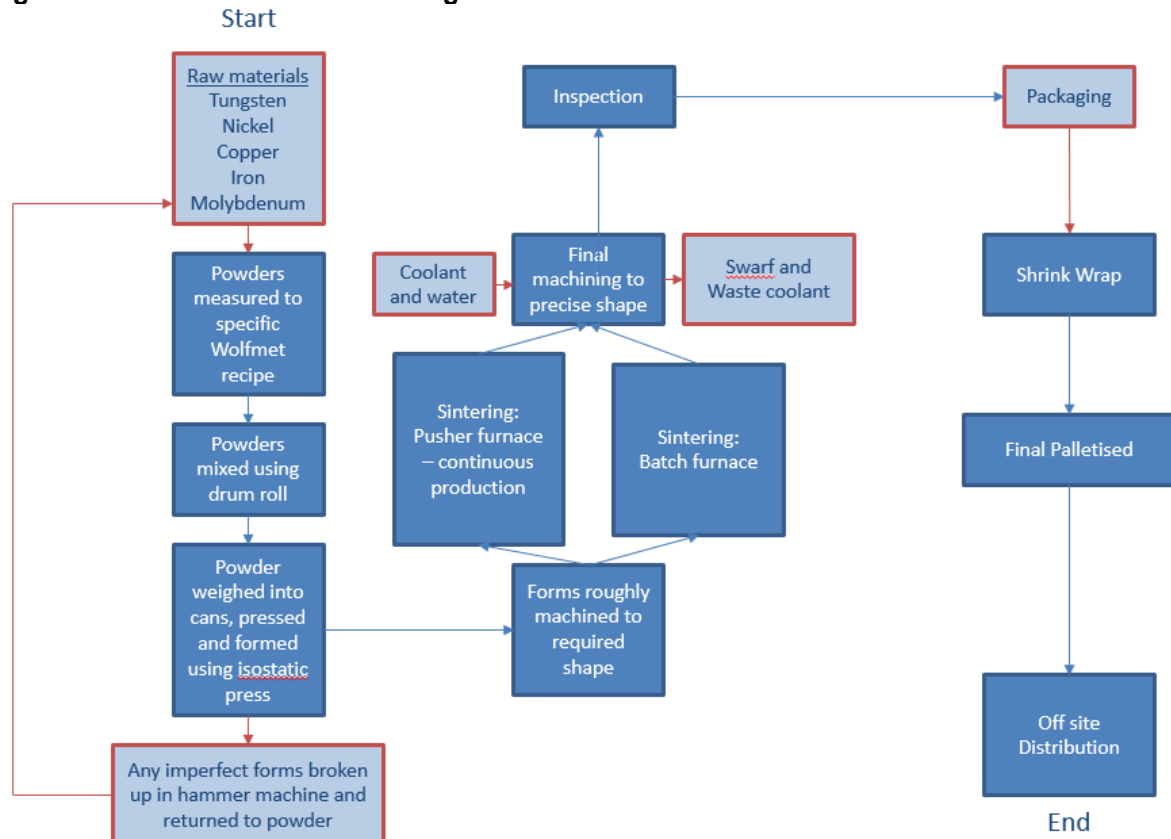
Wolfmet manufacture is a powder metallurgy process which involves the mixing of precise amounts of raw material in the form of tungsten and other secondary alloying powders to produce a homogeneous blend and applying exacting temperatures at different stages to create specific alloys. The components can be then further machined on or off site to produce finished tungsten alloy components.

The process is summarised below and should be read in conjunction with the process flow diagram:

- Powder mixing – Raw tungsten powder is mixed with other lower melting point metal powders such as nickel, copper or iron to achieve the desired grade required by the customer and industry standards
- Pressing – The powder mixture is pressed to bind it into a solid block. Various shapes and sizes are produced at this stage in line with the finished item requirements
- Forming – Basic machining is carried out to cut the compacted powder into pre-sintered shapes. This reduces the amount of material to be machined off after sintering, minimising material usage, costs and machining time

- Sintering – Formed parts are sintered in a furnace which converts the pressed powder into the solid composite metal alloy. Parts shrink by around 15% but no mass is lost, which increases the density of the material. This is the end of the process as it is described in the regulations.
- Machining – The sintered alloy is machined into the final parts using CNC machine, mills and lathes some of which is carried out on site or by third parties
- Quality control – Prior to dispatch, all parts are inspected for dimensional tolerances, traceability and density.

Figure 1: Wolfmet Process Flow Diagram



All powders are delivered to site in drums and are stored internally within a dedicated location in the warehouse. The materials are transferred to the weighing area as required for a specific batch. Operators carefully weigh exact amounts of each of the powders by hand, according to the customer specification or industry standards for the production of specific alloys.

Raw tungsten powder is mixed using drum rolling equipment with other lower melting point metal alloying powders such as nickel, copper or iron to produce a homogeneous blend that will achieve the desired grade of alloy once further processed. There are two mixing machines which accept a drum loaded with a powder mix in a horizontal alignment. The drums are loaded into the mixers via an overhead hoist. Drums are approximately Ø400.0mm x 350mm and weigh between 100Kg – 450Kg when loaded. Metal restraints hold the drum in position while it is spun for approximately 8 hours. The grade of material dictates the type of drum to be used, i.e. veined or plain.

The powder mixture is pressed to bind it into a solid block. Various shapes and sizes are produced at this stage in line with the customer requirements for the finished item. An isostatic press is used to cold press the powder into green compacts holding the items under specific pressures for a set amount of time. The size, quantity and component complexity are the main factors in determining how the pressing operation is precisely carried out using forms, dies and moulds. The process applies pressure uniformly over the compacted material and increase its density so an initial pre-sintered shape can be handled.

In any of the processes where there are powders being decanted from one container to another there is local extraction installed for the purpose of protection of workers from dust. Each set up and type of extraction is different depending on the area and will be designed and operated in full compliance with HSG258. All extraction is extracted to an enclosed hopper unit located outside of the factory walls. The extraction unit has filter unit, and gauges will be inspected, operated and maintained in accordance with supplier specifications. Powder collected by the extraction units is reused in the process where possible.

The operator will then carry out further green shaping processes to produce pre-sintered shapes close in form to the finished item. This process involves the operator cutting the compacted powder to reduce the amount of post sintering machining that is required and allows the recovery of materials back into the process as once broken down is feedstock for further forms.

The green shapes are stacked into carriers that are then either loaded into the continuous push or batch furnace. In both cases the sintering process is completed in closely controlled electric furnaces at temperatures between 1350°C and 1500°C for up to 24hrs. The furnaces use a nitrogen gas to purge at the beginning and end of cycle, and a mix of hydrogen / nitrogen for the sintering process. The exposure of the powder to the heat allows bonding to take place between the porous powder particles which once cooled form a denser solid component retaining the form of the original green shape. The increase in density occurs as rather than completely melting the mixed powder, particles diffuse into each other creating a fully bonded alloy. During this process, the volume of components shrinks by around 15% as the density of the material increases.

Emissions from the furnaces are extracted for discharge at A3. The gas emissions from the furnace will consist of small amounts of paraffin wax vapours. Following a request from an EA representative in 2018, M&I have previously undertaken detailed air dispersion modelling of these emissions. Several worst-case assumptions were made, such as assuming the emissions are wholly alternative substances with AELs, this assessment concluded the environmental impact from the furnace emissions was insignificant.

Further review of Paraffin wax emissions to air has been undertaken since the work undertaken in 2018, upon review of the ECHA Registration Dossier for Paraffin Wax¹, emissions to air of paraffin wax are determined as non-hazardous to human or environmental receptors. There is no EA published emissions limits values for the emissions to air of paraffin wax. Therefore, it is concluded the emissions will not have a detrimental impact on the environment.

Additionally, a H1 air quality risk assessment concluded that emissions to atmosphere from the process will be insignificant.

The sintered alloy components are finished using CNC machining equipment, mills and lathes, some of which is carried out on site or by third parties. Various tools are used for milling, turning and drilling. These processes can be carried out dry or using water soluble emulsion coolants.

At all points throughout the process the activities are subject to quality control and inspections. The operator seeks to identify and reject components as early as possible through the process to reduce material usage, energy and machining time. Any material machined off the components post-sintering or rejects at this stage are segregated and sent off site for recovery as a non-hazardous waste. Finished products are packed on site prior to dispatch in line with the customer's requirements.

In the event of any failure at any point within the process the equipment, including the mixing, press and furnaces, can be shut down either automatically or through operator intervention. The process does not involve exothermic reactions and is not chemically reactive. As all activities are carried out internally, from an environmental perspective they are judged to be intrinsically safe as there is no potential for release of materials that can pollute during normal, shutdown or abnormal conditions.

¹ <https://echa.europa.eu/registration-dossier/-/registered-dossier/15503/6/1>

Process Wastewater

There will be no process wastewater from Wolfmet process entering the site drainage network. Other wastewater from domestic use will leave site from foul drainage.

Waste Storage

Relatively small amounts of waste are generated by the process. All routine non-hazardous wastes will be stored lidded and labelled skips within the yard area. A sliding door, locking and bunded container will be provided in the yard for storage of liquid, oily or hazardous wastes. All wastes will be removed from site by a licensed waste contractor.

3b General Requirements

Table 4 General Requirements

Are fugitive emissions an important issue?	No
Is odour an important issue?	No
Is noise and vibration an important issue?	No

Fugitive Emissions to Sewer, Surface Water and Groundwater

The process is entirely dry with no additions of chemicals or water required for the mixing, pressing and sintering activities or routine clean down of this equipment. Coolant is required for the operation of certain machining equipment. There is insignificant risk to surface water from the storage and handling of materials as all raw materials will be stored within the building. The building floor is void of drains and of sufficient quality hardstanding to prevent escape of substances.

Operators are fully trained in the relevant SOPs including handling of chemicals, oils and responding to spillage of materials. All deliveries will be supervised by operators appropriately trained in spill response. Spill kits and drain slap mats will be utilised to prevent and losses reaching external drains. High quality hardstanding is present across the whole installation creating an engineered barrier to the underlying ground and groundwater. There is therefore very little potential for aqueous releases to the environment fugitively or otherwise.

Fugitive Emissions to Air

There is little potential for fugitive emission to air as a result of the operation of the Wolfmet process. In the event of failure of the LEV any powder emissions would drop down into the building.

Odour

There is no potential for fugitive odour emissions as a result of the operation of the Wolfmet process. There is no history of odour complaints for M&Is existing Wolfmet operation.

Noise

The process is carried out internally within the main M&I Wolfmet building. There are no internal or external noise issues associated with the operation of the installation.

3c Types and Amounts of Raw Materials

The Wolfmet process does not involve the use of liquids directly in the process. However, engineering and site services may utilise general engineering consumables (such as lubricating oils, coolants, aerosols, domestic cleaning chemicals) as part of plant management. These could be considered relevant hazardous substances. Relevant hazardous substances' are those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility,

persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation. These substances were screened using the three-stage assessment outlined in the EC guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions. This assessment can be summarised as:

- Stage 1 – Identify all potentially hazardous substances on-site.
- Stage 2 – Screen out the relevant hazardous Substances.
- Stage 3 – Assessment of site-specific pollution possibility.

The internal area in which raw materials will be stored does not contain any floor level drainage, and floor hardstanding is of good condition throughout. The building walls also provide an effective bund to mitigate the risk of pollutants escaping to external areas. Spill kits will be available across the facility, and relevant operatives are trained in spill response. Procedural walkover monitoring, preventative maintenance schedules and internal incident reporting practices provide a good framework for mitigating pollution to ground.

The full relevant hazardous substance assessment conducted on the Wolfmet process materials inventory can be reviewed in Appendix 3.

3d Management Systems

M&I Materials Limited currently operates an Environmental Management System (EMS) that is certified by LRQA's Register Quality Assurance Ltd to the latest international environmental standard ISO 14001:2015. See Appendix 5 - ISO14001 2015 Certificate. This management system covers all processes including Wolfmet at the current site. The EMS requires the organisation to manage, measure, improve and communicate its environmental program in accordance with the international standard.

An Environmental Policy is in place setting out the operator's approach, vision and commitments in relation to environmental management. The operator commits to legal compliance as a minimum, the prevention of pollution and the setting of objectives and targets for improvements in environmental performance.

An environmental risk assessment has been carried out to identify any activities which have the potential to impact on the environment. These are documented, along with relevant environmental legislation, in the Aspects and Legal Registers. Environmental aspects have been evaluated for significance and considered under normal, abnormal and emergency conditions. Where gaps in control have been identified, objectives and targets for improvement have been documented in the form of Improvement Programmes. Emergency Response plans are in place for identified potential emergency scenarios.

Management and operational control procedures have been developed in order to manage and control the risks identified.

All environmentally critical equipment has been identified and scheduled for regular inspection and maintenance on the PPM system. In addition, environmental parameters such as emissions, energy use, waste production, raw materials and water use are included in a scheduled monitoring programme which is part of the EMS. Progress with objectives and targets is monitored and discussed at management meetings. Internal and external audits are carried out on the system itself and identified legal requirements. All records relating to environmental compliance and performance are held within the EMS.

M&I Materials will be amending the scope of this system to account for the transfer of Wolfmet following the relocation to the Westpoint Enterprise Park site.

4 Monitoring

4a Describe the measures you use for monitoring emissions

No extractive sampling or monitoring is undertaken or proposed. LEV is only in place for the protection of workers from dust and the draw off of vapours from the furnace is not considered significant or harmful. No process effluent or other contaminant is deliberately discharged to controlled waters or sewer from the installation.

No further emissions monitoring is proposed.

4b Point source emissions to air only

No sample monitoring is routinely undertaken for emissions to atmosphere. None are considered significant. It is proposed to continue the existing regime with regard to the maintenance and inspection of LEV equipment.

Carbon dioxide emissions from combustion processes, namely the minimal use of gas for igniting burn offs on the furnaces, and electricity consumption, are measured indirectly through energy consumption data collected. It is not proposed to monitor other emissions from the installation.

5 Environmental Impact Assessment

5.1 5a Have your proposals been the subject of an EIA under Council Directive 85/337/EEC?

No

6 Resource Efficiency and Climate Change

6a Describe the basic measures for improving how energy efficient your activities are

Electricity is used to operate the furnaces, and other process equipment. A small amount of gas is used for lighting small burn offs on each furnace when in production.

All plant and equipment is regularly maintained in order to ensure optimum efficiency.

Energy use is closely monitored in order to meet corporate targets. Techniques are periodically reviewed as a part of a holistic energy management plan for the site. Due to the configuration of the process, location of potential heat sinks and heating/cooling requirements of the wider site operations techniques such as heat recovery are not currently a viable option. Opportunities assessments and a rolling CI programme is in place for the business allowing the review of strategic and reactive energy efficiency improvement opportunities. There are no plans to substantially alter Wolfmet's energy supply and generation systems however through an effective change management process the impact on the cost/benefit of energy options will be reviewed upon proposed significant alteration to the operations.

6b Provide a breakdown for any changes to the energy your activities use up and create

At the current installation recorded electricity figures show usage for the Wolfmet process as well as some other site wide services attached to that meter such as lighting. The Wolfmet process uses a small amount of gas. Based on the perceived usage in Wolfmet production for lighting small burn offs on each furnace when in production it is estimated that they would use 2% of the total at Hibernia Way.

The process operates 24 hours a day, 5 days a week. Recent records indicate the highest energy usage was recorded at 120.15 MWhr in July 2023, used over a period of 480 hours (24 hours a day, 5 days a

week, 4 weeks in the month). This equates to an average power demand of .25MW. There are no significant energy use changes expected following the relocation of the Wolfmet activity.

6c Have you entered into, or will you enter into, a climate change levy agreement? If not, describe the specific measures you use for improving your energy efficiency.

The operator is not part of a CCA. Energy management is important at M&I. Site data is captured and reviewed regularly in order to identify where the opportunities are for reductions to be made.

6d Explain and justify the raw and other materials, other substances and water that you will use.

Process optimisation and control philosophy of the plant is focused on minimisation of material and product losses. Raw materials and utilities are monitored closely and reviewed no less than on a period (monthly) basis analysing production data against forecasts. M&I works in close consultation with suppliers, stakeholders and customers in the development and introduction of new materials and processes. Any alterations to raw materials or the process would be implemented on site through an effective change management procedure taking account of technical guidance and environmental compliance requirements.

6e Describe how you avoid producing waste in line with Council Directive 2006/12/EC on waste.

The use of all materials on site is regularly reviewed and the process is optimised to minimise waste production. The nature of the manufacturing process allows for the majority of any rejected materials to be recovered back into the process, including powder and dust captured in the LEV systems.

Reworks and finished product loss is constantly monitored and compared against anticipated losses. A monitoring and measurement KPI plan identifies loss areas for investigation and improvement, plans for which would be put in place as part of the EMS if needed. This has both financial and environmental benefits for the site.

Waste reduction, increased production efficiency (process optimisation) and minimising of product losses is subject to an ongoing review and assessment. This is led by a dedicated team who meet weekly on site at a production losses meeting.

All waste streams are characterised and quantified in line with waste management standards and procedures, defined in the EMS. The site holds a waste register detailing each waste stream, how it is segregated, the EWC code, and approved waste contractor.

The waste hierarchy of minimisation, re-use, recycling, recovery, and disposal has been part of the culture within the M&I for a number of years and the operator has a good record in this respect. The recovery/disposal route of each waste stream has been identified and a justification for why the waste is disposed of in the chosen manner provided within the application. Where possible, waste materials are recovered and re-used or recycled.

7 Environmental Risk Assessment

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.*

No significant management effort is applied to meet the criteria above. The current Wolfmet installation has an intrinsically low environmental impact, this will not change following relocation. The Wolfmet process is currently covered by M&I's ISO 14001:2015 certification, this will be amended to cover the move to Westpoint Enterprise Park.

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.*

There are no aqueous emissions from the installation.

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.*

There are no air emissions from the process associated with BAT obligations for abatement or monitoring. No emissions from site are associated with EA published emissions limits values or BAT AELs. Therefore, it is concluded the emissions will not require any abatement and will not have a detrimental impact on the environment.

Groundwater regulations: *There must be no planned or fugitive emission from the permitted installation into the ground, or any soakaway. This does not preclude the discharge of clean rain-water run-off into soakaways.*

The only aspects of the site that will pose any groundwater water pollution risk will be the storage of raw and waste materials. This risk is insignificant as all raw materials will be stored within the building. The building floor is void of drains and of sufficient quality hardstanding to prevent escape of substances.

Any wates that are liquid, oily or hazardous will either be stored internally or be transferred to the external metal, lockable, self-bunded waste storage container(s) in the yard area. These waste materials are intrinsically low hazard. Due to the nature of waste and its storage, the risk of pollution is insignificant.

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.*

Site records show that solid non-hazardous waste (made up of empty metal drums and tungsten swarf) produced by the installation averages around 65 tonnes per year or approximately 0.12 tonnes per day. The installation does not therefore give rise to more than one tonne of Directive waste per day, averaged over a year and not more than 20 tonnes of Directive waste being released in any one day.

Total hazardous waste per year is expected to total around 35.00 Tonne (averaging 90.90 kg per day), this is made up of waste coolant entirely from the associated activity of machining and not directly as a result of the permitted process.

This machining process is not considered a directly associated activity with the permitted metallurgy process following the completion of an 'Understanding the meaning of a regulated facility, Limb (ii) test'. The machining process is not in an asymmetrical relationship with the Wolfmet metallurgical process. This machining of metal could be conducted at any facility in any location, the machining of finished product serves no purpose to the metallurgical activity that produces a tungsten alloy. This is further

evidenced as M&I routinely send finished 'Wolfmet' products for machining by third parties to meet capacity and customer demands. Therefore, the machining does not 'serve' the EPR activity and is therefore not a DAA. The environmental permitting regulations are not designed to regulate the CNC machining of metal components. The Limb ii test is designed to prevent the unnecessary regulation of processes that fall outside the scope of EPR.

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 process operates 24 hours a day, 5 days a week. A high demand energy use in a given month will be around 120.15 MWh; this is used over a period of 480 hours. This equates to an average power demand of .25MW.

Accident prevention: *You must have in place satisfactory containment measures 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.*

All activities including the handling of raw and ancillary materials is carried out internally in areas of hard standing that are not served by drains. There is therefore very limited potential for an accident to occur that could impact the environment.

For all materials stored in any quantity there are adequate containment measures to prevent fugitive emissions to surface water, sewer or land that are adequately maintained at all times. Deliveries of raw materials will be direct to internal areas, therefore in the unlikely event of spills there are adequate containment measures to prevent fugitive emissions to surface water, sewer or land.

All site activities are covered by a certified EMS which has procedures in place and trained out to deal with spillage, protection of drains and inspection of storage facilities.

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 process is carried out internally within the main M&I Wolfmet building. There are no internal or external noise issues associated with the operation of the installation. The magnitude of risk to environmental or human receptors from noise emissions is deemed to be very low.

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 (search for 'Control and monitor emissions for your environmental permit' on <https://www.gov.uk/government/organisations/environment-agency>). Describe the nature, quantities and sources of foreseeable emissions from the installation.*

As described in this application, there are no releases to the environment from the Wolfmet process that could have significant impacts on the environment. The only identified substance released from site are furnace related air emissions of minor amounts of paraffin wax. This has been designated as non-hazardous by the ECHA. Please see Appendix 6 demonstrating the insignificance of emissions.

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.*

The process will be carried out internally within the M&I facility. There are no internal or external odour issues associated with the operation of the installation and no complaints have been received. The magnitude of risk to environmental or human receptors from odour emissions is deemed to be very low.

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**

** (All under EPR or the equivalent under previous environmental regimes)*

No enforcement actions have taken place against the installation.

Appendix 1 – Landmark Envirocheck Report

Appendix 2 – Site Map

Appendix 3 - Wolfmet Materials Inventory & RHS Screening

Appendix 4 – Drainage Map

Appendix 5 – M&I ISO 14001 2015 Certificate