Permit Reference Number: HP3131KU

Operator: SPTS Technologies Ltd

Installation: SPTS Technologies Ltd

Form Number : L1

Reporting of Compliance with Low Impact Installation criteria for 2024

Criteria	Description	Demonstration of Compliance
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 installation uses only relatively small amounts of any substance for the demonstration and development of processes. There are procedures in place for their use by well-trained staff. The substances are well-protected and secure with comprehensive automated alarms and shut-off procedures. Planned preventative maintenance schedules are in place for equipment and plant.
Aqueous Waste:	The installation must not release more than 50 m^3 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 m^3 per day of water from process activities.	Discharge from cooling towers (for heat removal) are monitored, with average daily release of 1.2 m^3. Discharges from systems relating to our process are monitored daily with average daily release of 11.8 m^3. NOTE: following replacement of the site process cooling water chillers in September 2024, only one of three cooling towers is currently on line. It is anticipated that the cooling towers will all be fully decommissioned in 2025, whereupon the local authority (Newport City Council) will be notified accordingly.

Criteria	Description	Demonstration of Compliance
Techniques to prevent and reduce waste arisings and emissions:	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 design of the installation should prevent any releases irrespective of equipment operation. Control systems are in use to protect both the environment and the employees. However, should there be a failure in the control systems, process operations will automatically shut down preventing any escape of material to the environment. Materials are used for demonstration and R&D purposes only and therefore only small quantities are used.
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. Pet cemeteries may be exempt from this criterion provided certain specified conditions are met: • the landfill is not within a Groundwater Source Protection Zone 1 or 2; • there is a minimum of one metre unsaturated zone between the bottom of the buried carcass or cremated remains and the groundwater table; • there is a minimum of one metre of soil between the carcass and the surface; and • burial density shall not exceed 20 kg of carcass or cremated remains per m2	There are no planned or fugitive emissions to ground.
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. For the purpose of this application, no information is required on the proposed recovery and disposal of waste streams arising from the installation.	Directive and hazardous waste arising from production activities is below the specified limits. Waste management system records quantities and types of waste to monitor this.

Criteria	Description	Demonstration of Compliance
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 does not consume energy at a rate greater than 3 MW. Combined heat and power option is not currently relevant to site.
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.	Small quantities of substances are used at the installation. The installation has safe storage for substances, bunding and spill kits are in place. Furthermore, oil interceptors at the installation are regularly inspected to ensure their effectiveness. Employees are experienced and well trained in process procedures.
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. This requires the exercise of judgement, taking account of any history of noise complaint arising from the installation and consideration of the likely offsite noise levels and proximity of sensitive receptors. Describe the main sources of noise from the installation, the nearest noise sensitive locations and any relevant noise measurement surveys which have been undertaken; and the proposed techniques and measures for the control of noise. Provide justification that there is only a low potential for offence due to noise.	There are no activities or processes that give rise to noise that would be noticeable outside of the installation boundary. SPTS is not aware of there being any comments or complaints from neighbours or interested parties with respect to noise.
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 'How to comply' and 'H1 Environmental Assessment.' Describe the nature, quantities and sources of foreseeable emissions from the installation.	Due to the small quantities of substances used and the process controls in place, it is unlikely that releases of any substance could take place. The nature and sources of potential emissions are attached as an appendix on pp 5 - 6 below.

Criteria	Description	Demonstration of Compliance
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. A significant possibility or actual history of excursions or fugitive emissions, for example from stored materials, would suggest that the installation could not be treated as having a low impact. Provide details of potential sources of odour from the installation, for example from stored materials, and justify that there is only a low potential for offence due to odour.	The small quantities of chemicals and gases stored/used should not give rise to any offensive odours. Internal control detection and monitoring systems would also alert (and isolate the gases) in the event of any issue, thus preventing any discharge. This is done at levels below where any odour concerns may exist. SPTS is not aware of there being any comments or complaints from neighbours or interested parties with respect to odour.
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 been issued.

"Environmental Assessment and Appraisal of BAT"

Signed [redacted] Date: 13 January 2025 (authorised to sign as representative of the Operator)

APPENDIX: Nature and sources of potential emissions of polluting substances

Nature	Source	Mitigation
Air emissions	Process operations (toxic and fluorinated gases)	Interlocked thermal conditioning units and active gas monitoring linked to auto shut-off valves control any potential emission sources to air. Operating procedures in place for use of tools and systems managed by trained and competent personnel.
	Operation of emergency generator (fuel combustion)	Generator is run very infrequently for test purposes. Regular servicing and maintenance by competent contractor company.
	Gas boilers (combustion of natural gas)	High efficiency condensing boilers installed. Regular servicing and maintenance by competent contractor company.
	Cooling services – chillers and air con units (f-gases)	Regular servicing and leak-testing of chillers and air con units by licensed contractor companies. Service records maintained.
Surface water and groundwater pollution	Manufacturing, processing and maintenance operations (storage and use of hazardous substances)	Bunds used where appropriate but unplanned releases will be small in quantity and largely confined within clean rooms. Spill kits are available. Emergency response plan in place.
	Assembly and testing of machines (use of hazardous substances to clean components and tool surfaces)	Limited and small quantities of substances used. Dedicated bunded chemical store in place for central storage. Spill kits available. Spillage control procedure in place. Local releases will be largely contained within the clean room.

APPENDIX: Nature and sources of potential emissions of polluting substances – cont'd

Nature	Source	Mitigation
Surface water and groundwater pollution – cont'd	Storage of chemicals and chemical waste (leaks from storage containers)	COSHH assessments and risk controls. Dedicated chemical store. Bunds and approved cabinets used for local storage of chemicals. Local spillages will be contained within building. Spill kits available. Emergency response plan in place.
	Major spillages during emergency	Relatively small quantities of materials retained. COSHH assessments undertaken. Spill kits available. Emergency response plan in place, including provisions for containment of fire run-off water.
Waste recovery and disposal	Waste packaging from purchased materials	Segregation of waste for recycling. Waste data is collected and reviewed on an on-going basis to ensure thresholds are not exceeded.
	Waste created on site from packaging of manufactured products	Segregation of waste for recycling and re-use of some packaging material where possible. Waste data is collected and reviewed on an on-going basis to ensure thresholds are not exceeded.
	Hazardous waste arising from manufacturing, processing and maintenance operations	Relatively small quantities of waste generated. Segregation for collection and disposal by licensed hazardous waste contractor. Bunded compound in place for storage of hazardous waste. Waste disposal procedure in operation.