Building 58, Castle Works, East Moors Road
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30th January 2017

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Our Ref: W:\Environmental\IPPC\Environment Agency Reporting\Permit Reporting\Rod and Bar Mill\Section 2.8 accidents prevention\EPRBV0759IC _Section 2.8_review_2017.doc

Dear Dr Richards,

RE: Environmental Permitting Regulation (EPR) BV0759IC Rod & Bar Mill Permit Condition 2.8 - Accident Prevention and Control

1.0 Introduction

CELSA Manufacturing UK Ltd is regulated under Environmental Permitting Regulations (EPR), formerly the Pollution Prevention and Control (England and Wales) Regulations 2000 to operate an installation which carries out activities as defined within schedule 1, part 2, chapter 2, section 2.1 A(1)(c). As such the company is permitted in accordance to the terms and conditions of EPR permit BV0759IC.

Section 2.8.1 of this permit states that:

'The Operator shall maintain and implement when necessary the accident management plan submitted or described in response to Section 2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.'

2.0 Current Accident Management Plan

CELSA's current Accident Management Plan is as follows:

2.1 Assessing the Risks

The design construction, commissioning and operation of the installation encompasses the extensive use of Hazard and Operability (HAZOP) analysis, the risk of incidents and accidents associated with plant failure is remote and the planned preventive maintenance regime will ensure that this remains the case. It should also be borne in mind that although

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the plant is physically very large, it does not use large inventories of hazardous or potentially polluting materials, and is a relatively simple process that is well understood. It should be noted that all of the following hazard scenarios are deemed to be very rare events. The site does not fall under the COMAH Regulations.

The major risks to the environment from potentially hazardous materials used by CELSA are therefore mainly related to operational factors such as:

- Hazardous liquid spillage (e.g. oils, diesel, water treatment chemicals) and entry into ground water or storm drain;
- Release of polluting materials above consent limits to air;
- Release of polluting materials above consent limits via waste water discharge; and
- Fire.

The following potential hazards have been identified that could arise at the Installation and which have potential environmental implications:

Hazard	Probability of Occurrence	Potential Pathway & Receptor	Measures to Reduce the Risk
Accidental spillage of oil and chemicals during the handling or delivery of oil and chemical IBCs/barrels.	Moderate	Run-off into local drainage system and discharge East Bute Dock.	IBCs are stored on sump pallets, concrete lined bunds and purpose built storage cabinets designed to contain spillage or within designated containment storage compounds. Off-loading of potentially contaminative materials like oils and chemicals are supervised by competent personnel and only take place on hard-surfaced areas away from drains. Procedures are in place for chemical deliveries. Spill containment equipment is held at strategic locations around the site to prevent run-off into storm drains. Emergency Response Teams are in place and have been trained in spill containment. Mock spill incidents are created by the EHS team to test the responses of the Emergency Response

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Hazard	Probability of Occurrence	Potential Pathway & Receptor	Measures to Reduce the Risk
			Teams. These are recorded and lessons learnt are used to update relevant Emergency Response procedures.
Accidental spillage of oil and chemicals during the handling or delivery of bulk deliveries of oil and chemical	Moderate	Run-off into local drainage system and discharge to East Bute Dock.	Bulk storage tanks have been designed to contain spillage or within designated containment storage compounds. Off-loading of potentially contaminative materials like oils and chemicals are supervised by competent personnel and only take place on hard-surfaced areas away from drains. Procedures are in place for chemical deliveries. Oil and chemical tanks have volume gages. Oil tanks have high level alarm and high level trips (dual system). Spill containment equipment is held at strategic locations around the site to prevent run-off into storm drains. Emergency Response Teams are in place and have been trained in spill containment. Mock spill incidents are created by the EHS team to test the responses of the Emergency Response Teams. These are recorded and lessons learnt are used to update relevant Emergency Response procedures.
Release of contaminated cooling water contaminated with oil.	Low	Potential breach of consent to East Bute Dock.	Penstock valve in place which is closed and only opened to discharge water under controlled conditions after visual inspection for oil contamination. Written procedures are in place and personnel are trained

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Hazard	Probability of Occurrence	Potential Pathway & Receptor	Measures to Reduce the Risk
Run-off from waste storage skips.	Low	Run-off into storm water drainage system East Bute Dock	Skips are sited away from storm drainage.
Fire associated with flammable materials within the facility creating noxious fumes and smoke and giving rise to contaminated fire-fighting water	Low	Run-off into storm water drainage system and fire smoke plume drifting on to nearby housing or East Bute Dock.	Operation of fire prevention practices and Emergency Response Teams. Emergency Response Teams have awareness of Emergency Action Plans and how to manage a fire incident. The building and plant is designed for hot processes and will not propagate fire readily. Firewater will be contained within the site water treatment plant/drainage systems. Any contaminated fire-fighting water contained with be tested to determine the most suitable disposal route.
Release of NOx above permit limit.	Low	Airborne dispersion. Potential receptors include the adjacent Severn Estuary and residential areas.	Furnace controls are optimised for fuel efficiency. These are monitored. Furnace burners are maintained to minimise risk of control going out of optimal range.
Generation of contaminated run-off during flooding through either rainfall or burst mains.	Low	Run-off into storm water drainage system East Bute Dock.	The entire production area is maintained in good condition and free from contaminative materials (of which the usage on site is low). CELSA have a Contingency Plan in place and Environmental Action Plan to deal with flood events.
Vandalism resulting in uncontrolled release of oils/chemicals.	Low	Run-off into storm water drainage system. Possible impact on East Bute Dock.	Site has 24 hour security, controlled access and is under operation 24hrs per day. CCTV is in place across the site.

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Hazard	Probability of Occurrence	Potential Pathway & Receptor	Measures to Reduce the Risk
			Low inventories of potentially polluting materials are kept on site. Spill containment equipment is held at strategic locations around the site to prevent run-off into storm drains. Emergency Response Teams are in place and have been trained in spill containment. Mock spill incidents are created by the EHS team to test the responses of the Emergency Response Teams. These are recorded and lessons learnt are used to update relevant Emergency Response procedures.

Table 2.1.1: Potential Environmental Hazards Arising at the Installation

The table above gives an indication of the potential threats to the environment, their likelihood of occurrence and proposed mitigation measures. On the whole CELSA considers that its installation poses minimal risk of long-term environmental impairment given the relatively low inventory of potentially polluting materials that is used and the fact that they are relatively innocuous, both in their nature and the way they are being used. There have been no changes to potentially polluting materials since the beginning of the site operations, i.e oil, diesel and water treatment chemicals remain in use.

Transient potential nuisance issues associated noise emissions are controlled by abatement and management techniques, supplemented by procedures and preventative maintenance of key plant /equipment that could give rise to such emissions in failure mode.

The original permit Application Site Report[1] gave an assessment of the environmental sensitivity of the site and surrounding area and of the availability of pathways. This too indicated that the potential for substantial environmental impairment associated with any abnormal or emergency condition on the site is generally low. Notwithstanding this, CELSA has an emergency response procedure, environmental action plans and contingency plan as part of its Environmental Management System and the requirements of this is communicated

[1] ENVIRON PPC Permit BV0759IC Application

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to all staff with supplementary and more detailed training, where required. This is discussed in more detail below.

It should also be noted that associated with the implementation of the site wide Environmental Management System, CELSA undertake workplace environmental risk assessments as part of the 'aspects and impacts assessment procedure'. These are reviewed as a minimum on an annual basis or following an event or lessons learned from 'mock' emergency response incidents, and updated when necessary.

2.2 Techniques to Reduce the Risks

2.2.1 General Provisions

The company operates good industry practice insofar as handling and managing potentially polluting materials is concerned.

Operational Managers are responsible at a senior level for dealing with emergency or non-standard operating conditions that have been identified as having environmental implications in the Emergency Action Plans (e.g. spillages, pollution control equipment failure). The Operational Managers are supported by the Shift Managers who are responsible for the co-ordination and supervision of the Emergency Response Team.

CELSA has a widely publicised and updated list kept on-site, of all internal and external emergency contacts. This will include provision for out of hours contacts. These are available to security, managers and shift personnel.

CELSA has specific procedures and response plans for dealing with situations such as spillages, pollution control equipment or plant failure, fires, etc which should facilitate the prevention or minimisation of pollution arising from such occurrences. Staff are trained and practised in implementing such procedures and, where necessary, able to form Emergency Response Teams to deal with certain incidents or situations. In the event of an actual or 'mock' incident these procedures are updated accordingly where necessary.

CELSA ensures that all areas where potentially polluting materials are stored or handled are regularly inspected and that these inspections are documented. These areas are also audited by trained environmental auditors on an annual basis to ensure that latest legal requirements are met. Maintenance regimes are in place and managed using the SAP data and management system.

Where pollution is likely to have occurred and/or where an offence has occurred, CELSA will ensure that all dealings with regulators or aggrieved parties are handled by the Emergency Response Manager and through formal lines of communication.

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The allocation of a specific budget for environmental improvements is considered. Consideration is also given to how best to manage the installation's environmental responsibilities and how best to ensure that the budget created to improve environmental performance is properly allocated and tracked.

2.2.2 Emergency Response Actions

CELSA operates a site-wide emergency response programme for dealing with accidents and emergencies that threaten health, property and the environment. This implicitly covers all aspects of the installation. The emergency response provisions for the site are as follows:

- the Shift Manager will be notified;
- the EHS Department will notify the Authorities where appropriate;
- in the event of a leak, further leakages will be stopped and leaked substances prevented from migrating via site service corridors or other conduits (e.g. drains and ducts). Spilled material will be prevented from escaping from the site;
- infiltration via unsurfaced ground will be prevented (e.g., absorbent material will be thrown down or spilled material channelled away from unsurfaced ground); and
- all spill incidents will be documented, including the actions taken and final outcome and actions to prevent reoccurrence.

Materials contaminated with the leaked substance will be handled carefully and properly disposed of in accordance with the relevant Duty of Care/Hazardous Waste Regulations. Waste will be collected and deposited in polythene type bags (and/or lidded drums), clearly identified and labelled with the contents, and disposed of via approved Waste Contractors.

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2.2.3 Incident Reporting Procedure

Depending on the specific circumstances of the incident, a number of the emergency and regulatory authorities will be contacted. Three reporting levels will be considered for the reporting of incidents:

- Level 1: Life and Property Threatening Incidents

  The first level of reporting will be concerned with personal safety as first priority and significant property damage. Those parties to be informed will be involved in dealing with injured people and preventing fire and explosion, e.g. ambulance, Fire Brigade, Police.

- Level 2: Potentially Polluting Incidents

  If the site has been made safe in terms of an immediate fire and explosion risk, the Shift Manager will initiate the second level reporting actions, concerned with informing those parties whose responsibility it is to protect sources from the impact of the release, e.g Natural Resources Wales and Local Authority. These parties will be contacted once the site has been made safe.

- Level 3: Minor Incidents

  If the incident has not resulted in any health and safety or off-site environmental impact, external reporting of the incident will not be necessary unless required by the EPR permit BV0759IC. The majority of minor spillages will fall into this category. However, the incident will still be responded to, investigated and reported internally in accordance with the site's EMS.

In addition the following general measures are undertaken:

- New materials will not be brought onto the site until they have been assessed for both health & safety and environmental risks under the Environmental Management System;
- All projects involving process changes or modifications are subject to hazard and risk assessment studies at the planning stages;
- Contractors are managed through the control of contractor procedure and must obtain permits to work with methods statements including hazard risk assessments;
- The computer control of the furnace is designed to ensure that process parameters are controlled within acceptable limits;
- All areas where chemicals or other spillable materials are used, are bunded and/or drain via the effluent treatment plant;
- Relevant personnel are trained in incident response techniques including spill contingency plans, fire fighting, etc;

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- Incident and non-conformity reporting procedures (within the Environmental Management System) encourage the reporting of near-misses which are analysed and pro-active measures taken to reduce the likelihood of an incident occurring.
- All process and ancillary plant is subject to a planned preventive maintenance programme to minimise the risk of unplanned stoppages which might lead to an incident. There are safe shutdown procedures for all process and other equipment.

3.0 Accident Management Plan Review

CELSA have reviewed the existing accident management plan as stated in Section 2.0 above and have made a few minor updates to reflect current procedures and practices. There have been no changes to the installation as to those proposed during the permit application stage. Therefore CELSA deem that this accident management plan is up to date with current procedures and practices at the Rod & Bar Mill.

Should you require any further information or should have any further questions arising from the above, please do not hesitate to contact me.

Yours sincerely

R. Lewis

Richard Lewis
Environmental Manager