AMENDMENT *Text highlighted and in italics indicate amendments from previous version.		
Issue No.	**Date**	**Change**
1	28/08/2025	Amendment record & index added.
2	22/10/2025	Section 6, 7 & 8 added. Appendix & Index updated
3	09/02/2026	Updated AMP to align with CIRIA C736 spreadsheet
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1.0 INTRODUCTION & SCOPE

This Accident Management Plan applies to the Dairy Partners, Newcastle Emlyn Creamery and has been done in conjunction with a review of the requirements of Waste Treatment BRef and Food, Drink and Milk industries Bref guidance and Ciria 736 requirements. This review being a requirement of our continued NRW permit to discharge.

2.0 ACCIDENTS AND THEIR CONSEQUENCES

2.1 General

Accident/incident investigation involves a transparent process of open reporting and analytical investigation of any undesired event, which resulted, or may have resulted in injury to people, damage to property, loss to process or damage to the environment.

The Accident Management plan identifies all areas of the installation and processes that may have the potential to cause unwanted releases and contains information on all necessary measures which should be taken to prevent accidents which may have environmental consequences.

This Accident Management Plan shall be reviewed by the site management team on an annual basis or in the event of major changes to the sites processes. The review will be formally documented and retained for review.

2.2 Consequences

The consequences of an accident/incident occurring can have an effect on the environment and sensitive receptors in five different ways: -

Noise

Poorly maintained plant & machinery and badly controlled work practices can increase the chance of noise pollution being emitted from the factory.
Noise Assessments by competent 3rd party have been undertaken and corrective actions taken to implement noise reduction attenuation measures to areas highlighted as being a potential nuisance at the noise receptor. Measures include swapping out noisy equipment, lagging of pipe work, motors etc / lagged enclosure areas, ensuring Pre planned preventative maintenance program in place to prevent wear tear and failure of equipment.

Noise will mainly affect residential sensitive receptors 24 hours a day but can also affect our commercial sensitive receptors during business hours, which can lead to an increase in complaints. Monitoring of noise levels are carried out regularly but can also occur after a process change or based on the number of complaints received.

Odour

Odour is not only a cause for complaint by sensitive receptors but can also attract pests such as insects and rodents. Odour is mainly an issue due to poor housekeeping practices and is likely to affect the same sensitive receptors as noise.

An **Odour Risk assessment/ Management plan** is in place and the only potential area identified for odour is from WWTP plant - crude pits / sludge pit. These areas are located at the rear of the site.
Monitoring for odours is carried out throughout the year with increased monitoring in the summer months when elevated temperatures may cause increased odour from the WWTP.

Pollution of Water Courses

The consequence of pollution of water courses is a rapid destruction of plant and aquatic life in the immediate vicinity of and down-stream from the source of pollution.
Another consequence of the water course being polluted is a strong chance of prosecution, which in turn will incur fines and clean-up costs and adverse publicity, which is not in the best interests of Dairy Partners.
The Majority of this Accident Plan addresses the hazards and controls implemented to prevent / contain any uncontrolled discharge of milk, whey, chemical or raw effluent to the river and surrounding water course.

Newcastle Emlyn, Carmarthenshire SA38 9DQ T:+44(0)1239 712 200 E:enquiries@dairypartners.co.uk W:www.dairypartners.co.uk

Pollution of the Air

The main sources of air pollution are from delivery vehicles and drivers are required to not run their vehicles when loading / unloading on site.
Air quality Monitoring survey by 3rd party competent person has been carried out on the Boiler stacks as this is the only other potential air polluting activity on site. No issues were identified in the reports. Annual monitoring will continue to be undertaken.

Pollution of Land

The consequences of land pollution in an accident are clean up and repair costs, a risk to health and in an extreme case pollution of the water table. The site is not in an area considered to have a potential for low level risk of flooding.
Another consequence is that in the event of site closure, DP could be made responsible for the site to be cleaned up and therefore would be made liable to pay for all clean-up costs.

To enable Dairy Partners to realise what possible pollutants that are stored on site and what the consequences of a release of these substances would have on the environment, a full Chemical/Product Inventory of those chemicals / products with the potential to have an impact on the environment has been produced and maintained and additional updates covering the new WWTP.

Controls for preventing flood run off in the WWTP are covered in sect 3 this Management plan and also in the **Wastewater Treatment Plant Inventory and Containment Risk Assessment.**

2.3 Reporting and Investigation of Accidents/Incidents

2.3.1 Reporting of accidents/incidents/monitoring failures

Dairy Partners manage the reporting and investigation of accidents and incidents in compliance with all relevant legislation and company policies. Personnel involved with Management of accidents are detailed in table below:

RESPONSIBILITIES	
JOB TITLE	**RESPONSIBILITIES**
Site Manager or Deputy (Operations Manager)	• Ensures all accidents are investigated and lessons learned generated to avoid future issues • Ensures accident procedures are adequately tested on an annual basis • Ensure relevant persons are trained and involved in any test scenario
Health, Safety & Environment Manager (HSE)	• Coordinate the investigation and corrective actions. Liaise with 3rd Party Official bodies on legal requirements to report uncontrolled spills that have potential to impact the environment.
Department managers	• Ensure they understand the accident procedure and take part in the relevant training processes
All Staff	• Must report all accidents, incidents and near misses to the management team

Together they shall: -

- Take any immediate action, perceived to be necessary to render the situation safe.
- Take witness statements as appropriate.
- For each immediate cause, identify root causes.
- Describe remedial action taken and make recommendations.
- Retain any relevant permits and related documents.
- Report any incidents to the Directors.
- Report incidents/accidents that have the potential to cause pollution to NRW.

Retrospectively of the investigation the HSE Manager or other appropriate manager shall complete an analysis to include risk evaluation/immediate causes/basic causes/remedial actions and present in the **DPEMS F 002 Incident Response Investigation Report.** This shall be where possible completed by the end of the working day/shift of the incident.

2.3.2 Managers Review

The Site Manager *or his deputy* shall check the report and agree further action/investigation required. Actions shall be allocated to named individuals and a required completion date.

The Site Manager *or his deputy* are responsible for ensuring that remedial action is undertaken and that resources are allocated and that the remedial action is effective.
The Site Manager *or his deputy* are responsible for ensuring that the originator of the report receives feedback on how the issue(s) were resolved, or what progress is made.

2.3.3 Remedial Actions

Once the basic causes are known, using past experience, knowledge of the job and the people, the proposed remedies can be specified. Actions may include maintenance, training or the provision of improved procedures.

2.3.4 Incident Investigation

This will normally include: -

- Investigation of the circumstance leading to an accident/incident, establishing contacts.
- Establishment of the immediate causes (e.g. the use of defective equipment) and the basic causes (e.g. personal factors such as lack of training etc.)
- Establish an estimate of the actual/potential damage / losses.
- Recommend actions to improve the safety programme and raise standards or increase compliance with a view to preventing a recurrence.
- Recommendation of a review to the risk assessment(s) as appropriate

- To review the emergency responses and any preventative measures in force at the time

An investigation team may be formed to consist of a nominated Incident coordinator and members of staff having relevant experience. The number of team members is not limited as it will depend upon the nature/severity of the incident. The Team shall produce a report containing conclusion and recommendations.

The Site Manager shall formally accept or reject the conclusions and recommendations, take ownership of the remedial action and ensure that follow up is progressed to satisfactory completion.

2.3.5 Follow-up Procedures

The actions identified on the **DPEMS F 002 Incident Response Investigation Report** shall be undertaken within the agreed time constraint and at the end of each calendar month the HSE Manager and the Site Manager shall review the progress of each action with the individuals concerned.

The HSE Manager shall maintain records of accident/incidents for a minimum of three years for future reference.

The incidents / actions shall be subject to periodic review via the formal 'Management Review'.

3.0 IDENTIFICATION OF HAZARDS

3.1 Materials Inventory

All Chemicals and products kept on site have the potential to cause a degree of Environmental impact Chemical COSHH sheets are kept up to date and available for immediate referencing in the event of an accident they shall be used to determine their individual risks in the particular situation that presents itself. The COSSH sheets are kept in the HSE Managers office.

All other materials held on site, that could cause potential environmental damage by the nature of the material and or in combination with volume of material, have been assessed to determine their risk. The following tables summarises them and their main environmental risks.

3.1.1 Milk, Sweet Cream (stored in silos)

Common name	• Milk, sweet cream
Chemical Nature/Composition	• Cow's milk
Hazard Identification	• NIL (Milk 220kg COD/M^3) (Cream = 475 COD)
Process Use/Fate	• Manufacturing ingredients / Bi Products
Environmental Impact	• Excessive COD/BOD creation in water • Harmful to the aquatic environment

3.1.2 Raw/Conc Whey (Silo Storage)

Common name	• Raw/ Concentrate whey
Chemical Nature/Composition	• Pale green liquid
Hazard Identification	• NIL
Process Use/Fate	By-product from process, despatched as saleable commodity
Environmental Impact	• (COD raw whey = 82,000 mg/l) • Potential COD creation in water course • Low pH impact • Harmful to the aquatic environment

3.1.3 Whey Protein Concentrate (Silo Storage and Tanker transport)

Common name	• WPC
Chemical Nature/Composition	• Opaque Pale green liquid- slightly viscus
Hazard Identification	• NIL
Process Use/Fate	• Purchased material derived from Whey
Environmental Impact	• (COD raw whey = 82,000 mg/l) • Low pH impact • Potential COD creation in water course • Harmful to the aquatic environment

3.1.4 Light Fuel Oil (Stored in 35,000 litre steel tank + 1 x 15,000 & 1 x 5,000 litre Polypropylene tanks)

Common name	• Light Fuel Oil (Boiler)
Chemical Nature/Composition	• HFO/hydrocarbon • Dark brown / Black liquid • Petroleum odour
Hazard Identification	• Toxic, Carcinogenic
Process Use/Fate	• Boiler fuel
Environmental Impact	• Spillages may penetrate soil causing ground water contamination. • Slow biodegradation • Harmful to the aquatic environment

3.1.5 LIQUIDFIED NATURAL GAS (Bulk double walled storage tank, 23,000L)

Common name	• LNG
Chemical Nature/Composition	• Colourless gas
Hazard Identification	• Flammable

	• Irritant, contains • Refrigerated gas that may cause cryogenic burns
Process Use/Fate	• Use as boiler fuel
Environmental Impact	• Not harmful to aquatic life • Biodegradable in air • Not bio accumulative

3.1.6 LPG Gas cylinders

Common name	• Liquid Petroleum Gas
Chemical Nature/Composition	• Colourless gas
Hazard Identification	• Extremely Flammable / explosive
Process Use/Fate	• Used to power fork trucks
Environmental Impact	• No Known ecological damage effects • Biodegradable • Not bio accumulative

3.1.7 Lubrication Oils and Greases (up to 200L drums)

Common name	• Lubrication Oils and Greases
Chemical Nature/Composition	• Mineral oils thickened with soaps containing anti-wear, antioxidant, and corrosion inhibitor additives • (Low Odour)
Hazard Identification	• Not classified as hazardous
Process Use/Fate	• General lubricants for machinery
Environmental Impact	• Inherently, • Can penetrate soil causing ground water contamination • Biodegradable • Harmful to aquatic life and birds

3.1.8 Wastewater Treatment Plant – (UNTREATED Wastewater up to 650m3 /day)

Common name	• Raw untreated Process Effluent
Chemical Nature/Composition	• Wastewater/solids from cheese making process (CIP cleaning effluents) – slightly odourless
Hazard Identification	• Nontoxic
Process Use/Fate	• Aerobic digestion to reduce SS, COD, BOD, Heavy metals, pH correction
Environmental Impact	• Eutrophication of surface waters, groundwater contaminations, River Water impact on aquatic life

3.1.9 Wastewater Treatment Plant – Waste Sludge 2 x 30,000 L tanks

Common name	• Sludge
Chemical Nature/Composition	• Wastewater/solids from cheese making process (CIP cleaning effluents) – slightly odorous
Hazard Identification	• Nontoxic
Process Use/Fate	• Despatched from WWTP for 3rd party further processing or land spreading
Environmental Impact	• Eutrophication of surface waters, groundwater contaminations, River Water impact on aquatic life

3.1.10 WWTP Chemicals - Phosphoric Acid 75% - Bulk Storage Tank 1200L

Common name	• Phosphoric Acid
Chemical Nature/Composition	• Clear colourless liquid • (Odourless)
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• Provides correct nutrient balance for the biological system
Environmental Impact	• Harmful to aquatic life above 100mg/l and plants • Biodegradable with low persistence, • Not bio accumulative

3.1.11 WWTP Chemicals - Sulphuric Acid 36% - Bulk Storage Tank 1200L

Common name	• Sulphuric Acid
Chemical Nature/Composition	• Clear colourless liquid • (Odourless)
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• pH correction in wastewater Plant
Environmental Impact	• Harmful to aquatic life and plants • Biodegradable with low persistence, • No data on bio accumulative

3.1.12 WWTP Chemicals - Urea 40% - Bulk Storage Tank 1200L

Common name	• Urea
Chemical Nature/Composition	• Clear colourless liquid • Slight ammoniacal
Hazard Identification	• Not classified as hazardous
Process Use/Fate	• Provides correct nutrient balance for the biological system
Environmental Impact	• no known significant effects to aquatic life and plants • Readily biodegradable in plants and soils • Not bio accumulative

3.1.13 WWTP Chemicals - Sodium Hydroxide 32% Bulk Storage Tank 10,000L

Common name	• Caustic
Chemical Nature/Composition	• Liquid, milky pale yellow • (Low Odour)
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• pH correction of effluent Plant
Environmental Impact	• Harmful to aquatic life above 10ppm or a pH above 10.5 and plants • Degradable with low persistence, • Not bio accumulative

3.1.14 WWTP Chemicals - Coagulant Bulk Storage Tank 10,000L

Common name	• Coagulant / Flocculants (Aluminium Chloride)
Chemical Nature/Composition	• Liquid, pale yellow • Slight Acidic Odour
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• Sludge coagulant of wastewater Plant
Environmental Impact	• Harmful to aquatic life • Not Biodegradable in soils • No data on bioaccumulation

3.1.15 CIP Chemicals - Sodium Hydroxide IBC Storage 1000L

Common name	• Caustic Detergent
Chemical Nature/Composition	• Liquid, milky pale yellow • (Low Odour)
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• CIP Cleaning of process equipment
Environmental Impact	• Harmful to aquatic life above 22mg/l • Degradable with low persistence, • Not bio accumulative

3.1.16 CIP Chemicals - Acid Descaler IBC Storage 1000L

Common name	• Acid Descaler (Nitric Acid)
Chemical Nature/Composition	• Clear colourless liquid • (Odourless)
Hazard Identification	• Skin and metal corrosive
Process Use/Fate	• CIP Cleaning of process equipment
Environmental Impact	• Harmful to aquatic life above 12.5mg/l • Degradable with low persistence, • Not bio accumulative

Small amounts of additional cleaning materials stored on site in Containers ranging 5L - 25L. All chemicals are used and disposed of in accordance with good working practices and legal requirements. The chemicals are kept and disposed of in such small quantities that their environmental impact is insignificant. Chemical drums are stored on bunded pallets where possible to contain any spills.

Small amounts of various laboratory reagents are kept in the on-site laboratory. All reagents are used and disposed of in accordance with good working practices and legal requirements. The reagents are kept and disposed of in such small quantities that their environmental impact is insignificant.

Additional 25l drums of Polymer are used in the WWTP, these are stored on bunded pallet until required and then decanted in to 50l Feed tanks stored in bunded cabinet with any spill volume drained to captive container for safe disposal.

There is also an appendix to this document detailing the **Residues Management Plan** as required by Waste Bref BAT 1 (xii) and BAT 24. This lists the packaging residues for the site and their final disposition.

Containment Measures in place for Storage of chemicals for the WWTP are also detailed in the **Wastewater Treatment Plant Inventory and Containment Risk Assessment.**

4.0 RISK ASSESSMENT

The likelihood of an accident occurring is measured by means of environmental risk assessment. Copies of the risk assessments are reviewed on a yearly basis or if any significant change in the process occurs.

This Accident Management plan also incorporates the Appended Risk assessment detailed below which have been undertaken as a requirement for our existing Permit and additional permit variation applications with the NRW:

1. Effluent Treatment Plant Inventory and Containment Risk Assessment /
2. Hazardous Materials impact Assessment Sect 3 of this report
3. Waste Treatment Bref Risk Assessment
4. Food Drink and Milk Industries Bref Risk Assessment
5. Residues Management Plan
6. Odour Risk assessment/ Management plan
7. Noise Risk assessment
8. Air Quality Assessment

4.1 GENERAL MEASURES UNDERTAKEN TO MINIMISE RISK

The Company has an Emergency Disaster & Business Continuity Plan which is a controlled document (including Environmental accidents) and is subject to annual review.

The following measures are undertaken on a daily basis in order to reduce and mitigate any risks:

- Storage of chemicals, milk unloading, whey tanker loading and storage on hard standings to prevent any release to groundwater, River outlet or incorrect drainage channel. Any accidental run off would be contained in ETP plant.
- Drains are colour-coded: (red-foul, blue-surface water, Yellow Feeds to effluent plant)
- The Site Manager holds a daily meeting with his Management Team, and this is the forum to discuss and review any incidents and further actions required.
- The Team Leaders have a daily shift hand over meeting to discuss and review issues from the day's activities. Any incidents / accidents would be discussed with each team, and a shift report is sent to all members of the management team.
- Any action required in response to any accidents/incidents is undertaken as soon as possible to prevent recurrence and coordinated by the HSE Manager.
- Liquid spill kits are located throughout the facility (Chemical Storage, Milk Reception, Wastewater Treatment Plant & Boiler House areas). Each kit is numbered and has its own inventory of contents, relevant to its area of use and type of chemical spill risk.
- Supervised unloading of delivery vehicles containing chemicals and ingredients by trained staff.
- Incoming raw materials are visually checked to ensure they do not have the potential to cause any accidents/incidents.
- All bunds and hard surface areas are regularly checked on an audit schedule to ensure their adequate spill containment capacity and integrity.
- All oil wastes are stored on internal bunding where their potential to cause environmental harm are controlled.
- Products and Chemicals are stored on kerbed / impervious hard surfaces to prevent run off seepages to soils / ground water. Any spill is contained within bunding is diverted to the WWTP for treatment.
- Several audible alarms are in place to alert potential risk of overfill or breakdown: -
  - Low water on boiler

  - Boiler shutdown
  - Fire detection / alarm systems audible throughout site
  - High level in milk silos
  - High level in Whey Silos
  - High level on effluent plant Balance tank. Aeration tank, chemical storage tanks and Sludge tanks to prevent overflow/ accidental spill.

- Spillage from internal tanks are controlled by the fact that spillages are exclusively contained in an wastewater drainage infrastructure (channels),

- Speed restriction 5mph is in place on site to prevent collisions.

- Physical protection (barriers) are in place to prevent damage to external equipment and chemicals in storage containers, from the movement of vehicles.

- Tanks are checked to ensure they have sufficient capacity prior to any transfer of liquids.

- Secondary and or tertiary containment is provided as appropriate for Individual Bulk Containers such as Diesel Oil, LNG, Chemical storage tanks, IBCs stored on bunded pallet etc.

- Guidance detailing how a spill incident is to be dealt with, and the responsibilities of various personnel can be found in the EMS Spill Response Plan.

- Staff are given training in how to deal with minor incidents, such as spillages, according to the requirements of their role within the organisation.

- The extensive drainage infrastructure on site allows spillages which fail to be contained and allowed to enter either the effluent flow, or in cases where they enter the surface water routes, be contained within a lagoon and diverted into the WWTP if appropriate or can be removed for disposal/land spread.

- Similarly fire waters emanating from the Factory would be 'contained' in the same way.

- A further contingency is the use of 2 'out of spec' wastewater storage tanks (totalling up to 250m3) can also be used to accommodate an overflow crude wastewater buffer storage if required.

- In the event of an unlikely WWTP breakdown the upstream inputs are isolated until such time that the problem is rectified, or alternative tankering arrangements confirmed to remove wastewater for 3rd party treatment.

- The new WWTP is fully automated with SCADA screen controls and alarmed to inform operator when there are any issues / out of spec wastewater etc. All major tanks are fitted with low and high-level sensor probes to prevent over-dosing and or accidental overflow.

- The provision of onsite radios allows quick and effective communication between all departments simultaneously and would also be used in the event of emergency or uncontrolled incident / accidental spill.

The likelihood of an accident occurring is further reduced by: -

- Compliance with all applicable Safety & Environmental Legislation
- Maintaining environmental management system & Environmental Permit status
- Regular environmental audits by internal personnel
- The use of approved competent contractors and suppliers
- Implementing an adequate contractor Permit control system, Review of RAMS prior to any work undertaken on site.
- Inspections of buildings, storage containment, yards and drains, in order to ascertain condition and ensure timely repair.
- Maintenance of all plant and machinery through a pre-planned maintenance programme
- Procedures, Standard Instructions and Standard Operating Procedures issued to ensure proper work practices are carried out and staff trained accordingly.
- Adequate monitoring of processes and waste streams
- Compliance with MCERTS requirements and verified by 3rd party auditors.

5.0 INCIDENT MANAGEMENT

The main incidents that could arise at Dairy Partners are as follows: -

1. Spillages (Milk, Whey, Cream, oil, Chemicals)
2. Uncontrolled Wastewater Release from leaking containment or breaches to containment
3. Major fire
4. Flooding
5. Ice and Frost Damage
6. Failure of Plant Equipment
7. Vandalism
8. Failure of power supply
9. Human error
10. Loss, Theft or Breakage

The procedure for dealing with each of the above scenarios is described in the following sections.

5.1 Spillages

Liquid spills may include the following scenarios: -

- Failure of containment
- Overfilling of vessels
- Transfer of materials

Any of the above materials mentioned in Section 3 have the potential to cause environmental damage, however only Milk, Milk by Products, CIP Chemicals, Heavy Fuel Oil, wastewater, wastewater bulk storage chemicals and sludge have any significant risk.

5.1.1 Responsibilities

The Site Manager together with the HSE Manager are responsible for ensuring that all spills can be effectively dealt with, they are furthermore responsible for their prevention, response and remediation. **Refer to Spill response Plan** for dealing with all spill incidents.

5.1.2 Procedure

Any spill that occurs shall be reported immediately to the Team Leader or Department Manager. The team leader shall ensure that he follows the Spill Response plan ensuring containment of spill using appropriate spill kits, escalation to senior management if potential for environmental impact and completion of DPEMS **F 002 Incident Response Investigation Report.**

All spills shall in the first instance be considered as an 'Emergency' and the first act is that of containment. This is obtained through the provision and effective use of Spill Control Kits. Such kits are located at strategic locations around the facility. The kits are kept in appropriate containers (wheelie bins or drums) and are clearly marked for identification.

The requirements for the provision of spill kits have been identified through a risk assessment process taking into account the ability to contain or absorb the particular spill material. Typically, kits contain absorbent booms, flexible absorbent sheeting, absorbent granules, disposal sacks and chemical resistant drain covers.

The contents of each spill kit are detailed on the bin contents inventory, a copy of each is contained in each spill kit. And summarised in the DP Spill response Plan,

- Site plans detail the location of each spill kit.
- The site plan also details the drainage systems showing where the blue surface water, red foul drains and yellow drains feeding to the effluent system are located and the direction of flow.

5.1.3 Response and remediation

In the event of a spillage, the effective area is cordoned off and spill response kits are utilised. The appropriate PPE must be worn.

If the incident is on a larger scale, the appointed spill control contractor must be contacted, and specialist assistance provided e.g. tanker contractors.

If any hazardous material leaks into the plant drainage system or storm drains, or if any hazardous materials are accidentally discharged to air, land or water, the Site Manager/ HSE manager or other so nominated deputy must notify the Environment Agency immediately of the incident. Following the instruction and contact information detailed in the Spill Response plan.

Reporting of the incident is then carried out in accordance with Section 2.3. and completion of **DPEMS F 002 Incident Response Investigation Report**

5.2 Uncontrolled Wastewater Release from leaking containment or breaches to containment

5.2.1 Responsibilities

The Site Manager together with the HSE Manager and Senior Management Team are responsible for ensuring that any uncontrolled effluent releases can be effectively dealt with, they are furthermore responsible for their prevention, response and remediation.

5.2.2 Procedure

The risk of spillages from leaks / overflow or containment breaches in the Wastewater Treatment Plant is dealt with in the following risk assessment:

Wastewater Treatment Plant Inventory and Containment Risk Assessment. This also details the existing containment features built into WWTP together with level probes / alarms, sumps and run off areas.

Any uncontrolled wastewater release that occurs shall be reported immediately to the Site Manager, Environmental Manager, or head of department. The team leader shall ensure that he follows the Spill Response Plan ensuring containment of spill using appropriate spill kits where volume is containable.
Escalation of large spills to senior management if potential for environmental impact, ensuring completion of the incident report.

In the event of a potential impact to the environment the Site Manager / HSE Manager must follow the Spill response plan and inform NRW (Natural Resources Wales) at the earliest opportunity and complete **DPEMS F 002 Incident Response Investigation Report.**

Contact Numbers
Natural Resources Wales **03000653000**
industryregulation.swwales@cyfoethnaturiolcymru.gov.uk

5.3 Major Fire

In the event of a major fire specific tasks are undertaken by various personnel.

5.3.1 Responsibilities

The Site Manager/ HSE Manager (or any member of Management Team) are responsible for dealing with major fires.

5.3.2 Procedure

Person at scene of incident: -

1. Operate the nearest fire alarm.
2. Inform the Team Leader / Manager, and/or report to Assembly Point.

Engineering Team Leader: -

1. On hearing the fire alarm, report to the Site Manager, Engineering Manager, HSE Manager, Team Leader or area of plant involved
2. Obtain all relevant information.
3. Carry out all necessary electrical isolations and make area safe.

Team Leader shall in liaison with Site Manager / HSE Manager / Engineering Manager: -

1. Coordinate rollcall at Assembly Point (if applicable),
2. Proceed to scene of incident.
3. Ensure Receptionist or 'other' have contacted Emergency Services.
4. Direct any first aid / firefighting as necessary.
5. Send personnel to site gate to meet Emergency Services.
6. Liaise with Emergency Services
7. Ensure containment of any firefighting run off materials either by bunding or redirection to lagoon/ WWTP where it is safe to do so.

5.4 Flooding

5.4.1 Responsibilities

The Site Manager together with the Senior site management team and HSE Manager are responsible for ensuring that flooding can be effectively dealt with, they are furthermore responsible for any clean-up operation and for returning the plant into normal service effectively and with absolute regard to the environmental impacts of any flooding occurrences.

The site will deploy all resources necessary to either continue to run the plant without impact to the environment or make alternative arrangements such that the plant does not need to operate.
Emergency arrangements could also include diverting the wastewater to alternative 3rd party for processing. Protecting the environment will be of paramount importance.

Flood risk has been reviewed by 3rd party specialist and a detailed **Flood Management Plan** implemented from the recommendations in the report. This will be reviewed ongoing to reflect any new emerging issues of legislative improvements.

5.4.2 Procedure

Any Flooding that occurs will be notified to the Site Manager, Shift Manager and HSE Manager on the contact numbers listed in the emergency contacts list. They shall in turn liaise as necessary with any of the other members of staff to coordinate all activities relating to the flood, including notification to the NRW in the event of imminent risk of flooding from our site also impacting the environment.

It is likely that a flood could involve partial loss of the WWTP since this is the lowest lying area of the site. Temporary pumping infrastructure may allow temporary operation of the site.

Preventative flood walls are in existence around the sensitive area of the plant namely:

- Crude Pit / Sludge pit and separation tanks
- Bunded wall around the runoff area containing DAFs, serpentine, transfer tanks and pumps. This has an integrated sump with a pump to pump out the contents in the event of flooding.
- Bunded wall around sludge waste tank area

These walls provide more than adequate protection for those areas based on all experiences to date in the operational existence of the facility. Given the unpredictability of current and future weather patterns these protections will need review to ensure their ongoing effectiveness.

In the event of flooding that prevents either pumping, treatment or distribution of the outfall from the operation, then operations at the site will cease in a manner that does not in itself create a larger potential to pollute. This non-productive period will continue until the wastewater plant can

- be returned to service.
- be demonstrated to be effective and producing treated water that is 'in specification' for outfall unless alternative disposal for the outfall is put in place.

Site Drainage

There is a detailed site plan of the drainage systems:

- Red Drain System feeds to Foul drains / running off site to local treatment works
- Blue Drainage system is surface run off and feeds to our lagoon system or can be diverted through WWTP if Required.
- Yellow drainage system from the factory processing areas feeds directly to crude pit, feeding through WWTP.

Any flood Run off water that enters blue or Red drainage with effectively follow the above routes either to foul drain system or Lagoon / divert through WWTP if required.

Given the raised elevation of the main processing facility it is considered unlikely that no other plant and equipment would be put at risk even in the event of a major flooding incident. So, the yellow drain system should remain unaffected.

5.4.3 Response and remediation

In the event of a small-scale flood volume, the effective area is cordoned off and spill response kits are utilised to coordinate direction of flow into appropriate containment areas where possible. The appropriate PPE must be worn.

If the incident is on a larger scale, an appointed spill control contractor should be contacted, and specialist assistance provided i.e., pumping out flooded areas to prevent containment loss / over spill to the river or groundwater contamination.

If any hazardous materials are accidentally discharged to air, land, or water as a consequence of flooding, the Site Manager/ HSE Manager or other so nominated deputy must notify the NRW immediately of the incident.
Small hazardous material spillages not posing an immediate risk to the environment should be contained via the spill response plan using the appropriate spill response kit and materials

Reporting of any incident is then carried out in accordance with Section 2.3 and completion of **DPEMS F 002 Incident Response Investigation Report**

5.5 Freezing / Frost Damage

It is to be expected that there will be times during which the temperature in the UK will be lower than the freezing point for significantly prolonged periods as demonstrated in the winter of 2020 into early 2021.

During this time the external infrastructure of the plant could be severely challenged with frost damage. When Severe freezing temperatures are forecast the site management team can implement various measure to ensure external pipe work is drained free of liquids e.g. Milk, whey, CIP waters etc to minimise the risk of cracked pipes from frost damage.

The biggest risk to the wastewater treatment plant is ensuring external pipes remain unfrozen, and the plant continues to operate effectively. The following controls are in place:

- Pipes have been lagged / insulated where possible.
- Chemical storage dosing tanks are double skinned and will give added insulation.
- Sludge tanks are double skinned and will also give added insulation.
- The large volume in the balance tanks, aeration tanks and DAFs would prevent these tanks from being affected by frost damage. The large volume of Liquid is also unlikely to freeze to an extent to cause containment frost damage.

Another potential scenario could be cooling of the media itself limiting the ability of the Aeration tank to consume the COD in the feedstock. In these circumstances the plant shall be monitored on a daily basis and remedial steps taken.

These steps might be but are not limited to:

- Feeding warmer water to the plant to stimulate bacterial growth.
- Re-seeding system with fresh activated sludge.
- Temporarily shielding pipes should they prove susceptible to freezing.
- Alternative measures can be implemented to slow down the WWTP plant where needed and make alternative arrangements for wastewater to be tankered off site for 3rd party treatment in extreme case.

5.6 Failure of Plant or Equipment

The areas of plant and equipment that have the potential to incur failure are the Dairy Processing plant and ancillaries. These are subject to regular Maintenance under our PPM systems. Plant and equipment are only operated by suitable trained staff and under competent supervision.

5.7 Failure of Power Supply

In the event of an interruption to site power supply, all plant machinery shuts down. Valves, silos, and pipework have been designed to fail to safe thereby preventing accidental release of polluting substances. There is negligible environmental risk posed as all materials are contained.

5.8 Vandalism

The Site is manned 24/7 and is an 'out of town' semi-rural location which has a low crime rate. The Site can be secured by locking rear Entrance Gates and all door accesses into offices and production and ancillary buildings are secured by digital keypad entry only.

All silos and bulk storage tanks are secured by padlocks to prevent tampering.
The site is also looking to install additional security cameras around external areas of the site to increase security

5.9 Human Error

The main risk posed resulting from human error failure relates to untrained or inexperienced Operators, coupled with inadequate supervisions. All staff have received suitable training commensurate with their job function and regular refresher training undertaken as required. Staff are adequately supervised by competent management and supervisory team at all times.

Control of Contractors –
All contractors working on site must provide RAMS for each Job they undertake and complete the appropriate work / activity related Permit to Work before being authorised to commence any activity. RAMS and permits will be assessed prior to allowing any contractor to start work to ensure their activity does not pose a threat to the environment or a Health and safety risk to themselves, our staff or other 3rd parties.
Contractors are also reminded to ensure they either remove any waste for disposal by their own company waste management system or following prior agreement with Dairy Partners dispose of waste in one of our appropriate waste stream storage containers on site.

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5.10 Loss, Theft or Breakage

This is a highly unlikely scenario, as the Site is constantly manned and has a well-disciplined Supervisory regime.

- Spill response procedure in place to report and action any spills occurring on site to allow rapid containment. Hazardous chemicals are held in locked locations.
- Effluent plant is manned around the clock. And operators have radio contact in case of emergency.
- All the site buildings entrances are secured via digital keypads preventing unauthorised entry.
- Silos valves are secured from tampering via key operated padlock.

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6.0 CONTAINMENT & FAIL-SAFE CONTROLS

Dairy Partners maintains multiple levels of containment and automatic control to prevent any loss of effluent or chemicals to the environment.

6.1 Containment Capacity

All primary and secondary containment systems have been reviewed in accordance with CIRIA C736 (2025) to identify any shortfalls in available storage.
The assessment confirmed that some tanks and pits currently provide less than the recommended 110 % capacity.
These shortfalls and associated upgrade measures are documented within the CIRIA C736 Risk Assessment DP 2025.
Interim controls—including routine level monitoring, isolation valves, and operator visual checks—remain in place to mitigate overflow risk until permanent containment improvements are completed.

6.2 Fail-Safe and Power-Failure Measures

Following the 2025 containment improvement works (CAR NRW0048395 / IC24), the following upgrades were implemented:

- Pump contactors installed to replace manual trip resets – automatically re-engage on power restoration.
- UPS (Uninterrupted Power Supply) fitted to maintain control-system integrity during short outages.
- Interlocked dairy drain valves installed to automatically close when crude-pit pumps stop or a high-level alarm is triggered (installation completion due Dec 2025).
- High-level alarms linked to the drain-valve system to prevent overflows.
- December 2025 - Infeed silos and pipework designed to *fail to safe* – valves close on loss of power or signal.

These measures ensure that, during any loss of power or mechanical fault, no additional inflow can enter the crude pit and existing contents remain contained.

6.3 Inspection and Maintenance Controls

Integrity of containment and fail-safe systems is maintained through the Workmate PPMR (Planned Preventative Maintenance Regime) which generates, assigns, and records all inspections and maintenance tasks.
Records are stored electronically and retained for a minimum of three years.
Routine daily checks undertaken by WWTP Operators and Shift Leaders provide continuous assurance of system condition (see Section 7 and Appendix D).

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6.4 References

- *CIRIA C736 Risk Assessment DP 2025*
- *DPCW.01.08 Action 1 and 2-3 (2025)* – evidence of upgrades
- *OMP Issue 8* – Workmate PPMR details

7.0 PLANNED PREVENTATIVE MAINTENANCE REGIME (PPMR)

The integrity and reliability of all environmental protection systems are maintained through the site's Planned Preventative Maintenance Regime (PPMR), managed electronically within the Workmate computerised maintenance system.

7.1 System Overview

Workmate automatically generates and tracks maintenance tasks for all containment and control assets, including pumps, valves, alarms, bunds, and effluent treatment equipment.
Each task is allocated to the appropriate department, completed to defined intervals, and closed out with a digital record and timestamp.
The full structure of this regime is described within the PPMR Overview (Appendix C) and supported by Odour Management Plan Issue 8, Section 9.5.

7.2 Inspection and Record Management

All Workmate maintenance records are stored electronically for a minimum of three years and are accessible to the HS&E Manager and Engineering Manager for verification.
Quarterly reviews of Workmate data are carried out by the HS&E Manager to confirm completion rates, identify recurring issues, and raise improvement actions where necessary.

7.3 Operational Monitoring

In addition to the scheduled Workmate tasks, daily and shift-based operational checks are undertaken by WWTP Operators and Shift Leaders to provide early detection of leaks, blockages, or abnormal conditions.
These checks are detailed in Appendix D – Operational Monitoring Evidence Summary and act as a front-line assurance measure complementing the formal PPMR.

7.4 Continuous Improvement

Findings from Workmate and operator checks are reviewed during monthly Environmental Meetings.
Any required remedial works or system upgrades identified are captured within the CIRIA C736 Risk Assessment DP 2025 and, where relevant, incorporated into the ongoing improvement actions referenced in Section 8.

8.0 CRUDE PIT IMPROVEMENT PLAN

Following the 2024 – 2025 investigation into the crude-pit overflow (CAR NRW0048395) and subsequent containment review under Improvement Condition IC24, Dairy Partners implemented a series of upgrades to ensure full control and protection of the effluent system.

8.1 Implemented Improvements

Replacement of pump trip switches with contactors, allowing automatic re-engagement of pumps on power restoration.
Installation of an Uninterrupted Power Supply (UPS) to maintain control integrity during short-term outages.
Integration of interlocked dairy drain valves, programmed to automatically close when the crude-pit pumps stop or a high-level alarm is triggered.
Completion of high-level alarm and control logic upgrades, linking alarm activation to valve closure to prevent overflows.
Reinforcement and resealing of the pump-house floor and drainage joints, improving secondary containment and directing any potential leakage to the WWTP.

8.2 Ongoing Management

Routine inspections and integrity checks of the crude-pit area are managed under the Workmate PPMR system, with specific tasks assigned to the WWTP Supervisor and Engineering Manager.
Daily operator visual inspections are recorded within the WWTP Operations & Housekeeping Log, ensuring early detection of leaks or surface residue.
Any maintenance issues are raised automatically through Workmate for corrective action.

8.3 Future Actions / Assurance

All containment capacities and interlock functions will continue to be verified as part of the CIRIA C736 Risk Assessment DP 2025 annual review process.
Any further physical containment enhancements identified will be logged in Workmate and tracked to completion through the normal PPMR review cycle.
At the time of this revision, all required works identified under CAR NRW0048395 Actions 1 and 2-3 are complete, with the exception of the final interlocked valve installation scheduled for December 2025.

8.4 References

DPCW.01.08 Action 1 CAR0048395 Issue 1
DPCW.01.08 Action 2 and 3 Issue 1
CIRIA C736 Risk Assessment DP 2025
PPMR Overview (Appendix C)
Operational Monitoring Evidence Summary (Appendix D)

9.0 APPENDIX

- Effluent Treatment Plant Inventory and Containment Risk Assessment
- Hazardous Materials impact Assessment Sect 3 of this report
- Waste Treatment Bref Risk Assessment
- Food Drink and Milk Industries Bref Risk Assessment
- Residues Management Plan
- Odour Risk assessment/ Management plan
- Noise Risk assessment
- Air Quality Assessment
- Flood Management Plan
- DPEMS 003 App1 Spill Response Plan
- DPEMS F 002 Incident Response Investigation Report
- DPEMS F 001 Inspection Audit for Impermeable surfacing and containment Structures
- CIRIA C736 Risk Assessment Extract
- Post-Incident Action Evidence (DPCW.01.08 Actions 1 and 2-3)
- PPMR Overview (Workmate System)
- Operational Monitoring Evidence Summary
- OMP Issue 8 Section 9.5 Extract

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