

## **Attachment A.1 – Non Technical Summary**

### **The Installation and its Activities**

Lakeland Dairies, Ireland's second largest dairy processing co-operative, operates within a fifteen county catchment area in the northern half of the island of Ireland.

The Food Ingredients Division extracts constituents of freshly assembled milk to offer a comprehensive portfolio of highly functional food ingredients including milk powders, proteins and liquid dairy fats. The Food Ingredients Division manufactures on sites at Killeshandra, Co. Cavan, Bailieborough, Co. Cavan and Lough Egish, Co. Monaghan.

The Foodservice Division manufactures predominantly UHT (Ultra High Temperature) Products. This involves heating the milk/cream to high temperatures and packing them in sterile conditions into sterile packs. UHT products are generally sold in minipots, 1litre cartons and 200ml cartons. The Foodservice Division also manufactures frozen ice-cream, which involves taking cream / skim base and adding various ingredients/colours and flavours filling into blocks and tubs and freezing. The Foodservice Division also manufactures butter portions which involves buying in bulk butter and repacking it into foil wrapped portions. The main foodservice markets are Ireland, UK, Europe, Russia and the Middle East. The Foodservice Division manufactures at Killeshandra and at Newtownards in Northern Ireland.

The Killeshandra Site then involves the manufacture of products from both the Food Ingredients (Casein and Whey Processing) and Food Service (UHT, Ice-cream and Mini-butter) Divisions.

There has been dairy production on the Killeshandra Site since 1896.

For many years manufacturing on the site would have involved predominantly butter production. UHT production was introduced to the Site in the 1960s while Casein and Whey Processing was introduced to the Site in the early 1980s. More recent

additions to production on the site are Frozen Ice-cream manufacture and Whey Protein Concentrate manufacture for example.

Production activities are 24 hours a day, 7 days a week during peak production. There are 163 employees operating on site during peak production.

Lakeland Dairies Killeshandra occupies an approximately 5-hectare site, located in the town of Killeshandra, Co. Cavan. A site map and site location map are presented in Attachment A.1. The Site is split into two sections, an independent Processing Facility and Wastewater Treatment Plant. This Treatment Plant is located at the Convent Farm Killeshandra.

The Production Facility is bounded to the north by Church St., Killeshandra, to the east by commercial property, to the south by a housing development and agricultural land and to the west by agricultural land. The Wastewater Treatment Plant is located at the centre of the 'Convent Farm' at Cornaclea, Killeshandra and discharges effluent to the River Cullies.

### **Process Description**

The milk processing facility may be further divided into operations, which include:

1. Milk Intake
2. Separation
3. Casein Processing
4. Whey Processing
5. UHT
6. Ice-cream
7. Mini-butter
8. Butter-oil
9. Site Services
10. Wastewater Treatment

Details of the main processes on the Site are outlined in Section D of this application.

## **Raw and Auxiliary Materials**

The main raw material used on site during the process is milk. There are a number of more minor ingredients used on site, especially in the Ice-cream processing such as sugar, glucose and fruit flavourings. Food Grade Hydrochloric Acid is used on the site to precipitate casein from skim milk powder.

The main bulk chemicals used on site for cleaning purposes are nitric acid and lactol. These and other more minor chemicals used on the site are outlined in Section G of the Application.

The main fuels used on the Site are Heavy Fuel Oil and Tallow. LPG is used in the Casein Plant. The consumption of fuel along with electricity is monitored very closely on the site and the usage of energy relative to production is very low. The site possesses a Greenhouse Gas Emissions Permit.

## **Emissions**

The main emissions to atmosphere on site are the boilers and casein dryers. There are two boilers on site that both emit through one stack and there are three casein dryers that each has its own stack. The main abatements employed are the Baghouse Filters on the Casein Dryers.

There are two emissions to water off the site. The uncontaminated water on the site is discharged directly to the Town Lough, Killeshandra. Contaminated and wash waters are collected via a network of effluent drains and are treated at the Wastewater Treatment Plant. The final effluent from the Wastewater Treatment Plant is discharged into the River Cullies, a river that joins Town Lough and Tullyguide Lough at Killeshandra.

The main components of the Wastewater Treatment Plant are:

- Fat Removal System
- Balancing Tanks

- Flotation Unit
- Anoxic Zone
- Aeration
- Settling Tanks
- Sand Filtration
- Centrifuge (To dewater sludge)
- Lime Addition

The discharges to Town Lake and River Cullies are currently governed by the Cavan County Council Discharge License SS/W006/03.

There are no emissions to sewer at the installation apart from domestic emissions.

There are no emissions to ground at the installation. There is a program for landspreading activities, recycling sludge from the Wastewater Treatment System in the form of a Nutrient Management Plan.

Noise surveys have been carried out at the Site. These surveys would not indicate that the site is causing a noise problem at the nearest noise sensitive locations.

## **Waste**

Wastes arise at the facility from process, packaging, laboratory and the waste water treatment plant. They have been classified accordingly as hazardous and non-hazardous and are under control of standard operating procedures.

Waste segregation areas are located around the site for recyclable and landfill waste and all possible waste s are segregated and recycled. The site has been nominated for the Repak Recycling Best Practice Award.

## **Environmental Management**

There has long been a commitment to sound environmental practice on the Killeshandra Site. The company has operated an Environmental Management System

on the site for more than ten years and the system has been accredited to the ISO 14001 standard since 1996. The system is currently accredited by SGS.

The overall responsibility for environmental management rests with the Managing Director. Duties have been issued to the environmental manager to maintain ISO 14001, treatment plant operations and day-to-day operations at the installation. All environmental monitoring, management, developments and reporting are discussed with senior management on a weekly/monthly basis.

General procedural control is implemented by operators, supervisors and area managers on a daily basis to ensure efficient and compliant operation of the installation.

An Accident and Emergency Response Plan has been put into place to guide management and operators as to the actions to take place in the event of an unforeseen accident or emergency.

A plan has also been put into place to deal with decommissioning of Plant on the site.

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