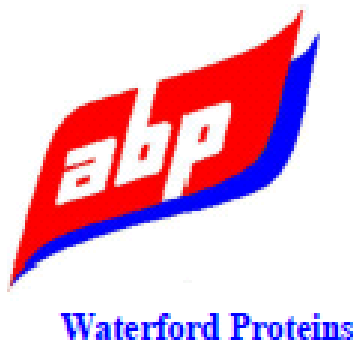




Manual 2: SOP'S  
Page: 1 of 7  
IE Licence: P0040-02

**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**



**Revision Status:**

| <b>Date:</b>    | <b>Revision:</b> | <b>Issued by:</b>   | <b>Approved by:</b>       | <b>Confirmed By:</b> |
|-----------------|------------------|---------------------|---------------------------|----------------------|
|                 |                  | <b>Env. Officer</b> | <b>Group Env. Manager</b> | <b>Env. Man</b>      |
| <b>10/10/16</b> | <b>9.0</b>       | <i>Liam Harty</i>   | <i>John Dwyer</i>         | <i>Peter Gorman</i>  |

**1.0 Purpose:**



**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

The purpose of this document is to detail the Standard Operating Procedures for overall operation of the Odour Control system at Waterford Proteins.

**2.0 Scope:**

The scope of this procedure concerns the Odour Control System on site and details measures to ensure any potential odour emissions are minimised.

**3.0 Responsibility:**

Plant Supervisor: Ensure that all procedures detailed in this document are adhered to.

Environmental Officer: Carry out routine checks on odour control equipment to ensuring operation is satisfactory.

Maintenance Department: Repair equipment as necessary.

**4.0 Condition 5.16 of Licence P0040-02**

*“The Licensee shall ensure that all operations on-site shall be carried out in a manner such that air emissions and/or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary and at odour sensitive locations.”*

**5.0 Definition:**

Not applicable.

**6.0 Procedure:**



**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

6.1 The following Procedure comprises two sections:

|           |                                |
|-----------|--------------------------------|
| Section 1 | Introduction/Overview          |
| Section 2 | Emergency Shutdown Procedure   |
|           | Startup Procedure              |
|           | Fan Failure Response Procedure |

## **SECTION 1 INTRODUCTION**

### **1.1 Purpose of Document**

This manual is intended to provide all the necessary information and data to enable trained works personnel to operate and maintain the plant with respect to the odour control system within the design parameters and in compliance with the Emission Limit Values laid down by the Environmental Protection Agency.

### **1.2 Overview**

The odour abatement system at Waterford Proteins operates by both general and local ventilation of the various plant buildings.

In the process area the ventilation system operates by drawing air from all the points where odours are given off and then passing this odorous air, first to a water scrubber to remove entrained matter and fully humidify it and then to Bio-filter to biologically oxidise the odour compounds. More odour gases namely the noncondensable gas stream and the vapours arising from the presses are ducted separately to the Thermal Oxidiser for combustion.

This method of collecting air from points where odour is given off is referred to as local ventilation. A local ventilation system will, of course, only deal with odours arising from the



Manual 2: SOP'S  
Page: 4 of 7  
IE Licence: P0040-02

**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

equipment. It can not deal with odour emissions from e.g. poor housekeeping or poor cleaning and disinfection of transport vehicles, nor with smells from drains, effluent treatment plant, etc.

The intake building is ventilated by general method. Odorous air is removed by ventilation of the whole building at a rate to ensure a negative pressure inside. The odorous air from the intake area follows the same route as the air extracted from the process area. The intake building must be reasonably airtight, as any openings or leakage's will increase the amount of air to be drawn off and treated.

Ventilation from the intake and process buildings will ensure negative pressure in both buildings. This will prevent the escape of odour which may arise due to spillage's or accidents within the building. To ensure this negative pressure is maintained, and the ventilation efficiency maximised, the following operational procedures should be adhered to:

### **1.3 Manual Overview**

The manual herewith presents the technical details of the odour control system at Waterford Proteins and the good housekeeping, operation and maintenance procedures for the plant.

### **Guidance and Maintenance Procedure for Odour Abatement System**

This Procedure is to supplement previous instructions given to personnel after installation and subsequent changes in personel.



Manual 2: SOP'S  
Page: 5 of 7  
IE Licence: P0040-02

**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

***General***

- (1) Unloading of raw material must take place in a controlled manner. The intake door must be open for a minimal period to prevent odour escape.
- (2) The area outside the intake door and process door must be cleaned regularly. (twice daily)
- (3) Any damage to doors, windows or other areas of building must be repaired immediately to prevent escape of odours from the building.
- (4) Personnel doors not working properly must be repaired as soon as possible.
- (5) Build up of vapours in process area must be reported immediately to the production manager and then reported immediately to the general manager and environmental manager.
- (6) Drains should be cleaned at the end of each working week to prevent odours emanating from gullies.



**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

**Emergency Shutdown Procedure**

- (1) Cease pumping Raw Material to plant.
- (2) Reduce levels in cooker.
- (3) Empty all process lines.
- (4) Shutdown and switch off.
- (5) Fan to be run for a minimum of 3 to 4 hours after processing finishes to remove any odours remaining from the building.
- (6) Doors to be kept closed as far as practicable.

**Start Up Procedures**

- (1) The main fan must be switched on before any processing takes place.
- (2) Water to be placed on humidifier.
- (3) All doors to be kept closed.
- (4) The T.O. must be at operating temperature 850°C minimum before commencement of processing.
- (5) In the event of T.O. being unavailable for longer than 4 hours *air cooled condensers are to be put operational.*

**FAN FAILURE**

**IN THE EVENT OF FAN FAILURE THE FOLLOWING RULES**

**‘STRICTLY’ APPLY.**

- (1) Immediately inform maintenance department of malfunction. Investigate cause and restart fan if possible. In the event that restarting the fan is not possible plant shutdown procedure must be initiated.



**Title:**  
**10.6 Standard Operating Procedure for Overall Operation of the Odour Control System at Waterford Proteins**

- (2) The plant operator must then inform the Production Manager, if present on site, and then General Manager and or Environmental Manager, whether day or night through the appropriate channels. Phone numbers are available at security.
- (3) All exit doors to be kept closed to prevent odour escape.
- (4) Process will not recommence until the fault is rectified and fan is operational.

### **Inspections**

Daily site inspections are undertaken of the following key equipment and recorded in the preventative.

- Maintenance Check Sheet Manual 2B ERF 2.2A
- Weekly Inspection of Potential Fugitive Odours Manual 2B ERF 10.7
- Olfactory Assessment Log Sheet ERF 10.7A
- Calibration Matrix Manual 2B ERF 5.1A
- Negative Pressure Check & Daily Checksheet Manual 2B ERF12.13A
- Monitoring of Biofilter Manual 2B ERF 12.3A

Key Equipment:      Biofilter Fan  
                              Water Scrubber Pump.  
                              Biofilter Temp.  
                              Humidity Sensor.  
                              Biofilter Flow Sensor.