

APPENDIX C

ODOUR MANAGEMENT PROCEDURE

Acknowledgements

Rum Jungle Meat Exports acknowledge The Odour Consultants for their contribution to the content of this appendix

Rum Jungle Meat Exports Pty Ltd – A subsidiary of Central Agri Group Pty Ltd – ABN 75 632 450 527



Head Office
132 Maffra St
Coolaroo VIC 3048
Australia
T +61 3 9302 1258

Operation Address
165 Meneling Road
Batchelor NT 0845
Australia
T +61 8 8976 0085





THE ODOUR
UNIT



CENTRAL
AGRI
GROUP

CENTRAL AGRI GROUP

ODOUR MANAGEMENT PROCEDURES

Batchelor, NT

Version 1

August 2019

THE ODOUR UNIT PTY LTD

ABN 53 091 165 061

ACN 091 165 061

Level 3, 12/56 Church Avenue

MASCOT, NSW 2020

P: +61 2 9209 4420

F: + 61 2 9209 4421

E: info@odourunit.com.auW: www.odourunit.com.au

This document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. This document should not be used or copied without written authorisation from **CENTRAL AGRI GROUP** and **THE ODOUR UNIT PTY LTD**.

Project Number: N2264L.01

Report Revision		
Report Version	Date	Description
Version 0	29.08.2019	Issued to client
Version 1	09.09.2019	Minor edits. Issued to client
Version 2	09.09.2024	Minor Additions
Report Preparation		
Report Prepared By: T. Schulz & M. Assal		Approved By: T. Schulz
Report Title: Central Agri Group – Odour Management Procedures		

1.1 KEY STAFF AND RESPONSIBILITIES

This section summarises the key staff and responsibilities for ensuring that Odour Management Procedures (OMP) are valid, up to date and achieve the desired result. The key staff responsible for the OMP at the Batchelor Meat Processing Plant (**the Plant**) include:

- Plant Manager; and
- Environmental Officer.

1.1.1 1.1 PLANT MANAGER

The Plant Manager responsibilities are as follows:

- Overall responsibility for the management of operational activities for the Plant, including the oversight of the odour management and control systems;
- Oversees management of the Plant ensuring that all activities and operations are conducted in compliance with management plans and operating systems including supervision of those relating to environmental management (including odour);
- Is advised of any relevant odour complaints; and
- Implementation of the OMP on a day-to-day basis for the Plant.

1.1.2 1.2 ENVIRONMENTAL OFFICER

The Environmental Officer's responsibilities are as follows:

- Overall responsibility for administrative controls and environmental management systems for the Plant;
- Ensuring that the process parameters are being correctly undertaken and maintained; and
- Responsible for the maintenance of the monitoring records.

1.2 2 INCIDENT & COMPLAINTS MANAGEMENT

1.2.1 2.1 ODOUR COMPLAINTS/INCIDENT HANDLING

The Plant has two internal key reporting forms, and one external form taken from the NTEPA website for the management of incident and complaints, as follows, respectively:

1. An Environmental incident report (Internal, refer to **Form 2.1**)
2. An Environmental Complaints form (internal, refer to **Form 2.2**)
3. EPA Approved Incident Report Form for Submission to the NT EPA (referred to as **Form 2.3** / SECTION 14 INCIDENT REPORT (Waste Management and Pollution Control Act)



ENVIRONMENTAL INCIDENT REPORT		
INCIDENT LOCATION:		
NATURE OF OCCURRENCE:		
☐ Spill ☐ Leak ☐ Unsightly / offensive accumulation of waste, litter etc. ☐ Other (describe):-	☐ Excessive Noise / Vibration ☐ Dust / smoke / odour ☐ Fire / Flood / Natural Disaster	
FURTHER DETAILS:		
Origin of Incident:		
From (date/time):		
To (date/time):		
DESCRIPTION OF INCIDENT		
RESULTING IMPACT: (what Environmental Harm was caused or threatened?)		
EXTENT OF IMPACT: (area affected)		
PROBABLE CAUSE: (what caused the incident?)		
CORRECTIVE ACTION TAKEN: (immediate actions, date/time etc)		
PREVENTATIVE ACTION TO BE TAKEN: (to prevent occurrence/eliminate root cause of the incident)		
MAINTENANCE SERVICE REQUEST NUMBER:		
ANY COMMUNITY/MEDIA ATTENTION: (give a brief description)		
INCIDENT REPORTED TO EPA: YES NO		
Date:	Time:	EPA Officer:
OTHER COMMENTS/ATTACHMENTS:		
REPORT COMPLETED BY:	SIGNED:	DATE:
ENVIRONMENTAL MANAGER:	SIGNED:	DATE:
PLANT MANAGER:	SIGNED:	DATE:

Form 2.1 – Environmental Incident Report Internal



ENVIRONMENTAL COMPLAINT FORM

DATE & TIME COMPLAINT REPORTED:

DETAIL OF COMPLAINT:

(If Odour, please describe)

NAME & ADDRESS OF COMPLAINANT:

(if permitted)

DATE & TIME OF EVENTS GIVING
RISE TO COMPLAINT:

AT THE TIME OF THE EVENT AN ESTIMATE OF:

TEMPERATURE:

WIND SPEED:

WIND DIRECTION:

RAINFALL:

LIKELY CAUSE OF EVENTS GIVING
RISE TO COMPLAINT:

ACTION TAKEN IN RESPONSE TO THE COMPLAINT, AND TO PREVENT A REOCCURRENCE OF THE EVENTS
GIVING RISE TO THE COMPLAINT:

SERVICE REQUEST NUMBER:

REPORTED TO: _____

SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

Date and Time of Notification:	
Person / Company:	
Incident:	

(a) the incident causing or threatening to cause pollution	
(b) the place where the incident occurred	
(c) the date and time of the incident	
(d) how the pollution has occurred, is occurring or may occur	
(e) the attempts made to prevent, reduce, control, rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident	
(f) the identity of the person notifying the NT EPA	

Notification to the administering authority must occur within 24 hours of the person responsible for notifying becoming aware of an incident that may have caused or threatens serious or material environmental harm.

You can notify us in any of the following ways:

Email us your completed Section 14 Incident Report Form DOCX (57.3 KB)

Submit an Online Pollution Report

Contact the Pollution Hotline on 1800 064 567.

(Northern Territory Government, 2022)

More information on notification guidelines and processes Can be found on the NT EPA Website via the below link.

[Notification of an incident | NTEPA](#)

1.2.2 2.2 ODOUR INCIDENT, MANAGEMENT AND MONITORING

2.2.1 Field Ambient Odour Assessment Surveys

In response to an odour complaint, the undertaking of Field Ambient Odour Assessment Surveys (**FAOA**) by suitable personnel from the Plant can be undertaken to allow for real-time monitoring of ambient odour levels, especially during atypical process conditions and can be undertaken in the form of regular patrols both on-site and off-site (if necessary, especially at known problematically areas or sensitive receptors). The FAOA surveys could also be a response protocol to an odour complaint received from the Plant Manager or Environmental Officer of the Plant (provided the odour complaint has been logged the same day and within a reasonable timeframe since the odour episode).

The FAOA surveys are intended to be used as a complaints response and management tool, designed to record the Plant personnel's determinations of the presence or absence of ambient odours at both on-site and off-site locations (in the instance that a positive detection beyond the Plant boundary is recorded), the perceived strength/intensity of any odour found to be present, the duration of the odour event, any definable odour character, and information of prevailing wind conditions. The results are to be recorded in a FAOA log sheet template (see

Form 2.3). If there is odour present, then an entry should be completed. If there is a prevailing wind from the direction of the Plant, and there is no positive detection observed, then an entry should still be made. These NIL entries can provide as much valuable data to the responsible Plant personnel as 'FAOA positive' form log sheet entries.

The key FAOA parameters that are to be recorded in the form log sheet are as follows:

- ☐ Date and time;
- ☐ Location;
- ☐ Intensity, according to the 7-point odour intensity scale (see **Table 2.1**); and
- ☐ Meteorological conditions including weather conditions, wind direction, and wind speed.

Form 2.3 should be printed or electronically stored and template kept in a separate and accessible file at the Plant's Main Office. All filled forms should also be kept in a separate file or attached to the corresponding logged complaint in the Environmental

Complaints Register (as outlined **Section 2**). **Section 2.2.1.1** & **Section 2.2.1.2** outline and describe the odour intensity scale and odour descriptors, respectively, available to the responsible Plant personnel for the assessment of odour during a FAOA survey.

2.2.1.1 Odour intensity scale

The odour strength for use in the FAOA is quantified according to the German VDI 3940 odour intensity scale. The category scale for judging odour intensity in the field is a quantitative seven-point reference scale where the responsible Plant personnel assign one of the attributes in the **Table 2.1** to the assessor's odour impression. As a reference point, an odour is clearly recognised (category of intensity 3) when an odour descriptor can be clearly distinct.

Table 2.1 –Odour Intensity Chart		
Odour Strength	Intensity Rank	Comment
Not detectable	0	No odour detected
Very Weak	1	Odour recognised and where possible assigned to the odour source
Weak	2	Odour is weak but not yet distinct
Distinct	3	Odour is clearly distinct
Strong	4	Strong odour detectable
Very Strong	5	Very strong odour detectable
Extremely Strong	6	Extremely strong odour detectable

2.2.1.2 Odour character

Any potential odour sources have their origins from the process operations occurring at the Plant. Based on typical abattoir/rendering process operations, the key odour descriptors have been developed as shown in **Table 2.2**. The odour descriptors are specific to the Plant and its operations. This enables the responsible personnel to readily identify the likely source of a positive odour entry during the daily FAOA survey.

Table 2.2 - Odour Descriptors associated with the Plant	
Character ID	Odour description
A	meaty, putrid, pungent
B	faecal, dirty, septic
C	rotten egg, sewage
D	manure
E	other (describe)

Field Ambient Odour Assessment Form Log sheet							
Date of Observation							
Time of Observation							
Measurement Location ID or location of odour							
Weather conditions (sunny, dry, rain, fog, etc)							
Temperature (hot, very warm, warm, mild, cold or degrees if known)*							
Wind strength (calm, light, steady, strong, gusting)*							
Wind direction (e.g. from NE)*							
What does it smell like? (Please circle response)	meaty, putrid, pungent faecal, dirty, septic rotten egg, sewage manure Other _____						
How unpleasant is it?							
Was the character or strength of this smell offensive?							
Intensity – How strong was it? (Please circle) Refer to odour intensity scale for meaning (see below)	0	1	2	3	4	5	6
How long did the smell last?							
Was it constant or intermittent?							
Any other comments							

Form 2.4 – FAOA Log sheet

2.2.2 Odour Communication and Response Strategy

2.2.2.1 Odour diaries

Odour diaries can assist complainants in providing details of their perception of the suspected nuisance odours and any effects that the odour has on their behaviour. They are best used for persistent and recurring odour incidents. Details are recorded using a standard diary record sheet on a daily or weekly basis and particularly whenever an odour episode occurs. Simple local wind or weather condition records can also help identify or confirm the source of alleged nuisance odours. The odour descriptors and intensity chart should be provided to concerned neighbouring receptors as shown in **Table 2.1 & Table 2.2**.

The odour diaries are a valuable communication tool between the community, EPA NT and the Plant, as it provides feedback on what the complainant is experiencing in real-time during an odour episode, especially in the event where they do not have the opportunity to lodge a complaint in real-time. Such observations are not limited to odour but can also include issues that may arise from the Plant.

2.2.3 Meteorological Station

The BoM meteorological station at the Batchelor Airport can be referenced as a source of relevant weather data.