EMISSION MANAGEMENT PROCEDURE

OHSaES 7.8.18P

1. PURPOSE

This procedure establishes the guidelines to be followed to manage all stacks and odour emissions

2. SCOPE

2.1 This procedure covers the entire **Supreme Poultry (Pty) Ltd – Mahikeng Processing Plant.**

2.2 The following will be discussed in this procedure:

2.2.1 Abbreviations

2.2.2 References

2.2.3 Introduction

2.2.4 Site Description

2.2.5 Responsibility

2.2.6 Requirements with regards to risks

2.2.7 Standards of emissions management

2.2.8 Monitoring and checking

2.2.9 Records and retention

2.2.10 Control sheet Annexure A

3. ABBREVIATIONS

NEMA	-	National Environmental Management Act
OHSaES	-	Occupational Health, Safety & Environmental System
AIA	-	Approved Inspection Authority
SHE	-	Safety, Health & Environmental
AEL	-	Air Emissions License

4. REFERENCES

4.1 OHSaES Module 7 & OHSaES 7.6.2.2PLAN

4.2 NEMA Air Quality Act 39 of 2004, relevant notices and National Greenhouse reporting: March annually

4.3 Provincial: Public Health By-Laws.

4.4 Stack emissions survey ISOKINETIC Sampling Services CC: Annual

4.5 Pragma system (Maintenance System)

4.6 Odour management plan: Annual

4.7 Air emissions license: Mahikeng Processing Plant: 5 Yearly

4.8 Sterilizing plant registration: Mahikeng Processing Plant: 3 Yearly

4.9 Aspect and Impact register: Mahikeng Processing Plant: OHSaES 7.6.2.1R

5. INTRODUCTION

5.1 Air pollutants are chemicals that are in high enough concentrations in the air to cause harm to humans, other animals, vegetation or other materials. Other forms of air pollution include excess heat and noise.

5.2 Primary pollutants are the actual products released into the air, and secondary pollutants are what result after mixing and reacting of separate chemicals and each other as well as with the basic components of air.

5.3 Pollutants are dispersed throughout the troposphere (the lowest layer of Earth's atmosphere) by wind currents and can cause damages far from the source of the pollution.

5.4 The major types of air pollution can be classed as follows:

5.4.1 Carbon oxides

5.4.2 Sulphur oxides

5.4.3 Nitrogen oxides

5.4.4 Volatile organic compounds

5.4.5 Suspended organic compounds

6. SITE DESCRIPTION

6.1 The processing plant is situated in an industrial area and it is expected emissions would be emitted as a result of the activities at the processing plant.

6.2 Main sources of emissions at Mahikeng Processing Plant area as follows:

6.2.1 Steam generators – stacking emissions

6.2.2 Rendering (Effluent re-work of blood and feathers) – Odour

6.3 These sources of emissions will be quantified by means of the site's aspect and impact register that will determine risk rating and required compliance to adhered too (OHSaES 7.6.2.1R)

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7. RESPONSIBILITY

7.1 It is the responsibility of:

7.1.1 General Manager	-	Provide resources and overall responsibility and comply to AEL conditions
7.1.2 GMR 2.1 / Maintenance Manager	-	Overall maintenance and inspections of equipment and machinery and comply to AEL conditions and Sterilizing plant registration
7.1.3 SHE Officer	-	Plan, monitor and recording keeping of inspections and stacking emissions, odour management and managing AEL conditions and reporting and Sterilizing Plant registration
7.1.4 Group Quality Manager	-	Reporting on Green-house gasses

6. REQUIREMENTS WITH REGARD TO RISKS

6.1 Safety

6.1.1 Regular cleaning of all equipment, especially equipment near to emission producing processes, is required because air pollutants can damage materials and result in unsafe working conditions.

6.2 Health

6.2.1 Atmospheric emissions must be kept as low as possible to protect the health of all persons.

6.3 Environment

6.3.1 The effects of primary and secondary pollutants can be very hazardous to the environment, especially as they can travel so far, and accumulate in certain areas

7. STANDARDS FOR EMISSIONS MANAGEMENT

7.1 **Mahikeng Processing Plant** will comply with all national laws & by-laws in terms of Emissions Management and conditions of AEL and sterilizing plant registration.

7.2 **Existing Measures are as follow:**

7.2.1 The Maintenance manager & SHE Officer will monitor air pollution control measures. Required planning is recorded on the following OHSaES documentation:

7.2.1.1 Aspect and Impact register OHSaES 7.6.1.2R

7.2.1.2 Year Planner OHSaES 7.6.2.2PLAN

7.2.1.3 Environmental Management Plan OHSaES 7.6.2R

7.2.2 Ensure annual stacking emissions are conducted and recommendations are implemented as identified by AIA.

7.2.3 Annual green-house reporting send to Group Quality Manager by March.

7.2.4 AEL Conditions are as follows to complied with:

7.2.4.1 Re-apply 5 yearly for AEL – expire in July 2025

7.2.4.2 Quarterly reports to be complied and submitted to AEL Officer

7.2.4.3 Quarterly verification of AEL conditions – if any changes to be submitted to AEL Officer

72.4.4 Annual review of odour management plan and submitted to AEL officer

7.2.4 Sterilizing plant registration on 3 yearly intervals.

7.2.5 Annual review of odour management plan and submission to READ.

7.2.6 Planned maintenance of required equipment as scheduled on PRAGMA system.

7.3 **Monitoring and Control Emissions**

7.3.1 All emissions shall be kept within the local bylaws and the national legal requirements.

7.3.2 Any visible emissions from identified emissions as refer in par 6.2 will be noted and relevant department to record the following to the Maintenance Manager and SHE Officer:

- The date of the incident
- The time of the incident
- The reason for the incident
- The approximate time the incident was corrected.

7.3.3 Record any complaints by neighbours or local authority in complaints register.

Note:

Any poor combustion, besides causing pollution, results in large wastes of energy, and enormous escalation in cost of coal. Thus, besides remaining compliant, it is in our best interests to burn efficiently. For fuel burning equipment, an emissions violation or potential violation of the Local By-laws, would result in the Local Authorities being informed of the incident, and the following information would be conveyed to them: -

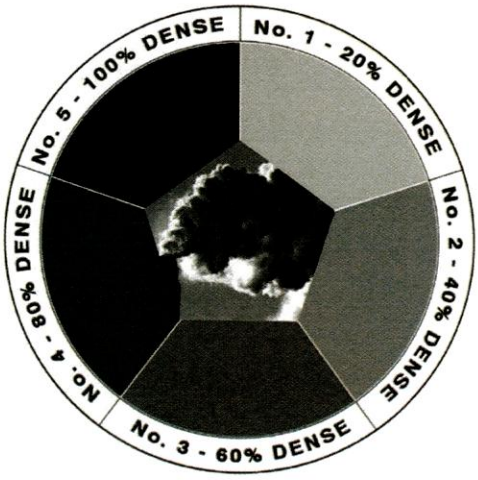
- *Where the emission stems from*
- *The reason for the emission*
- *The possible duration of non-conformance*

7.4 **Emissions Internal Control**

7.4.1 To endeavour to not exceed Stack emissions the Ringlemann chart to determine the density of smoke (emissions released)

SMOKE CHART

RINGELMANN TYPE



7.4.2 The above would not apply to smoke emanating from a fuel burning appliance during the start-up period or if such emissions could not reasonably have been prevented, due to such appliances is being overhauled or during the period of any breakdown or disturbance of such appliance.

7.4.3 This chart must be used on a daily basis and results must be recorded in daily steam generator log register. Any deviations must be report to maintenance manager & GMR 2,1 of the site immediately.

7.5 **Resource management**

7.5.1 Ensure that require resources are made available for:

7.5.1.1 Coal purchased as required standards to ensure optimum energy efficiency *(Grade A coal – specifications to be made available to client by supplier)*

7.5.1.2 Annual stacking emissions by AIA

7.5.1.3 5 yearly re-application of AEL license

7.5.1.4 3 Yearly re-application for Sterilizing Plant

7.5.1.5 Annual review of odour management plan

7.5.1.6 Quarterly reporting on conditions of AEL License

7.5.2 Training of all operators and refresher training to ensure effective and optimum energy efficiency of Steam generators and cookers.

8. MONITOR AND CHECKING

7.1 The Maintenance Manager and SHE Officer will ensure the following:

7.1.1 Ensure annual stacking emissions to be conducted by AIA and results submitted to Group Quality manager for Greenhouses gasses submission by March each year.

7.1.2 Annual Steam generator inspections by competent person.

7.1.3 Statutory 36 months steam generator inspections by competent person.

7.1.4 Daily inspections by steam generator operators and recording in daily log.

7.1.5 Ensure effective maintenance of equipment through planned maintenance inspections and record keeping.

7.1.6 Quarterly reporting on AEL conditions to AEL Official – all reports must be signed by site management (GM & GMR 2.1)

7.1.7 Annual review of odour management plan and submission to AEL Official.

7.1.8 5 yearly re-application of the AEL at local AEL official

7.1.9 3 yearly re-application of Sterilizing plant registration

7.1.10 Keep complaints register up to date of any complaints and communication register of communication (7.7.4R) with regards to visit formal and informal from READ etc.

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9. RECORDS & RETENTION

8.1	Maintenance records	-	3 years
8.2	AIA Survey reports (Stacking)	-	40 years
8.3	AEL Registration	-	5 years
8.4	Sterilizing plant registration	-	3 years
8.5	Odour management plan	-	5 years
8.6	Complaints register	-	3 years
8.7	Communication register (7.7.4R)	-	3 years
8.8	Impact & Aspect register (7.6.2.1R)	-	3 years
8.9	Environmental management plan (7.6.2R)	-	3 Years
8.10	Environmental year planner (7.6.2.2PLAN	-	3 Years

APPROVED

(T VAN WYNGAARD)
SUPREME POULTY (PTY) LTD
MAHIKENG PROCESSING PLANT: GENERAL MANAGER

DATE: 5/8/21

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APPENDIX A

CONTROL SHEET FOR UPGRADING OF SHE PROCEDURE AND RECORDS

Date	Nature of change	Page reviewed	Name of reviewer	Signature