STACK MONITORING PLAN

Isando Foods (Pty) Ltd
21 Quality Road, Isando within the City of Ekurhuleni, Gauteng Province

Proponent:
Isando Foods (Pty) Ltd
Project Reference:
22548 – Isando Foods
Report Date:
September 2026
Report Reference:
22548_Stack_MP_001

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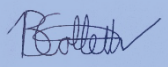
Approval Page

Stack Monitoring Plan

Document status

Project Name	Isando Foods (Pty) Ltd, 21 Quality Rd, Isando, Ekurhuleni Metropolitan Municipality
Report Title	Stack Monitoring Plan – 2026 v001
Report Status	Final
Applicant Name	Isando Foods

	Name	Signature	Date
Document Compilation	**Mr. B. Collett** (B.Sc. Hons. Env. Man.) **Cand. EAP | Cand.Sci.Nat**		September 2026
Peer Review	**Mr. D. Botha** (M.A. Env.Man.) (PHED) Principal EAP | Pr.Sci.Nat. | Reg. EAP		September 2026
Document Signoff	**Mr. D. Botha** (M.A. Env.Man.) (PHED) Principal EAP | Pr.Sci.Nat. | Reg. EAP.		September 2026

Distribution List

Date	Report Reference number	Document Distribution	Number of Copies
2026/09	22548_Stack_MP_2026_001	Ekurhuleni GDEnv	Digital

Amendments on document

Date	Report Reference number		Description of Amendment

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Specialist Name	De Wet Botha
Declaration of Independence	I declare, as a specialist appointed in terms of the National Environmental Management Act (Act No 108 of 1998) and the associated 2014 Environmental Impact Assessment (EIA) Regulations, that: • I act as the independent specialist in this application; • I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant; • I declare that there are no circumstances that may compromise my objectivity in performing such work; • I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity; • I will comply with the Act, Regulations and all other applicable legislation; • I have no, and will not engage in, conflicting interests in the undertaking of the activity; • I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority; • All the particulars furnished by me in this form are true and correct; and • I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.
Signature	
Date	September 2026

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1. Purpose

The purpose of this Stack Emission Monitoring Plan (SEMP) is to establish a structured programme for monitoring atmospheric emissions from the combustion and boiler systems associated with the Isando Foods facility.

The Plan provides for routine monitoring of particulate matter (PM) and sulphur dioxide (SO_2) from the four existing Isando Foods coal-fired boilers, as well as Geka Connus Boiler 1 and Boiler 2. The Plan is intended to ensure that emissions are routinely quantified, assessed against applicable emission limits and emission-reduction targets, and managed where elevated concentrations or adverse trends are identified.

The SEMP must be implemented in conjunction with the facility's Emission Reduction and Management Plan (ERMP), Environmental Management Programme (EMPr), Atmospheric Emission Licence (AEL), and other applicable atmospheric emission requirements.

The objectives of the SEMP are to:

- monitor stack emissions under representative operating conditions;
- assess compliance with applicable emission limits;
- assess progress towards applicable emission-reduction targets;
- identify increasing or abnormal emission trends;
- ensure effective operation and maintenance of emission-control equipment;
- provide a documented basis for corrective and preventative action; and
- maintain appropriate records of atmospheric emission performance.

2. Scope of the Monitoring Programme

The monitoring programme applies to the following boiler emission sources:

Table 2-1: Boiler Emission Sources on site

Emission Source	Boiler	Fuel	Main Emission-Control Equipment	Primary Parameters
Coal-fired Boiler 1	Boiler 1	Coal	Baghouse	PM and SO_2
Coal-fired Boiler 2	Boiler 2	Coal	Baghouse	PM and SO_2
Coal-fired Boiler 3	Boiler 3	Coal	Baghouse	PM and SO_2
Coal-fired Boiler 4	Boiler 4	Coal	Baghouse	PM and SO_2

Geka Connus Boiler 1	Boiler 1	Liquid	Existing boiler emission-control system	PM and SO_2
Geka Connus Boiler 2	Boiler 2	Liquid	Existing boiler emission-control system	PM and SO_2

The primary pollutants covered by this Plan are PM and SO_2, as these are the principal pollutants relevant to the current emission-monitoring and ERMP requirements for the Isando Foods boilers.

Where required by an applicable AEL, regulatory requirement, monitoring methodology or competent authority, additional parameters may be monitored.

3. Applicable Emission Limits and Targets

The current emission limits and ERMP targets identified for the facility are presented below.

Table 3-1: Site-Specific ERMP Emission-Reduction Targets for the Coal-Fired Boilers

Unit	Pollutant	Current emission limits (mg/Nm^3)	Proposed 2030 emission limits (mg/Nm^3)
Boiler 1	PM	250	150
	SO_2	2800	1680
Boiler 2	PM	250	150
	SO_2	2800	1680
Boiler 3	PM	250	150
	SO_2	2800	1680
Boiler 4	PM	120	72
	SO_2	2800	1680
Geka Connus Boiler #1	PM	75	45
	SO_2	3500	2100
Geka Connus Boiler #2 **(Not Yet Operational)**	PM	50	30
	SO_2	500	300

The statutory/licence emission limits and ERMP targets serve different purposes and must not be treated as interchangeable. The emission limits represent the applicable compliance thresholds, while the ERMP targets represent the facility's intended emission-reduction benchmarks.

4. Monitoring Frequency and Methodology

4.1 Routine monitoring

Stack emission monitoring must be undertaken at least annually for each of the six identified boiler stacks, unless a different monitoring frequency is prescribed by the applicable AEL, legislation or competent authority.

The annual monitoring programme must therefore include:

- Isando Foods Boiler 1;
- Isando Foods Boiler 2;
- Isando Foods Boiler 3;
- Isando Foods Boiler 4;
- Geka Connus Boiler 1; and
- Geka Connus Boiler 2.

Additional monitoring should be undertaken where an emission exceedance occurs, significant increases in emissions are identified, substantial modifications are made to a boiler or emission-control system or where required by the competent authority.

4.2 Sampling Conditions

Monitoring must be undertaken under normal and representative operating conditions. The operating conditions during monitoring must be recorded to allow the results to be appropriately interpreted and compared with previous monitoring campaigns.

The monitoring record should include, where applicable:

- boiler identification;
- date and time of monitoring;
- boiler operating load;
- coal feed rate;
- fuel characteristics/coal quality;
- combustion conditions;
- operating status of emission-control equipment;
- maintenance activities undertaken;
- relevant process conditions; and
- any abnormal operating conditions.

4.3 Sampling Runs

Each annual monitoring campaign should comprise three individual sampling runs of approximately three hours each, subject to the applicable monitoring methodology and licence requirements.

The three individual results must be reported separately, together with the calculated average concentration used for the compliance assessment where required by the applicable methodology.

Monitoring must be undertaken by a suitably qualified and competent atmospheric emission monitoring service provider using appropriate recognised sampling and analytical methods.

5. Quality Assurance and Quality Control

Appropriate quality assurance and quality control procedures must be applied to all stack emission monitoring.

The monitoring service provider must ensure that:

- sampling equipment is appropriately calibrated and maintained;
- sampling locations are suitable for representative measurements;
- monitoring equipment is checked before and after sampling;
- appropriate QA/QC procedures are implemented;
- samples requiring laboratory analysis are properly identified and controlled;
- analytical methods are appropriate for the parameters being measured;
- monitoring results are supported by relevant field and laboratory records; and
- any deviations from the prescribed monitoring methodology are documented.

Each monitoring report must clearly state the sampling and analytical methodologies used, the operating conditions during monitoring, and any factors that may influence interpretation of the results.

6. Emission Control and Operational Management

Effective stack emission monitoring must be supported by appropriate operational controls.

6.1 Isando Foods Coal Boilers 1-4

The baghouse filtration systems associated with the Isando Foods boilers must be routinely inspected and maintained. Particular attention must be given to:

- filter-bag condition;
- baghouse pressure and operating performance;
- damaged or failed filter bags;
- ducting and connections;

- leaks;
- cleaning systems; and
- general structural condition.

Filter bags and other defective components must be repaired or replaced as soon as reasonably practicable.

Boiler operating conditions must also be managed to promote efficient combustion and minimise atmospheric emissions. Coal feed rates, combustion conditions, boiler load and coal quality should be monitored where relevant to emission performance.

Grit arrestors and associated particulate-control equipment must be inspected and cleaned as required.

6.2 Geka Connus Boilers 1 and 2

The Geka Connus Boiler 1 and Boiler 2 emission-control systems must be routinely inspected and maintained in accordance with the applicable operating and maintenance requirements.

The same principles of preventative management must be applied, including:

- inspection of emission-control equipment;
- maintenance of combustion systems;
- management of fuel quality and feed rates;
- inspection of associated ducting and stack infrastructure;
- recording of maintenance activities; and
- investigation of abnormal emission results.

The condition and performance of the Geka Connus emission-control systems should be considered when interpreting monitoring results and identifying potential sources of elevated emissions.

7. Data Assessment and Trend Analysis

Following each monitoring campaign, the results must be assessed against the applicable emission limit for the relevant boiler.

The assessment must include:

- each individual sampling-run result;

- the calculated average concentration;
- applicable emission limit;
- applicable ERMP target, where relevant;
- comparison with previous monitoring results;
- identification of increasing or decreasing trends; and
- recommendations for corrective or preventative measures.

A result that is below the applicable legal limit should not automatically be regarded as satisfactory where monitoring indicates a sustained increase in emissions.

Trend analysis must therefore form an important component of the SEMP.

Particular attention should be given to the historical performance of the Isando Foods boilers. Previous monitoring has indicated an increasing PM and SO_2 trend for Boiler 3, although concentrations remained below the applicable emission limits. Continued monitoring is therefore required to determine whether this trend persists.

The same trend-based approach must be applied to the Geka Connus Boiler 1 and Boiler 2 once sufficient monitoring data have been collected to establish a baseline.

8. Exceedance and Corrective Action

Where a monitoring result indicates an exceedance of an applicable emission limit, the relevant boiler must be investigated to determine the cause.

The investigation should consider:

- boiler operating conditions;
- fuel quality and feed rate;
- combustion efficiency;
- emission-control equipment;
- filter/bag condition;
- ducting and associated infrastructure;
- recent maintenance or operational changes;
- monitoring methodology and data quality; and

- other relevant process conditions.

Where an exceedance is confirmed, appropriate corrective action must be implemented.

Corrective measures may include:

- inspection and repair of emission-control equipment;
- replacement of damaged filter bags;
- cleaning of particulate-control equipment;
- adjustment of boiler operating conditions;
- review of fuel quality;
- maintenance of ducting and associated infrastructure;
- additional monitoring; and
- implementation of other technically appropriate measures.

All exceedances and corrective actions must be recorded and tracked until the issue has been resolved.

9. Response to Increasing Emission Trends

Management action should not only be initiated when an emission limit is exceeded.

Where monitoring identifies a sustained or significant increase in PM or SO_2 concentrations, Isando Foods must investigate the potential cause and implement preventative measures where appropriate.

The investigation should include a review of:

- historical stack monitoring results;
- boiler operating conditions;
- fuel quality;
- fuel consumption;
- maintenance records;
- emission-control equipment performance;
- filter replacement history;
- abnormal operating events; and
- any other relevant factors.

This approach is particularly important for identifying deterioration in emission-control performance before statutory limits are exceeded.

10. Monitoring Records and Reporting

A formal stack emission monitoring report must be prepared following each monitoring campaign.

The report must, as applicable, include:

- identification of the facility and boiler;
- monitoring date and time;
- monitoring service provider;
- sampling methodology;
- analytical methodology;
- operating conditions;
- individual sampling results;
- average emission concentration;
- applicable emission limit;
- ERMP target, where applicable;
- compliance assessment;
- comparison with historical results;
- trend assessment;
- identified exceedances or abnormalities;
- corrective actions; and
- recommendations.

A consolidated Stack Emission Monitoring Register must be maintained for all six boiler stacks.

Table 10-1: Stack Emission Monitoring Register

Monitoring year	Source	Boiler	Pollutant	Average result	Applicable limit (mg/Nm^3)	ERMP target (mg/Nm^3)	Compliance (Y/N)	Trend
2026	Isando Foods	Boiler 1	PM		250	150		
2026	Isando Foods	Boiler 1	SO_2		2800	1680		
2026	Isando Foods	Boiler 2	PM		250	150		
2026	Isando Foods	Boiler 2	SO_2		2800	1680		
2026	Isando Foods	Boiler 3	PM		250	150		
2026	Isando Foods	Boiler 3	SO_2		2800	1680		
2026	Isando Foods	Boiler 4	PM		120	72		
2026	Isando Foods	Boiler 4	SO_2		2800	1680		
2026	Isando Foods	Geka Connus Boiler 1	PM		75	45		
2026	Isando Foods	Geka Connus Boiler 1	SO_2		3500	2100		
2026	Isando Foods	Geka Connus Boiler 2	PM		50	30		
2026	Isando Foods	Geka Connus Boiler 2	SO_2		500	300		

Monitoring reports, raw data, calibration certificates, laboratory results, maintenance records, exceedance investigations and corrective-action records must be retained and made available to the competent authority upon request.

11. Responsibilities

Table 11-1: Activities on site and responsible parties

Activity	Responsible party
Overall implementation of SEMP	Isando Foods
Appointment of monitoring service provider	Isando Foods
Annual stack monitoring	Competent monitoring service provider
Boiler operating records	Isando Foods / Boiler operators
Emission-control equipment maintenance	Isando Foods / Maintenance personnel
Review and interpretation of results	Isando Foods / Environmental representative
Investigation of exceedances	Isando Foods / Relevant technical personnel
Corrective action	Isando Foods
Monitoring records and reporting	Isando Foods / Environmental representative
Regulatory reporting, where required	Isando Foods

12. Review of the Stack Emission Monitoring Plan

The SEMP must be reviewed at least annually and whenever there is:

- a change to applicable legislation or AEL requirements;
- a significant modification to a boiler or emission-control system;
- an emission-limit exceedance;
- a significant or sustained increase in emissions;
- a change in the operating status of the boilers; or
- a requirement from the competent authority.

The SEMP must remain aligned with the facility's AEL, ERMP, EMPr and applicable atmospheric emission requirements.

13. Conclusion and Summary of Monitoring Commitments

The implementation of the Stack Emission Monitoring Plan will provide a structured and consistent mechanism for monitoring atmospheric emissions from Isando Foods Boilers 1-4 and the Geka Connus Boilers 1-2. Routine monitoring of particulate matter and sulphur dioxide, undertaken under representative operating conditions, will enable the facility to demonstrate compliance with applicable emission limits while also tracking longer-term emission trends and progress towards relevant emission-reduction targets. The Plan further provides for preventative maintenance of emission-control equipment, investigation of exceedances and increasing emission trends, and implementation of

appropriate corrective actions. When implemented together with the facility's ERMP, EMPr and applicable Atmospheric Emission Licence requirements, the SEMP will support the ongoing management and reduction of atmospheric emission impacts and promote continual improvement in the facility's overall air-quality performance.

Isando Foods must implement the following minimum commitments:

1. Annual stack emission monitoring of Isando Foods Boilers 1-4 and Geka Connus Boilers 1-2.
2. Monitoring of PM and SO_2 from each identified boiler stack.
3. Three approximately three-hour sampling runs per boiler monitoring campaign, subject to the applicable methodology and licence requirements.
4. Monitoring under normal and representative operating conditions.
5. Assessment of results against the applicable emission limits and relevant ERMP targets.
6. Maintenance and inspection of boiler emission-control equipment.
7. Investigation of all confirmed emission-limit exceedances.
8. Investigation of sustained increasing emission trends, even where legal limits have not been exceeded.
9. Maintenance of comprehensive monitoring, maintenance and corrective-action records.
10. Annual review and updating of the SEMP where required