
GENERAL NOTICE

NOTICE 541 OF 2015**NOTE: THESE REGULATIONS WILL REPLACE NATIONAL GAZETTE
NO. 38779 WHICH WAS PUBLISHED ON THE 11-MAY-2015****DEPARTMENT OF ENVIRONMENTAL AFFAIRS****NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004
(ACT NO. 39 OF 2004)****DRAFT NATIONAL GREENHOUSE GAS EMISSION REPORTING REGULATIONS**

I, Bomo Edna Edith Molewa, Minister of Environmental Affairs, hereby give notice of my intention to make the National Greenhouse Gas Emission Reporting Regulations, under sections 12(b) and (c) and 53(aA), (o) and (p) read with section 57 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), set out in the Schedule hereto.

Members of the public are invited to submit to the Minister, within 60 days of publication of the notice in the *Gazette*, written representations or objections to the draft regulations to the following addresses:

By post to: The Director-General
 Department of Environmental Affairs
 Attention: Mr Jongikhaya Witi
 Private Bag X447
 PRETORIA
 0001

By hand: Ground Floor (Reception), Environment House, 473 Steve Biko Road, Pretoria.

By email: jwiti@environment.gov.za or by fax: 086 586 7570.

Any inquiries in connection with the draft regulations can be directed to Mr Jongikhaya Witi at 012 399 9154 or Ms Lungile Manzini at 012 399 9196.

Comments received after the closing date may not be considered.



BOMO EDNA EDITH MOLEWA
MINISTER OF ENVIRONMENTAL AFFAIRS

SCHEDULE

DEFINITIONS

1. (1) In these Regulations any word or expression to which the meaning has been assigned in the Act has that meaning, unless the context indicates otherwise—

“**data provider**” means any person as classified in regulation 4 and shall include—

- (a) its holding company or corporation or legal entity, registered in South Africa in accordance with the Laws of South Africa;
- (b) all its subsidiaries and legally held operations, including joint ventures and partnerships where it has a controlling interest, or is nominated as the responsible entity for the purpose of reporting under these Regulations;
- (c) all facilities generally over which it has control, which are not part of another data provider as provided for in these Regulations;

“**activity data**” means the data on the amount of fuels or materials consumed or produced by a process as relevant for the calculation-based monitoring methodology, expressed in terajoules, mass in tonnes, or for gases as volume in normal cubic metres, as appropriate;

“**combustion emissions**” means greenhouse gas emissions occurring during the exothermic reaction of a fuel with oxygen;

“**competent authority**” means the National Inventory Unit based at the National Department of Environmental Affairs;

“**continuous emission measurement**” means a set of operations having the objective of determining the value of a quantity by means of periodic measurements, applying either measurements in the stack or extractive procedures with a measuring instrument located close to the stack, whilst excluding measurement methodologies based on the collection of individual samples from the stack;

“**emission factor**” means the average emission rate of a greenhouse gas relative to the activity data of a source stream assuming complete oxidation for combustion and complete conversion for all other chemical reactions;

“**emission source**” means a separately identifiable part of an installation or a process within an installation, from which relevant greenhouse gases are emitted or, for aviation activities, an individual aircraft;

“**facility**” means premises where activities identified in Annexure 1 are being undertaken;

“**fugitive emissions**” means irregular or unintended emissions from sources which are not localised, or too diverse or too small to be monitored individually;

“**greenhouse gas**” has the meaning assigned to it in the Act;

"IPCC" means the Intergovernmental Panel on Climate Change which is the international body for the assessment of climate change established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988;

"IPCC Guidelines for National Greenhouse Gas Inventories (2006)" means the guidelines developed by the IPCC for the establishment and maintenance of national greenhouse gas inventories and are available on the IPCC website (www.ipcc.ch); **"Megawatt"** means a unit of power equal to one million watts, especially as a measure of the output of a power station;

"National Atmospheric Emission Inventory System" or "NAEIS" means the internet-based emissions reporting system that is a component of the South African Air Quality Information System;

"National Inventory Unit" means the institutional structure within National Department of Environmental Affairs responsible for the compilation of the national greenhouse gas inventory in order to respond to the requirements of section 6.7 of the National Climate Change Response Policy;

"reporting period" means one calendar year;

"process emissions" means greenhouse gas emissions other than combustion emissions occurring as a result of intentional and unintentional reactions between substances or their transformation, including the chemical or electrolytic reduction of metal ores, the thermal decomposition of substances, and the formation of substances for use as product or feedstock

"South African Air Quality Information System" or "SAAQIS" means the national air quality information system established in terms of the National Framework for Air Quality Management in the Republic of South Africa;

"the Act" means the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004);

"Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry" means the reporting methodology approved by the competent authority available on the National Department of Environmental Affairs website (www.environment.gov.za);

"these Regulations" include the Annexure to these Regulations.

"tier" means a method used for determining greenhouse gas emissions as required by the "IPCC Guidelines for National Greenhouse Gas Inventories (2006)" and include—

- (a) Tier 1 method: Default IPCC emission factors available in the 2006 IPCC Guidelines are used to calculate emissions from activity data;
- (b) Tier 2 method: Country specific emission factors published in the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry are used to calculate emissions from activity data;
- (c) Tier 3 method: Emission models, material carbon balances and continuous emission measurements in the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry available on the DEA website (www.environment.gov.za) are used.

Purpose of Regulations

2. The purpose of these Regulations is to introduce a single national reporting system for the reporting of greenhouse gas emissions, which will be used—
 - (a) to inform policy formulation;
 - (b) for the Republic of South Africa to meet its obligations under the United Framework Convention on Climate Change and any other international treaties to which it is bound; and
 - (c) to establish and maintain a National Greenhouse Gas Inventory.

Application of Regulations

3. (1) These Regulations apply to the categories of emission sources listed in Annexure 1 and corresponding data providers as classified in regulation 4.
- (2) Where data required by the competent authority from data providers classified as category B in terms of these Regulations, is already collected by another organ of state, a research institution or an academic institution, the competent authority may collect such data from such organ of state, research institution or academic institution.

Classification of emission sources and data providers

4. (1) For purposes of these Regulations, data providers are classified as follows:
 - (a) Category A: any person conducting an activity listed in Annexure 1 to these Regulations; and
 - (b) Category B: any organ of state, research institution or academic institution, which holds GHG emission data arising from an activity listed in Annexure 2 to these Regulations.
- (2) Notwithstanding sub-regulation (1), the competent authority may identify additional emission sources and associated data providers and, in writing, request such data providers to register and to submit data for their emissions within a period to be specified by the competent authority.

Registration

5. (1) A person classified as a data provider in regulation 4(1)(a) must register on the NAEIS within 30 days after the commencement of these Regulations.
- (2) A person classified as a data provider in regulation 4(1)(a) who commences an activity classified as an emission source in terms of sub regulation 4(1)(a) after the commencement of these Regulations, must register on the NAEIS within 30 days after commencing such an activity.
- (3) A person identified as a data provider and required to register in terms of regulation 4(2), must register on the NAEIS within 30 days after commencing with such an activity.

Changes to registration details

6. (1) A data provider must notify, in writing, the competent authority of any change in respect of the data provider's registration details within 14 days from the date the data provider became aware of such change occurring.
- (2) If a data provider transfers ownership of a facility, or discontinues an activity, the data provider must notify the competent authority in writing within 14 days of such transfer of ownership or the activity being discontinued.
- (3) A person to whom ownership of the facility is transferred as contemplated in subregulation (2), the data provider must within 30 days after taking ownership of the facility, register on the NAEIS as a data provider.
- (4) Registration of a data provider on the NAEIS is deemed withdrawn once the competent authority has within 30 days acknowledged receipt of notification, in writing, provided by a data provider in terms of sub-regulation (2).

Reporting requirements

7. (1) Category A data provider must submit the total greenhouse gas emissions arising from each of the activities as set out in Annexure 1 to these Regulations for the preceding calendar year, to the NAEIS by 31 March of each year.
- (2) Where the 31 March falls on a Saturday, Sunday or public holiday, the submission deadline is the next working day.
- (3) A data provider required to submit emission data in terms of these Regulations must report the total of all its facility level emissions at company level.
- (4) A data provider required to submit greenhouse gas emissions in terms of these Regulations and listed in Annexure 3 must determine the emissions to be reported using tier 2 or tier 3 methods and in compliance with the requirements set out in the "Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry" available at the Department website.
- (5) A data provider required to submit greenhouse gas emissions in terms of these Regulations and not listed in Annexure 3 must determine the emissions to be reported using tier 1 or tier 2 or tier 3 methods and in compliance with the requirements set out in the "Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry" available at the Department website.
- (6) A data provider required to submit greenhouse gas emissions in terms of these Regulations must notify the competent authority which of the activity or activities listed in Annexure 1, that data provider undertakes, within 30 days after the commencement of these Regulations.
- (7) If the scope of the activity or activities notified in terms of subregulation (6) above change during the reporting period, the data provider must notify the competent authority of such change by 31 December of the year in which the change occurred.

- (8) A data provider that wishes to deviate from the requirements of the "Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry" must obtain approval from the competent authority for such deviation.
- (9) A Category B data provider must submit activity data arising from the activity or activities set out in Annexure 2 when requested by the competent authority.

Reporting boundaries

8. (1) A data provider must define the reporting boundaries for each installation based on operational control.
- (2) A data provider must provide all direct greenhouse gas emissions from all emission sources and source streams belonging to activities carried out at the installation and listed in Annex 1.
- (3) A data provider must include emissions from regular operations and abnormal events including start-up and shut-down and emergency situations over the reporting period, with the exception of emissions from mobile machinery for transportation purposes.

Completeness

9. (1) Monitoring and reporting must be complete and cover all process and combustion emissions from all emission sources and source streams belonging to activities listed in Annex 1 of these Regulations.
- (2) Reporting of combustion emission applies to individual combustion installation with energy capacity that is 10 megawatts or above.

Alternative emission factors

10. (1) Where a data provider referred to in these Regulations reasonably believes that any emission factor referred to the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emission in South Africa for a particular activity is not appropriate under the specific condition of emission, a data provider may make a submission to the competent authority requesting a review of the applicable emission factor.
- (2) A submission contemplated in sub-regulation (1) must be accompanied by the information set out in Annexure 4.

Record keeping

11. A data provider must keep a record of the information submitted to the NAEIS for five years and such record must, on request, be made available for inspection by the competent authority.

Verification of information

12. (1) If the competent authority reasonably believes that the information submitted to the NAEIS is incomplete or incorrect the competent authority, must instruct, in writing, a data provider to verify the information submitted.

- (2) A competent authority must, once every two years, conduct on-site verification of emission estimated using tier 2 and tier 3 methodologies by data providers listed in Annexure 3.
- (3) A data provider instructed to verify information in terms of subregulation (1) must verify the information within 30 days after receiving the written instruction from the competent authority.
- (4) If a competent authority reasonably believes the verified information submitted in terms of sub-regulation (1) to be incomplete or incorrect the competent authority must instruct such data provider, in writing, to submit supporting documentation prepared by an independent person with the competent expertise on the accuracy of the information that has been submitted to the NAEIS.
- (5) The supporting documentation requested must be submitted within 30 days after receipt of the instruction contemplated in sub-regulation (4).
- (6) A data provider is liable for all costs incurred in connection with compliance with an instruction from the competent authority in terms of sub-regulations (1) and (4).

Confidentiality of Information

13. (1) No person may disclose confidential information obtained in terms of these Regulations, unless—
- (a) the information is disclosed in compliance with the provisions of any law;
 - (b) the person is ordered to disclose the information by a court of law;
 - (c) the information is disclosed to enable a person to perform a function in terms of these Regulations.

Publishing data and information

14. (1) The competent authority may only place NAEIS data and information in the public domain if it does not—
- (a) it does not promote unfair competition in terms of the Competition legislation;
 - (b) it does not contravene section 36 of the Promotion of Access to Information Act, 2000 (Act No. 2 of 2000); and
 - (c) it does not contravene section 17 of the Statistics Act, 1999 (Act No. 6 of 1999).

Transitional arrangements

15. A competent authority may, for a transitional period of up to four years from the date of commencement of these Regulations, allow a data provider who operates any activity with emission source categories listed in terms of Annexure 3 to these Regulations to apply lower tiers than those referred to in regulation 7(4), with a minimum tier 1 method.

Offences

16. (1) A person commits an offence if that person—
- (a) provides false or misleading information to the NAEIS; or
 - (b) fails to comply with regulations 5, 6(1), 6(3), 7, 9, 11, 12 or 13.

Penalties

17. (1) A person convicted of an offence in terms of regulation 16 is liable in the case of a first conviction to a fine not exceeding R5 million or to imprisonment of a period not exceeding five years and in the case of a second or subsequent conviction to a fine not exceeding R10 million or imprisonment for a period not exceeding 10 years and in respect of both instances to both such fine and such imprisonment.

Short title and commencement

18. (1) These Regulations are called the National Greenhouse Gas Emission Reporting Regulations, 2015.

ANNEXURE 1**LIST OF ACTIVITIES FOR WHICH GHG EMISSIONS MUST BE REPORTED TO THE COMPETENT AUTHORITY****1. ENERGY****1A Fuel combustion activities****1A1 Energy Industries****1A1a Electricity and Heat Production****1A1a i Electricity Generation****1A1a ii Combined heat and Power Generation (CHP)****1A1a iii Heat Plants****1A1b Petroleum Refining****1A1c Manufacture of Solid Fuels and other Energy Industries****1a1ci Manufacture of Solid Fuels****1a1cii Other Energy Industries****1A2 Manufacturing Industries and Construction****1A2a Iron and Steel****1A2b Non-Ferrous Metals****1A2c Chemicals****1A2d Pulp, Paper and Print****1A2e Food Processing, Beverages and Tobacco****1A2f Non-Metallic Minerals****1A2g Transport Equipment****1A2h Machinery****1A2i Mining (excluding fuels) and Quarrying****1A2j Wood and wood products****1A2k Construction****1a2l Textile and Leather**

1A2m Non-specified Industry**1B FUGITIVE EMISSIONS FROM FUELS****1B1 Solid fuels****1B1a Coal mining and handling****1B1ai Underground Mines****1B1ai1 Mining****1B1ai2 Post-mining seam gas emissions****1B1ai3 Abandoned underground mines****1B1ai4 Flaring of drained methane or conversion of methane to CO₂****1B1ai1 Surface mines****1B1ai1 Mining****1B1ai2 Post-mining seam gas emissions****1B1b Spontaneous combustion and burning coal dumps****1B2 Oil and natural Gas****1B2a Oil****1B2aii Venting****1B2ai Flaring****1B2aiii All other****1B2aiii2 Production and Upgrading****1B2aiii3 Transport****1B2aiii4 Refining****1B2aiii5 Distribution of oil products****1B2aiii6 Other****1B2a Exploration****1B2b Natural Gas****1B2bi Venting**

1B2bii Flaring

1B2biii All Other

1B2biii1 Exploration

1B2biii2 Production

1B2biii3 Processing

1B2biii4 Transmission and Storage

1B2biii5 Distribution

1B2biii6 Other

1B3 Other Emissions from Energy Production

2. INDUSTRIAL PROCESSES AND PRODUCT USE

2A Mineral Production

2A1: Cement Production

2A2: Lime Production

2A3: Glass Production

2A4: Other process use of carbonates

2A4a: Ceramics

2A4b: Uses of soda ash not listed above

2A4c: Non metallurgical Magnesia production

2A4d: Other

2B Chemical Production

2B1: Ammonia Production

2B2: Nitric Acid Production

2B5: Carbide Production

2B6: Titanium Dioxide Production

2B8f Carbon Black Production

2B8g Hydrogen Production

2C Metal Industry

2C1: Iron and Steel Production

2C2: Ferro Alloys Production

2C3: Aluminium Production

2C5: Lead Production

2C6: Zinc Production

2D Non energy products form fuels and solvents use

2D1: Lubricant use

2D2: Paraffin wax use

2D3: Solvent use

2D4: Other

2E Electronics industry

2E1: Integrated circuit or semi-conductor

2E2: TFT flat panel display

2E3: Photovoltaics

2E4: Heat transfer fluid

2E5: Other

2F Product uses as substitutes of ozone depleting substances

2F1: Refrigeration and air conditioning

2F1a: Refrigeration and stationary air conditioning

2F1b: Mobile air conditioning

2F2: Foam blowing agents

2F3: Fire protection

2F4: Aerosols

2F5: Use of fluorinated gases as solvent

2F6: Other applications

2G Other product manufacture and use

3. AGRICULTURE, FORESTRY AND OTHER LAND USE

4. WASTE SECTOR

4A Solid Waste Disposal

4A1 Managed waste disposal sites

4A2 Unmanaged waste disposal sites

4A3 Uncategorised waste disposal sites

4B Biological treatment of solid waste

4C Incineration and open burning of waste

4D Waste Water Treatment and Discharge

4D1 Domestic wastewater treatment and discharge

4D2 Industrial wastewater treatment and discharge

ANNEXURE 2**ACTIVITIES FOR WHICH ACTIVITY DATA TO ESTIMATE GHG EMISSIONS MAY BE REQUESTED
IN TERMS OF REGULATION 7(9)**

The activities listed below are defined as set out in the IPCC Guidelines for National Greenhouse Gas Inventories (2006). Copies of these guidelines are available on the IPPCC website www.ipcc.ch.

2. ENERGY**1A Fuel combustion activities****1A1 Energy Industries****1A1a Electricity and Heat Production****1A1a i Electricity Generation****1A1a ii Combined heat and Power Generation (CHP)****1A1a iii Heat Plants****1A1b Petroleum Refining****1A1c Manufacture of Solid Fuels and other Energy Industries****1a1ci Manufacture of Solid Fuels****1a1cii Other Energy Industries****1A2 Manufacturing Industries and Construction****1A2a Iron and Steel****1A2b Non-Ferrous Metals****1A2c Chemicals****1A2d Pulp, Paper and Print****1A2e Food Processing, Beverages and Tobacco****1A2f Non-Metallic Minerals****1A2g Transport Equipment****1A2h Machinery****1A2i Mining (excluding fuels) and Quarrying****1A2j Wood and wood products****1A2k Construction**

1a2l Textile and Leather

1A2m Non-specified Industry

1A3 Transport

1A3a Civil Aviation

1A3ai International Aviation (International Bunkers)

1A3aii Domestic Aviation

1A3b Road Transportation

1A3bi Cars

1A3bii Passenger cars with 3-way catalysts

1A3bi2 Passenger cars without 3-way catalysts

1A3biii Light duty truck with 3-way catalyst

1A3b ii Light-duty trucks

1A3b1 Light-duty trucks with catalysts

1A3b2 Light-duty trucks without catalysts

1A3biii Heavy-duty trucks and buses

1A3biv Motorcycles

1A3b v Evaporative emissions from vehicles

1A3bvi Urea-based catalysts

1A3c Railways

1A3d Water-Borne Navigation

1A3di International water-borne navigation (International bunkers)

1A3dii Domestic Water-Borne Navigation

1A3e Other Transportation

1A3ei Pipeline Transport

1A3eii Off-road

1A4 Other Sectors

1A4a Commercial/institutional

- 1A4b Residential
- 1A4c Agriculture/forestry/fishing/fish farms
 - 1Aci Stationary
 - 1A4cii Off-road Vehicles and Other Machinery
 - 1A4ciii Fishing (mobile combustion)
- 1A5 Non-Specified**
 - 1A5a Stationary
 - 1A5b Mobile
 - 1A5bi Mobile (aviation component)
 - 1A5bii Mobile (waterborne component)
 - 1A5biii Mobile (other)
 - 1A5c Multilateral Operations

3. AGRICULTURAL FORESTRY AND OTHER LAND USE

4. WASTE SECTOR

4A Solid Waste Disposal

- 4A1 Managed waste disposal sites
- 4A2 Unmanaged waste disposal sites
- 4A3 Uncategorised waste disposal sites

4B Biological treatment of solid waste

4C Incineration and open burning of waste

4D Waste Water Treatment and Discharge

- 4D1 Domestic wastewater treatment and discharge
- 4D2 Industrial wastewater treatment and discharge

ANNEXURE 3

LIST OF SECTORS AND SUB-SECTORS FOR WHICH REGULATION 7(4) APPLIES

Key sector	Sector	Source - Category
Energy	Power	Electricity and heat production

Key sector	Sector	Source - Category
Industry	Non-Power	Petroleum refining
		Other energy industries and Synfuels
		Coal mining and handling
		Oil and natural gas
		Iron and steel production
	Metals	Ferroalloy production
		Primary aluminium production
	Chemicals	Chemicals production (nitric acid, carbon black, ammonia production)
	Other	Pulp and paper production (including source/sequestration from plantations)
		Sugar processing and refining
		Glass production
		Cement production
		Lime production
Minerals		
Mining	Mining and quarrying	
Aviation	Civil aviation	
Transport	Rail	Railway
	Domestic water-borne navigation	Domestic water-borne navigation

ANNEXURE 4:**INFORMATION TO ACCOMPANY SUBMISSION IN TERMS OF REGULATION 10(2)**

REQUEST FOR REVIEW OF EMISSION FACTOR	
Administrative information	
Data Provider	
Data Provider Country:	
Data Provider Contact	
Date Calculated	
Date submitted to competent authority by Data provider	

Technical information	
Greenhouse gas	
Relevant IPCC Source-Category in terms of 2006 IPCC or later Guidelines	
Type of Parameter	
Measurement technique/standard	
Periodicity of measurement	
External quality control performed and verification report	
Date of measurement	
Comments from Data provider	
Comments from others (e.g. independent verifier)	