

## GENERAL NOTICES • ALGEMENE KENNISGEWINGS

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### DEPARTMENT OF ENVIRONMENTAL AFFAIRS

#### NOTICE 275 OF 2017

#### NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

#### NATIONAL GREENHOUSE GAS EMISSION REPORTING REGULATIONS

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



**BOMO EDITH EDNA 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—

**“activity data”** means data on the magnitude of a human activity resulting in emissions or removals taking place during a given period of time. Data on energy use, metal production, land areas, management systems, lime and fertilizer use and waste arising are examples of activity data;

**“boiler”** means a combustion appliance designed to heat water. In terms of these regulations, a boiler is referred to as a stationary combustion device;

**“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;

**“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 legislation of the Republic 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 operational control, which are not part of another data provider as provided for in these Regulations;

**“default IPCC emission factors”** are emission factors provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and its associated supplementary information; these emission factors assume a linear relation between the intensity of the process and the resulting emissions and an average or typical process description;

**“design capacity”** means capacity as installed;

**“direct emission measurement”** means a set of operations having the objective of determining the value of a quantity by means of periodic or continuous measurement, applying either measurements in the stack or extractive procedures with a measuring instrument located close to the stack;

**“emissions”** are the release of greenhouse gases/and/or their precursors into the atmosphere over a specified area and period of time;

**“emission factor”** means a coefficient that quantifies the emissions or removals of a gas per unit of activity. Emission factors are often based on a sample of measurement data, averaged to develop a representative rate of emission for a given activity level under a given set of operating conditions;

**“IPCC emission source”** means any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere which is identified by IPCC code in Annexure 1;

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

**“fugitive emissions”** means emissions that are not emitted through an intentional release through stack or vent. This can include leaks from industrial plant and pipelines;

**“greenhouse gas”** means any one of the following gases:

Carbon dioxide (CO<sub>2</sub>) , Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O) Sulphur hexafluoride (SF<sub>6</sub>), Perfluorocarbons (PFCs), Hydrofluorocarbons (HFCs);

**“Global Warming Potential (GWP)”** means a metric that compares the radiative forcing of a tonne of a greenhouse gas over a given period (e.g., 100 years for the purpose of annual greenhouse gas inventory) to a tonne of Carbon Dioxide. By using GWPs, greenhouse gas emissions can be standardised to a carbon dioxide equivalent (CO<sub>2</sub>-eq);

**“installation”** means a device, operation or process that provides a particular service or is used for a particular industry. An installation generally performs one or more of the activities listed in annexure 1 and is housed within a facility;

**“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](http://www.ipcc.ch));

**“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;

**“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;

**“Operational control”** means a data provider has operational control or another company if it, or one of its subsidiaries, has the full authority to introduce and implement its operating policies at the company;

**“process emissions”** means greenhouse gas emissions other than combustion emissions occurring:

- (a) during use of specific substances;
- (b) 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;
- (c) the formation of substances for use as product or feedstock;

**“reporting period”** means one calendar year;

**“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;

**“Technical Guidelines for Monitoring, Reporting, Verification and Validation 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/legislation/guidelines](http://www.environment.gov.za/legislation/guidelines));

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

**“these Regulations”** include the Annexures to these Regulations;

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

- (a) Tier 1 method: A method using readily available statistical data on the intensity of processes (activity data) and IPCC emission factors (specified in the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry or available in from 2006 IPCC);
- (b) Tier 2 method: similar to Tier 1 but uses country-specific emission factors;
- (c) Tier 3 method: Tier 3 is any methodology more detailed than Tier 2 and might include amongst others, process models and direct measurements as specified in the 2006 IPCC guidelines;

“**transparency**” means that the assumptions and methodologies used as a basis for reporting activity data and greenhouse gas emissions should be clearly explained to facilitate replication and assessment of the submitted information by users of the reported information;

“**upset conditions**” means any temporary failure or air pollution control equipment or process equipment or failure of a process to operate in a normal or usual manner that leads to abrupt increases or decreases in greenhouse gas emission rates;

“**validation**” means the establishment of sound approach and foundation. In the context of emissions inventories, validation involves checking to ensure that reported greenhouse gas emissions data have been compiled correctly in line with reporting instructions and guidelines. It checks the internal consistency of the inventory;

“**verification**” refers to the collection of activities and procedures that can be followed during the planning and development, or after completion of reported greenhouse gas emissions data that can help to establish its reliability for the intended applications of that inventory.

## PURPOSE OF REGULATIONS

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

## APPLICATION OF REGULATIONS

3. These Regulations apply to the categories of emission sources listed in Annexure 1 to these Regulations and a corresponding data provider as classified in regulation 4 of these Regulations.

## CLASSIFICATION OF EMISSION SOURCES AND DATA PROVIDERS

4. (1) For purposes of these Regulations, a data provider is classified as follows:
  - (a) **Category A:** any person in control of or conducting an activity marked in the Category A column above the capacity given in the threshold column of the table in Annexure 1 to these Regulations; and
  - (b) **Category B:** any organ of state, research institution or academic institution, which holds greenhouse gas emission data or activity data relevant for calculating greenhouse gas emissions relating to a category identified in table in Annexure 1 to these Regulations.
- (2) Notwithstanding sub-regulation (1)(a), the Minister may identify additional greenhouse gases, sources and associated data providers by following the consultative process set out in sections 56 and 57 of the Act and, in writing, require such data providers to register and to submit data for their emissions within a specified period to the competent authority.

## REGISTRATION

5. (1) A person classified as a Category A data provider in terms of regulation 4(1)(a) of these Regulations must register all facilities where activities exceed the thresholds listed in Annexure 1 by providing the relevant information as listed in Annexure 2 to these Regulations, within 30 days after the commencement of these Regulations or within 30 days after commencing such an activity after the commencement of these Regulations.
- (2) A data provider must ensure that the registration details are complete and are an accurate reflection of the IPCC emission sources at each facility.
- (3) The registration contemplated in sub-regulation (1) must be done as follows:
  - (a) on the NAEIS;
  - (b) in cases where the NAEIS is unable to meet the registration requirements, the registration must be done by submitting the information specified in Annexure 2 in an electronic format to the competent authority.

## 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 as listed in Annexure 2 to these Regulations within 30 days from the date the data provider became aware of such change occurring.
- (2) If a data provider transfers ownership and operational control of a facility, or discontinues an activity, the data provider must notify the competent authority in writing within 30 days of such transfer of ownership or operational control or the activity being changed or discontinued.
- (3) A person to whom ownership or operational control of a facility is transferred as contemplated in sub-regulation (2) must, within 30 days after taking ownership or operational control of the facility, register as a data provider in terms of regulation 5 of these Regulations.
- (4) Registration of a data provider in terms of regulation 5 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) A Category A data provider must submit the greenhouse gas emissions and activity data as set out in the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry for each of the relevant greenhouse gases and IPCC emission sources specified in Annexure 1 to these Regulations for all of its facilities and in accordance with the data and format requirements specified in Annexure 3 to these Regulations for the preceding calendar year, to the competent authority 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 Category B data provider must submit emissions and activity data collected that is related to the relevant activity or activities set out in Annexure 1 to these Regulations and in accordance

with the format and data requirements as specified in Annexure 3 to these Regulations when requested by the competent authority.

- (4) The reporting contemplated in sub-regulations (1), (2) and (3) must be done as follows:
  - (a) on the NAEIS;
  - (b) in cases where the NAEIS is unable to meet the reporting requirements, the reporting must be done by submitting the information specified in Annexure 3 in an electronic format to the competent authority.

## REPORTING BOUNDARIES

8. (1) A Category A data provider must define its reporting boundaries based on operational control.
- (2) A Category A data provider must include greenhouse gas emissions from normal operating conditions and upset conditions including start-up and shut-down and emergency situations over the reporting period.

## COMPLETENESS

9. A Category A data provider monitoring and reporting must be complete and cover all process, fugitive and combustion emissions from all greenhouse gas emission sources and source streams belonging to activities listed in Annexure 1 of these Regulations, taking into account the capacity thresholds specific to the different activities as listed in Annexure 1 to these Regulations.

## METHODS

10. (1) A Category A data provider must determine the emissions to be reported as contemplated in regulation 7 of these Regulations according to the tiers specified for the relevant categories in Annexure 1 to these Regulations using the methods set out in the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry.
- (2) Where a data provider reasonably believes that any emission factor referred to in the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry for a particular activity is not appropriate under the specific conditions of greenhouse gas emission, such a data provider may make a submission to the competent authority, by providing the information set out in Annexure 4 to these Regulations, requesting a review of the applicable emission factor.
- (3) The competent authority must review a submission contemplated in sub-regulation (2) within 60 days after the submission date, and if the submission is —
  - (a) approved by the competent authority, the accepted method will be included in the Technical guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry;

- (b) not approved, the data provider must submit the emission and related data, using a method from the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry, compliant with sub-regulation (1).

## VERIFICATION AND VALIDATION OF INFORMATION

11. (1) The competent authority must assess, in accordance with the assessment procedures in the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry, the data submitted by a Category A data provider within 60 days after the submission date.
- (2) The assessment contemplated in sub-regulation (1) may include a comparison with methods defined in the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry, with earlier submissions, with submissions from similar facilities and with other independent data.
  - (2) A data provider's submission contemplated in regulation 7 of these Regulations is deemed accepted if the competent authority does not respond to the data provider with questions for clarification or corrections within 60 days from the date of the data provider's submission.
  - (3) If, after the assessment in terms of sub-regulation (1), the competent authority reasonably believes that the information submitted in terms of these regulations may not be transparent, complete, or correct, the competent authority may instruct, in writing, a data provider to verify and validate the information submitted, and to provide the supporting information required to substantiate the submission within 60 days after receiving the written instruction from the competent authority.
  - (4) Where a Category A data provider provides insufficient information for the purposes of validation and verification, in terms of sub-regulation (3), the competent authority may undertake one or any combination of the following:
    - a) Conduct on-site facility or installation specific verification and validation of emissions estimated using the methods as set out in Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry by Category A data providers at its discretion;
    - b) Require verification by an independent assessor.
  - (5) A data provider is liable for all costs incurred in connection with compliance with sub-regulations (3) and (4)(b).

## CONFIDENTIALITY OF INFORMATION

12. (1) The competent authority may disclose confidential information obtained in terms of these Regulations if:
- (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; or
  - (c) the information is disclosed for the purposes of the administration of justice.
- (2) The competent authority must destroy all confidential information by any data provider, not later than five years after the information was provided to the competent authority.

### **RECORD KEEPING**

13. (1) A data provider must ensure transparency of the submission by archiving all data, measuring reports, algorithms, procedures and technical references used to estimate greenhouse gas emissions.
- (2) A data provider must keep a record of the information submitted to the competent authority in terms of these Regulations and all information mentioned in sub-regulation (1) for at least five years and such record must, on request, be made available for inspection by the competent authority.

### **PUBLISHING DATA AND INFORMATION**

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

### **TRANSITIONAL ARRANGEMENTS**

15. A data provider may for a transitional period of up to five years from the date of commencement of these Regulations apply lower tiers than those referred to in Annexure 1 to these Regulations, with tier 1 method being the minimum.

### **OFFENCES**

16. A person commits an offence if that person—
- (a) provides false or misleading information to the competent authority; or
  - (b) fails to comply with regulations 5(1), 5(2), 6(1), 6(3), 7(1), 7(3), 9, or 13.

### **PENALTIES**

17. A person convicted of an offence in terms of regulation 16 of these Regulations is liable in the case of a first conviction to a fine not exceeding R5 million or to imprisonment for 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. These Regulations are called the National Greenhouse Gas Emissions Reporting Regulations, 2016, and come into operation on the date of publication in the *Gazette*.

## ANNEXURE 1

## LIST OF ACTIVITIES FOR WHICH GHG EMISSIONS MUST BE REPORTED TO THE COMPETENT AUTHORITY

The table below lists all activities, as defined in the IPCC 2006 Guidelines' source categories, where data providers must report greenhouse gas emissions and related data if such activity takes place on the data provider's premises. Copies of the IPCC guidelines are available on the IPCC website [www.ipcc.ch](http://www.ipcc.ch).

Category A data providers shall report the relevant greenhouse gases and associated activity data for all IPCC source categories where their capacity is equal or above the threshold indicated, using the methods indicated in column 3 of the table below. Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry stipulates the greenhouse gases relevant for each IPCC code. Category B data providers shall provide data upon request where indicated, using any method provided in the Technical Guidelines.

Where no method is provided and reporting threshold is reflected as Not Applicable (NA) reporting is not required.

Code	Name	shall report when their total installed capacity for this activity is over the threshold	Category A	
			Threshold	Transitional Arrangement Applicability (Regulation 15)
1	ENERGY			
1A	Fuel Combustion Activities			
1A1	Energy Industries			
1A1a	Main Activity Electricity and Heat Production	Tier 2 or 3	110 MW(th)	<sup>2</sup> YES
1A1b	Petroleum Refining	Tier 2 or 3	10 MW(th)	YES
1A1c	Manufacture of Solid Fuels and Other Energy Industries	Tier 2 or 3	10 MW(th)	YES
1A2	Manufacturing Industries and Construction			
1A2a	Iron and Steel	Tier 2 or 3	10 MW(th)	YES
1A2b	Non-Ferrous Metals	Tier 2 or 3	10 MW(th)	YES
1A2c	Chemicals	Tier 2 or 3	10 MW(th)	YES
1A2d	Pulp, Paper and Print	Tier 2 or 3	10 MW(th)	YES
1A2e	Food Processing, Beverages and Tobacco	Tier 2 or 3	10 MW(th)	NO
1A2f	Non-Metallic Minerals	Tier 2 or 3	10 MW(th)	YES
1A2g	Transport Equipment	Tier 2 or 3	10 MW(th)	NO
1A2h	Machinery	Tier 2 or 3	10 MW(th)	NO
1A2i	Mining and Quarrying	Tier 2 or 3	10 MW(th)	YES
1A2j	Wood and Wood Products	Tier 2 or 3	10 MW(th)	NO
1A2k	Construction	Tier 2 or 3	10 MW(th)	NO
1A2l	Textile and Leather	Tier 2 or 3	10 MW(th)	NO
1A2m	Brick manufacturing:	Tier 2 or 3	4 million bricks a month	NO
1A3	Transport			

<sup>1</sup> This threshold refers to a combined boiler design capacity equal to or above 10 MW(th) net heat input. For example, the combined boiler design capacity for six (6) 2MW(th) boilers is equal to 12 MW (th) which is above the reporting threshold of 10MW (th). Therefore, the data provider has to report greenhouse gas emissions associated with stationary combustion in this case.

<sup>2</sup> A YES implies that a data provider has to apply a tier 2 or tier 3 methodology for the relevant IPCC source code after 5 years from the date of promulgation of these regulations

Code	Name	shall report when their total installed capacity for this activity is over the threshold	Category A	
			Threshold	Transitional Arrangement Applicability (Regulation 15)
1A3a	Civil Aviation	Tier 2 or 3	100 000 litres/year	Yes
1A3b	Road Transportation	NA	NA	NO
1A3c	Railways	Tier 2 or 3	100 000 litres/year	Yes
1A3d	Water-borne Navigation	Tier 2 or 3	100 000 litres/year	Yes
1A3e	Other Transportation	NA	NA	NA
1A4	Other Sectors			
1A4a	Commercial/Institutional	Tier 2 or 3	10 MW(th)	Yes
1A4b	Residential	Tier 2 or 3	10 MW(th)	Yes
1A4c	Agriculture/Forestry/Fishing/Fish Farms	Tier 2 or 3	10 MW(th)	Yes
1A5	Non-Specified			
1A5a	Stationary	Tier 2 or 3	10 MW(th)	YES
1A5b	Mobile	NA	NA	NA
1A5c	Multilateral Operations	NA	NA	NA
1B	Fugitive Emissions from Fuels			
1B1	Solid Fuels			
1B1a	Coal Mining and Handling	Tier 2 or 3	<sup>3</sup> none	YES
1B1b	Uncontrolled Combustion, and Burning Coal Dumps	NA	NA	NA
1B1c	Solid Fuel Transformation	Tier 2 or 3	none	YES
1B2	Oil and Natural Gas			
1B2a	Oil	Tier 2 or 3	none	YES
1B2b	Natural Gas	Tier 2 or 3	none	YES
1B3	Other Emissions from Energy Production	Tier 2 or 3	none	YES
1C	Carbon Dioxide Transport and Storage			
1C1	Transport of CO2	Tier 1, 2 or 3	none	NO
1C1a	Pipelines	NA	10 000 tons CO2/year	NO
1C1b	Ships	Tier 1, 2 or 3	10 000 tons CO2/year	NO
1C1c	Other (please specify)	Tier 1, 2 or 3	10 000 tons CO2/year	NO
1C2	Injection and Storage			
1C2a	Injection	Tier 1, 2 or 3	10 000 tons CO2/year	NO
1C2b	Storage	Tier 1, 2 or 3	10 000 tons CO2/year	NO
1C3	Other	NA	NA	NA
2	INDUSTRIAL PROCESSES AND PRODUCT USE			
2A	Mineral Industry			
2A1	Cement Production	Tier 2 or 3	none	YES
2A2	Lime Production	Tier 2 or 3	none	YES
2A3	Glass Production	Tier 2 or 3	none	YES
2A4	Other Process Uses of Carbonates	Tier 1, 2 or 3	none	NO
2A4a	Ceramics	NA	NA	NA
2A4b	Other Uses of Soda Ash	NA	NA	NA
2A4c	Non Metallurgical Magnesia Production	Tier 1,2 or 3	none	YES

<sup>3</sup> If the threshold for a specific IPCC source category in this table is reflected as none, it means that the data provider has to report activity data and greenhouse gas emissions irrespective of the size of greenhouse gas emissions and the scale of the operation of the activity.

Code	Name	shall report when their total installed capacity for this activity is over the threshold	Category A	
			Threshold	Transitional Arrangement Applicability (Regulation 15)
2A4d	Other (please specify)			
2A5	Other (please specify)	NA	NA	NA
2B	Chemical Industry			
2B1	Ammonia Production	Tier 2 or 3	none	YES
2B2	Nitric Acid Production	Tier 2 or 3	none	YES
2B3	Adipic Acid Production	Tier 2 or 3	none	YES
2B4	Caprolactam, Glyoxal and Glyoxylic Acid Production	Tier 2 or 3	none	YES
2B5	Carbide Production	Tier 2 or 3	none	YES
2B6	Titanium Dioxide Production	Tier 2 or 3	none	YES
2B7	Soda Ash Production	Tier 2 or 3	none	YES
2B8	Petrochemical and Carbon Black Production	Tier 2 or 3	none	YES
2B8a	Methanol	Tier 2 or 3	none	YES
2B8b	Ethylene	Tier 2 or 3	none	YES
2B8c	Ethylene Dichloride and Vinyl Chloride Monomer	Tier 2 or 3	none	YES
2B8d	Ethylene Oxide	Tier 2 or 3	none	YES
2B8e	Acrylonitrile	Tier 2 or 3	none	YES
2B8f	Carbon Black	Tier 2 or 3	none	YES
2B9	Fluorochemical Production			
2B9a	By-product Emissions	Tier 1,2 or 3	none	NO
2B9b	Fugitive Emissions	Tier 1,2 or 3	none	NO
2B10	Other (Please specify)	NA	NA	NO
2C	Metal Industry			
2C1	Iron and Steel Production	Tier 2 or 3	none	YES
2C2	Ferroalloys Production	Tier 2 or 3	none	YES
2C3	Aluminium Production	Tier 2 or 3	none	YES
2C4	Magnesium Production	Tier 2 or 3	none	YES
2C5	Lead Production	Tier 2 or 3	none	YES
2C6	Zinc Production	Tier 2 or 3	none	YES
2C7	Other (please specify)	NA	NA	NO
2D	Non-Energy Products from Fuels and Solvent Use			
2D1	Lubricant Use	NA	NA	NO
2D2	Paraffin Wax Use	NA	NA	NO
2D3	Solvent Use	NA	NA	NO
2D4	Other (please specify)	NA	NA	NO
2E	Electronics Industry			
2E1	Integrated Circuit or Semiconductor	NA	NA	NA
2E2	TFT Flat Panel Display	NA	NA	NA
2E3	Photovoltaics	NA	NA	NA
2E4	Heat Transfer Fluid	NA	NA	NA
2E5	Other (please specify)	NA	NA	NA
2F	Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA
2F1	Refrigeration and Air Conditioning	NA	NA	NA
2F1a	Refrigeration and Stationary Air Conditioning			
2F1b	Mobile Air Conditioning	NA	NA	NA
2F2	Foam Blowing Agents	NA	NA	NA
2F3	Fire Protection	NA	NA	NA
2F4	Aerosols	NA	NA	NA
2F5	Solvents	NA	NA	NA
2F6	Other Applications (please specify)	NA	NA	NA
2G	OTHER PRODUCT MANUFACTURE AND USE			
2G1	Electrical Equipment	NA	NA	NA
2G1a	Manufacture of Electrical Equipment			
2G1b	Use of Electrical Equipment	NA	NA	NA

Code	Name	shall report when their total installed capacity for this activity is over the threshold	Category A Threshold	Transitional Arrangement Applicability (Regulation 15)
2G1c	Disposal of Electrical Equipment			
2G2	SF6 and PFCs from Other Product Uses	NA	NA	NA
2G2a	Military Applications	NA	NA	NA
2G2b	Accelerators	NA	NA	NA
2G2c	Other (please specify)	NA	NA	NA
2G3	N2O from Product Uses	NA	NA	NA
2G3a	Medical Applications	NA	NA	NA
2G3b	Propellant for Pressure and Aerosol Products	NA	NA	NA
2G3c	Other (Please specify)	NA	NA	NA
2G4	Other (Please specify)	NA	NA	NA
2H	Other			
2H1	Pulp and Paper Industry	NA	NA	NA
2H2	Food and Beverages Industry	NA	NA	NA
2H3	Other (please specify)	NA	NA	NA
3	AGRICULTURE, FORESTRY, AND OTHER LAND USE			
3A	Livestock			
3A1	Enteric Fermentation			
3A1a	Cattle	NA	NA	NA
3A1b	Buffalo	NA	NA	NA
3A1c	Sheep	NA	NA	NA
3A1d	Goats	NA	NA	NA
3A1e	Camels	NA	NA	NA
3A1f	Horses	NA	NA	NA
3A1g	Mules and Asses	NA	NA	NA
3A1h	Swine	NA	NA	NA
3A1j	Other (please specify)	NA	NA	NA
3A2	Manure Management			NA
3A2a	Cattle	NA	NA	NA
3A2b	Buffalo	NA	NA	NA
3A2c	Sheep	NA	NA	NA
3A2d	Goats	NA	NA	NA
3A2e	Camels	NA	NA	NA
3A2f	Horses	NA	NA	NA
3A2g	Mules and Asses	NA	NA	NA
3A2h	Swine	NA	NA	NA
3A2i	Poultry	NA	NA	NA
3A2j	Other (please specify)	NA	NA	NA
3B	Land			
3B1	Forest Land			
3B1a	Land Forest land Remaining Forest	Tier 2 or 3	100 Hectares of Plantations or Natural forests	YES
3B1b	Land Converted to Forest Land	Tier 2 or 3	100 Hectares of Plantations or Natural forests	YES
3B2	Cropland			
3B2a	Cropland Remaining Cropland	NA	NA	NA
3B2b	Land Converted to Cropland	NA	NA	NA
3B3	Grassland			
3B3a	Grassland Remaining Grassland	NA	NA	NA
3B3b	Land Converted to Grassland	NA	NA	NA
3B4	Wetlands			
3B4a	Wetlands Remaining Wetlands	NA	NA	NA
3B4b	Land Converted to Wetlands	NA	NA	NA
3B5	Settlements			
3B5a	Settlements Remaining Settlements	NA	NA	NA
3B5b	Land Converted to Settlements	NA	NA	NA

Code	Name	shall report when their total installed capacity for this activity is over the threshold	Category A	
			Threshold	Transitional Arrangement Applicability (Regulation 15)
3B6	Other Land			NA
3B6a	Other Land Remaining Other Land	NA	NA	NA
3B6b	Land Converted to Other Land	NA	NA	NA
3C	Aggregate Sources and Non-CO2 Emissions Sources on Land			
3C1	Emissions from Biomass Burning			
3C1a	Biomass Burning in Forest Lands	NA	NA	NA
3C1b	Biomass Burning in Croplands	NA	NA	NA
3C1c	Biomass Burning in Grasslands	NA	NA	NA
3C1d	Biomass Burning in All Other Land	NA	NA	NA
3C2	Liming	NA	NA	NA
3C3	Urea Application	NA	NA	NA
3C4	Direct N2O Emissions from Managed Soils	NA	NA	NA
3C5	Indirect N2O Emissions from Managed Soils	NA	NA	NA
3C6	Indirect N2O Emissions from Manure Management	NA	NA	NA
3C7	Rice Cultivations	NA	NA	NA
3C8	Other (please specify)	NA	NA	NA
3D	Other			NA
3D1	Harvested Wood Products	NA	NA	NA
3D2	Other (please specify)	NA	NA	NA
4	WASTE			
4A	Solid Waste Disposal			
4A1	Managed Waste Disposal Sites	Tier 1 or 2	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	NO
4A2	Unmanaged Waste Disposal Sites	Tier 1 or 2	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	NO
4A3	Uncategorised Waste Disposal Sites	Tier 1 or 2	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	NO
4B	Biological Treatment of Solid Waste	NA	NA	NA
4C	Incineration and Open Burning of Waste			
4C1	Waste Incineration	Tier 1 or 2	1 tonnes per hour	NO
4C0	Waste – Pyrolysis	Tier 2 or 3	100 kg/hour	Yes
4C2	Open Burning of Waste	NA	NA	NO
4D	Wastewater Treatment and Discharge			
4D1	Domestic Wastewater Treatment and Discharge	Tier 1	2 Million litres/day	NO
4D2	Industrial Wastewater Treatment and Discharge	Tier 1	1000 cubic metres per day	NO
4E	Other (please specify)	NA	NA	NA
5	Other			
5A	Indirect N2O Emissions from the Atmospheric Deposition of Nitrogen in NOx and NH3	NA	NA	NA
5B	Other (please specify)	NA	NA	NA

## ANNEXURE 2 REGISTRATION

Information to be provided during registration

Registration Item		Details	Comments
Data Provider Name			
Data Provider ID			<i>To be generated by the system</i>
Physical Address of the data provider			
Contact Person			<i>Name, Designation, Contact number, e-mail address</i>
Facility/ies			
Facility 1	Name of Facility 1		<i>Name used to identify the facility</i>
	Physical Address		<i>Physical address of the facility</i>
	Relevant IPCC Code for the facility		<i>See Annexure 1 for IPCC codes</i>
	Installed capacity of the facility		<i>Quantity and units</i>
	Description of Non – combustion sources		<i>Description of process, technology and products</i>
	Description of combustion source		<i>Description of process, technology and fuel types</i>
Facility 2	Name of Facility 2		<i>Name used to identify the facility</i>
	Physical Address		<i>Physical address of the facility</i>
	Relevant IPCC Code for the facility		<i>See Annexure 1 for IPCC codes</i>
	Installed capacity of the facility		<i>Quantity and units</i>
	Description of Non – combustion sources		<i>Description of process, technology and products</i>
	Description of combustion source		<i>Description of process, technology and fuel types</i>
Facility 3	Name of Facility 3		<i>Name used to identify the facility</i>
	Physical Address		<i>Physical address of the facility</i>
	Relevant IPCC Code for the facility		<i>See Annexure 1 for IPCC codes</i>
	Installed capacity of the facility		<i>Quantity and units</i>
	Description of Non – combustion sources		<i>Description of process, technology and products</i>



	Description of combustion source		<i>Description of process, technology and fuel types</i>
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Additional rows should be added to the table above to accommodate registration all facilities as contemplated in Regulation 5.

**ANNEXURE 3  
ANNUAL REPORTING  
Category A reporting**

Name of Data Provider													
Data Provider ID													
Date of Submission:													
Year of data:													
Comments:													
IPCC Code (see Annexure 1)	Sub category <sup>4</sup> (disaggregated by fuel / product type / production process)	Activity data <sup>5</sup>			Emissions (tonnes/year)								
		Name of activity data	Value of activity data	Units of activity data	GHG-1 <sup>6</sup>		GHG-2		GHG-3				
					Value	Tier	Ref	Value	Tier	Ref	Value	Tier	Ref

<sup>4</sup> Sub-category is applicable in cases whereby more than one fuel type, technology, product or production process is relevant for a specific IPCC code. In steel production for example, Basic Oxygen Furnace (BOF) and Electric Arch Furnace (EAF) are commonly used to produce steel. Each of these processes has a unique greenhouse gas emission factor.

<sup>5</sup> Activity data as specified for each activity type in the "Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry".

<sup>6</sup> Please consult the "Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry" to identify the relevant greenhouse gases that must be considered for each activity listed in Annexure 1 of these regulations.

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

<b>REQUEST FOR REVIEW OF EMISSION FACTOR</b>	
<b><i>Administrative information</i></b>	
Data Provider	
Data Provider Country:	
Data Provider Contact	
Date Calculated	
Date submitted to competent authority by Data provider	
<b><i>Technical information</i></b>	
Greenhouse gas	
Relevant IPCC Source-Category in terms of 2006 IPCC or later Guidelines	
<b>Parameter</b>	Type / name
	Value
	Unit
	95% confidence interval
<b>Method</b>	Technique/standard
	Date(s) of measurement
	External QA/QC
	Comments by data provider
	Comments by others (e.g. independent verifier)