

LEGAL NOTICE NO. 12

REPUBLIC OF TRINIDAD AND TOBAGO

THE ENVIRONMENTAL MANAGEMENT ACT, CHAP. 35:05

RULES

MADE BY THE MINISTER UNDER SECTION 26(a), (b), (c), (d), (j), (k),
(l), 27, 49, 50 AND 51(1) OF THE ENVIRONMENTAL MANAGEMENT
ACT AND SUBJECT TO NEGATIVE RESOLUTION OF PARLIAMENT

THE AIR POLLUTION RULES, 2014

PART I

PRELIMINARY

1. These Rules may be cited as the Air Pollution Rules, 2014. Citation

2. In these Rules— Interpretation
 - “acute effect” means an adverse effect on any living organism after a single or multiple exposures to an air pollutant which results in severe symptoms, up to and including death, that develop and present rapidly;
 - “air” means the atmosphere up to one hundred kilometres above sea level;
 - “air pollutant” means any pollutant released into, or which otherwise has an impact on, the atmosphere or climate and includes—
 - (a) any substance listed in Schedule 1 or Schedule 2 Schedule 1
Schedule 2 which—
 - (i) is emitted into the air; and
 - (ii) causes the maximum permissible level of the parameters listed in Schedule 1 or Schedule 2 to be exceeded; or
 - (b) any substance or combination of substances listed in Schedule 1 or Schedule 2 which is emitted into the air; or
 - (c) any emission arising from an activity listed in Schedule 3; Schedule 3
 - “ambient air” means the air surrounding the Earth with the exception of the air that is indoors;

“applicant” means a person who applies for a permit and includes an agent of the person or an Attorney-at-law appointed by the person under a duly registered power of attorney;

“approved form” means a form approved by the Authority;

“bubble approach” means an approach to air pollution emissions control that allows a facility to consider emissions from more than one source as combined emissions for that facility as long as the maximum permissible levels specified in Schedule 1 are not exceeded outside the facility;

“chronic effect” means an adverse effect on any living organism after either single or multiple exposures to an air pollutant which results in symptoms, up to and including death, that develop and present slowly over a long period of time;

“emergency” means any situation, including a *force majeure*, that requires immediate—

(a) corrective action to restore normal operations; or

(b) mitigation measures such as warnings or evacuations,

and which causes or is likely to cause a facility to breach a condition of a permit or exceed any maximum permissible level specified in Schedule 1 or Schedule 2;

“emissions” means any substance that is released into the air;

“emitter facility” means a facility—

(a) from which an air pollutant is emitted; and

(b) which is used for any activity listed in Schedule 3;

“facility” means any—

(a) building or other man-made structure, whether permanent or temporary in form, together with its land;

(b) operation; or

(c) equipment,

which forms part of a continuous space from or on which emissions may be released;

“holder of a permit” means a person to whom a permit has been granted;

“Local Authority” means the Tobago House of Assembly as defined by the Tobago House of Assembly Act or a Chap. 25:03 Corporation as defined by the Municipal Corporations Act; Chap. 25:04

“major component” means any integral constituent of an emitter facility that plays a key role in the operation of the emitter facility during normal as well as emergency conditions and includes, but is not limited to, any building, installation, equipment, storage unit or area, operation, appurtenance, or activity that produces emissions;

“modification” means any change in a facility, that—

(a) alters or is likely to alter the characteristics of quality and quantity of any emission released by that facility; or

(b) results or is likely to result in the release of any emission not previously released by that facility;

“operator” means a person who owns or operates a facility which is an emitter facility or which is intended to be used as an emitter facility;

“parameter” means a variable and measurable property of a substance without physical dimensions;

“permit” means an air pollution permit granted under section 50(1) of the Act and rule 17;

“prescribed fee” means a fee prescribed in the Air Pollution (Fees) Regulations, 2014;

“Register” means the Register of Air Pollutants established in accordance with section 49(2) of the Act and maintained under rule 3;

“Register of Emitter Facilities” means the register established under rule 34;

“registered emitter facility” means a facility in respect of which a registration certificate has been issued under rule 6(3);

“registrant” means a person who submits a request to register a facility under rule 4;

“Registrar General’s Certificate” means a certificate furnished by the Registrar of Companies under section 486(1)(b) of the Companies Act;

Chap. 81:01

“registration certificate” means a certificate issued under rule 6;

“sensitive receptor” mean any living organism that is more susceptible than its general population to the adverse effects of exposure to air pollutants as a result of predisposing factors, which include but are not limited to, age, infirmity, illness, genetics, physiology, ecology, or pre-existing environmental stress;

“stack” means a chimney or smoke stack or a vertical pipe through which an emission is released into the air;

“substance” means a material of a particular kind or constitution, including pure elements, compounds and chemical substances comprising mixtures of elements or compounds;

“UTM” means Universal Transverse Mercator;

“volatile organic compound” means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or metallic carbonates and ammonium carbonate, that participates in photochemical reactions, and includes organic compounds other than methane and ethane and other organic compounds which have been determined to have negligible photochemical reactivity.

Register of
air pollutants

3. (1) In accordance with section 49(2) of the Act, the Authority shall maintain a register of air pollutants to be called “the Register of Air Pollutants”.

(2) The Register shall be in the form determined by the Authority and shall be open to examination by members of the public at such place and during such times as the Authority may notify from time to time in the *Gazette* and in one or more daily newspapers circulating in Trinidad and Tobago.

PART II

REGISTRATION

Requirement
to be
registered

4. (1) Every operator who, on the date of the coming into effect of this Part operates an emitter facility, shall within six months of that date—

- (a) submit to the Authority in the approved form a request to register the emitter facility; and
- (b) pay the prescribed fee.

(2) On the commencement of these Rules every operator who intends to operate an emitter facility, shall at least ten working days before the commencement of operations—

- (a) submit to the Authority a request in the approved form to register the facility; and
- (b) pay the prescribed fee.

5. (1) Every registrant shall on submitting a request under rule 4 provide the Authority with the following information:

Information
to be
provided on
registration

- (a) where the registrant is an individual, the name and mailing address of the individual;
- (b) where the registrant is a registered company—
 - (i) the registered corporate name;
 - (ii) the names of the directors;
 - (iii) the registered address of the company;
 - (iv) the name and position of the person submitting the request on behalf of the registrant;
 - (v) the mailing address of the facility; and
 - (vi) a copy of the Registrar General's Certificate;
- (c) where the registrant is an entity other than a registered company, including a trust, an unincorporated association, a partnership or a governmental entity—
 - (i) the name of the entity;
 - (ii) the names of the directors, if any;
 - (iii) the registered address of the entity;
 - (iv) the name and position of the person submitting the request on behalf of the registrant; and
 - (v) the mailing address of the facility;
- (d) an indication of whether the facility is an existing or proposed emitter facility;
- (e) the location of the facility, including UTM co-ordinates, a description of the boundary, town or village, district, street name and lot number;
- (f) a topographic map of the area with a scale of one in twenty-five thousand or any other appropriate scale as required by the Authority, extending to at least one kilometre beyond the boundary of the facility;
- (g) the nature, location and age of the major components of the facility;
- (h) the use or proposed use of energy and water by the facility;
- (i) a brief description of the processes or activities that generate or will generate the air pollutant, including principal products and raw materials;
- (j) existing or proposed emission rates;

- (k) emission data which shall indicate the characteristics of any emission, including the method of release, location of emission sources, flow rate, quantity, conditions and concentrations of constituents;
- (l) a description of the environment into which the emission is released;
- (m) a description of any air pollution management programme that is, or may be utilised by the registrant;
- (n) an indication of whether approvals from any other governmental entity are required under written law and of whether such approvals have been applied for or obtained;
- (o) evidence of any approval or application referred to in paragraph (n);
- (p) where required by the Authority, the results of an air quality assessment; and
- (q) any other relevant information considered necessary by the Authority.

(2) Where the Authority determines that an air quality assessment should be undertaken by a registrant, the Authority shall notify him in writing of the requirement to conduct an air quality assessment and shall—

- (a) within ten working days of the service of the notice, consult with the registrant on the preparation of the terms of reference;
- (b) within fifty working days of the service of the notice, prepare the final terms of reference for the conduct of the air quality assessment; and
- (c) notify the registrant in writing that the terms of reference is available for collection at the office of the Authority before a specified date, upon payment of the prescribed fee.

(3) The terms of reference referred to at subrule (2) may—

- (a) specify the qualifications of persons conducting the air quality assessment;
- (b) specify the period within which an air quality assessment shall be submitted to the Authority; and
- (c) include any other terms as the Authority considers appropriate.

(4) A registrant who receives a notice under subrule (2) shall comply with the requirements of such notice.

(5) After submission of an air quality assessment, a registrant shall on the direction of the Authority, monitor emissions and submit reports and any other information at such times as the Authority may reasonably specify.

6. (1) The Authority shall, within twenty working days of receipt of a request to be registered under rule 4, issue to the registrant a notice in writing acknowledging receipt of the request for registration.

(2) Upon receipt of the request for registration, the Authority may—

(a) notify the registrant of any omission of information required pursuant to rule 5 and specify a time for submission of such information; and

(b) request further information and specify a time for submission of such information.

(3) The Authority shall within ten working days of being satisfied that all necessary information has been submitted, issue to the registrant a registration certificate.

(4) Where, after the submission of a request for registration but before the issuance of a registration certificate, a registrant becomes aware that—

(a) he has failed to submit any relevant facts or has submitted incorrect information; or

(b) there is any change affecting the accuracy of any information provided to the Authority,

he shall immediately notify the Authority in writing and submit to the Authority, the relevant facts and correct information.

(5) Where a registration certificate is issued to a registrant and the registrant becomes aware that—

(a) he has failed to submit any relevant facts or has submitted incorrect information; or

(b) there is any change affecting the accuracy of any information provided to the Authority,

he shall within twenty working days notify the Authority and submit to the Authority, the relevant facts and correct information and, where those relevant facts and information affect the particulars on the registration certificate, the Authority shall within ten working days re-issue to the registrant a registration certificate.

- (6) Where an operator of a registered emitter facility—
 - (a) dies;
 - (b) is declared bankrupt;
 - (c) transfers ownership of the facility;
 - (d) goes into liquidation or receivership; or
 - (e) becomes a party to an amalgamation,

the operator, his agent or legal personal representative shall within twenty working days give the Authority notice in writing thereof and submit supporting documentation.

Transfer of
registration
certificate

7. (1) A registrant shall not assign or transfer his registration certificate to any person without the written consent of the Authority.

(2) The Authority may, on the application of a registrant, transfer his registration certificate to another person.

(3) An application to transfer a registration certificate shall be made in the approved form and accompanied by the prescribed fee.

(4) An application for the transfer of a registration certificate shall contain—

- (a) where the proposed transferee is an individual, the name and address of the proposed transferee;
- (b) where the proposed transferee is a registered company—
 - (i) the registered corporate name;
 - (ii) the names of the directors;
 - (iii) the registered address of the company;
 - (iv) the name and position of the person submitting the request on behalf of the registrant;
 - (v) the mailing address of the facility; and
 - (vi) a copy of the Registrar General's Certificate;
- (c) where the proposed transferee is an entity other than a registered company, including a trust, an unincorporated association, a partnership or a governmental entity—
 - (i) the name of the entity;
 - (ii) the names of the directors, if any;
 - (iii) the registered address of the entity;

- (iv) than name and the position of the person submitting the application on behalf of the proposed transferee; and
- (v) the mailing address of the facility;
- (d) the signatures of the proposed transferee and the registrant; and
- (e) such other particulars as the Authority may require.
- (5) An application to transfer a registration certificate shall be accompanied by the registration certificate which is to be transferred.
- (6) Subject to rules 15, 16 and 17, the Authority shall, within thirty working days of receipt of an application under the Rule, approve or refuse the application.
- (7) Where the Authority approves an application for a transfer under this Rule, the Authority shall—
- (a) endorse on the registration certificate the date on which the application was approved and the effective date of the transfer; and
- (b) substitute the name on the registration certificate with that of the transferee.
8. Every operator of a registered emitter facility shall inform the Authority by notice in writing of any modifications to the emitter facility, at least ten working days before the commencement of any such modification and the notice shall—
- (a) specify the characteristics of any air pollutants including the method of release, location, flow rate, quantity, conditions and concentrations of constituents;
- (b) where applicable, include a map or other illustration showing the intended location of any release structure; and
- (c) include any change to the information provided under rule 5 as a result of the proposed modification.
9. (1) Where, after a registration certificate has been issued to a registrant, the Authority determines that the registrant is also required to obtain a permit, the Authority may, by notice, require the registrant to apply for a permit in accordance with rule 11.
- (2) A registrant who receives a notice under subrule (1) shall comply with the requirements of that notice.

Notice of
modifications
to registered
emitter
facility

Authority to
determine
whether a
registered
emitter
facility
requires a
permit

PART III

PERMITS

Permit
requirement

10. (1) Subject to rule 16, an operator shall not permit the release—
- (a) of any substance identified in Schedule 1, that causes the maximum permissible level specified therein to be exceeded; or
 - (b) where a stack exists, any substance or parameter identified in Schedule 2 that causes the maximum permissible levels specified in that Schedule to be exceeded,
- unless he holds a permit to do so.

(2) Notwithstanding subrule (1), the Authority may at any time, by notice, require the operator to apply for a permit or a variation of his permit pursuant to a notice of operation changes under rule 21.

(3) An operator who receives a notice under subrule (2) shall comply with the requirements of that notice.

Permit
application

11. (1) An operator who is required under rules 9 and 10 to obtain a permit shall apply to the Authority.

(2) An application under subrule (1) for a permit shall—

(a) be in the approved form and accompanied by the prescribed fee;

(b) include the following information unless otherwise directed by the Authority:

(i) where the applicant is an individual, the name and mailing address of the individual;

(ii) where the applicant is a registered company, the registered corporate name, the names of directors, the registered address, a copy of the Registrar General's Certificate, the name of the agent or authority applying on behalf of the company and the mailing address of the facility;

(iii) where the applicant is an entity other than a registered company, including a trust, an unincorporated association, a partnership or a governmental entity, the name of the entity, the names of directors, if any, the registered address of the entity, the name and position of the person applying on behalf of the applicant and the mailing address of the facility;

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- (iv) the location of the emitter facility, including town or village, district, street name and lot number and where applicable, UTM co-ordinates;
 - (v) the topography, distances to nearby residential, commercial or other industrial operations and the location of any known sensitive human, animal or plant receptors within one kilometre beyond the boundary of the facility;
 - (vi) a plan of the facility, drawn to scale, showing all structures on the property including elevations of all structures;
 - (vii) stack dimensions, exit temperatures and velocities, stack elevations, stack emissions results, ambient air quality data in the vicinity of the facility and any other facility parameters that would be required by the Authority to verify the impact of air pollutants on the ambient standards;
 - (viii) a description of the receiving environment into which the air pollutant is released;
 - (ix) a detailed description of the process or activity generating the release;
 - (x) details on the existing or proposed facility operations, including the start up, shut down, scheduled maintenance and safety measures of the facility;
 - (xi) the age of the facility and its components;
 - (xii) the raw materials, utility requirements and intermediate and end products of the facility;
 - (xiii) a map with a scale of one in twenty-five thousand or any other appropriate scale required by the Authority showing the location of any existing or proposed release structures and the location of any release;
 - (xiv) existing or proposed release rates;
 - (xv) monitoring data which may indicate characteristics of release, including method of release, quantities, conditions and concentrations of constituents;
 - (xvi) an indication of whether the facility is an existing facility or a proposed facility;
 - (xvii) an indication of whether other approvals from any other governmental entity are required under written law and whether such approvals have been applied for or obtained;

- (xviii) copies of existing approvals relating to the activity that have been granted to the applicant by the Authority or any other governmental entity;
- (xix) the proposed or actual dates of construction commencement, construction completion, commencement of operation and project completion of the proposed facility;
- (xx) a copy of any Environmental Impact Statement or Assessment Report or environmental study which pertains to the facility;
- (xxi) an account of the measures undertaken to avoid, mitigate or remedy any air pollution caused by the operation of the facility; and
- (xxii) any other relevant information required by the Authority.

(3) Where the application is made on behalf of a company, the applicant shall supply the Authority with a copy of the Registrar General's Certificate.

(4) Where an applicant under subrule (1) does not hold a registration certificate issued under Part II, he shall first apply for and obtain such certificate in accordance with that Part.

Acknowledgement of receipt of application

12. (1) The Authority shall, within twenty working days of receipt of an application for a permit under rule 11, issue to the applicant a notice in writing—

- (a) acknowledging receipt of the application; and
- (b) where appropriate, notifying the applicant of any omission of information required under the approved form and specifying a time for submission of such information.

(2) The Authority may at the request of the applicant, allow an extension of the time specified under subrule (1)(b).

Notice of consideration of application

13. (1) Where the Authority decides to commence the consideration of a permit application, it shall issue a written notice to the applicant advising of the date from which the application shall be considered.

(2) The Authority may prioritise the consideration of applications for permits on the basis of any or a combination of the following considerations:

- (a) actual or potential impacts of the emissions of air pollutants by the emitter facility to human health or the environment;

- (b) the quality, condition or concentration of emitted pollutants;
- (c) the proximity of the emitter facility to sensitive human, animal or plant receptors;
- (d) the cumulative impact of the operation of the facility when considered in combination with emissions from other sources in the vicinity;
- (e) the extent to which the maximum permissible levels in Schedule 1 or Schedule 2 are exceeded; and
- (f) any other consideration as may be required by the Authority.

14. (1) The Authority may at any time during the consideration of ^{Further} an application, request additional information from— ^{information}

- (a) the applicant;
- (b) a person who may be or is likely to be affected by the grant of a permit;
- (c) a Local Authority or any other governmental entity; or
- (d) any other source that the Authority considers appropriate,

and may request that such additional information be provided within a specified time.

(2) Where the Authority receives information under subrule (1)(b), (c) or (d), the Authority shall—

- (a) forward such information to the applicant; and
- (b) request the applicant to submit a response within a specified time.

(3) Where during the consideration of an application under these Rules, the applicant becomes aware that—

- (a) in the application or in a report to the Authority, he has failed to submit any relevant facts or has submitted incorrect information; or
- (b) there is any change affecting the accuracy of any information provided to the Authority,

the applicant shall immediately notify the Authority and submit to the Authority, the relevant facts and correct information.

(4) The Authority may, during the consideration of an application, direct the applicant to—

- (a) conduct or participate in a public consultation in such manner as specified by the Authority;

- (b) submit a transcript of any proceedings arising out of such consultation within such time frame as prescribed by the Authority; and
- (c) conduct a human health and ecological risk assessment and submit the results thereof within such time as prescribed by the Authority.

(5) The Authority may, at the written request of the applicant, extend the time specified under subrules (1), (2)(b) and (4).

Refusal for failure to provide information

15. Where the applicant does not supply the information requested under rule 12(1)(b) or 14(1)(a) within the time specified by the Authority therein, or any other information as may be required by the Authority within a specified time, the Authority may refuse the application.

Release of air pollutants during determination of permit application

16. Where an operator of a registered emitter facility applies for a permit he shall not continue emitting the air pollutants to be governed by the permit pending the grant of a permit unless the Authority is satisfied that the emissions do not create a clear and imminent danger of acute or chronic effects or harm to the environment.

Grant or refusal or permit

17. (1) The Authority shall, within ninety working days of issuing a notice of its decision to commence consideration of an application for a permit under rule 13 and upon receipt of any further information requested, grant or refuse to grant a permit to the applicant.

(2) Where the Authority considers that it will be unable to make a determination whether to grant or refuse a permit under rule 13 within the period specified under subrule (1) it shall, before the expiry thereof, notify the applicant in writing of a date by which the determination will be made and the reasons thereof.

Duration of permits and annual fee

18. (1) Unless varied, suspended or revoked by the Authority, a permit granted under these Rules shall be valid for a period specified therein but in no case shall the period exceed five years.

(2) Where a permit is granted under these Rules, the operator shall pay the prescribed annual fee.

Contents of permit

19. (1) The Authority shall set out in each permit—
- (a) the air pollutants permitted to be released; and
 - (b) the quantity, conditions and concentrations of the air pollutants that the operator may release.

(2) Notwithstanding rule 10(1)(b) the Authority may, for the purposes of subrule (1)(b), give priority to meeting the standards specified in Schedule 1 over the standards specified in Schedule 2.

20. (1) The Authority may include terms or conditions in any permit, that— Conditions of permit

- (a) all reasonable steps be taken to—
 - (i) avoid all adverse environmental impacts which could result from the release of air pollutants from the facility;
 - (ii) minimise any adverse environmental impact where the avoidance is impractical;
- (b) reduction targets as determined by the Authority be met in respect of releases of air pollutants;
- (c) the monitoring of air pollutants be conducted in accordance with the methods specified in the permit;
- (d) monitoring equipment as specified by the Authority be installed, used and maintained;
- (e) records of all monitoring, including—
 - (i) all calibration and maintenance records;
 - (ii) all original strip chart or electronic recordings for continuous monitoring of instrumentation;
 - (iii) copies of all reports required by the permit;
 - (iv) records of all data used to complete the application for the permit; and
 - (v) results of all modelling or calculations,be retained for a period specified by the Authority;
- (f) records of monitoring information shall include where applicable—
 - (i) the date, exact place and time that samples or measurements were taken and the names and contact information of individuals who took the samples or measurements;
 - (ii) the date or dates on which analyses were performed and the names and contact information of the individuals who performed the analyses;
 - (iii) the analytical techniques or methods used; and
 - (iv) the status of the operation of the facility including planned and unplanned start up, shut down, scheduled maintenance, safety measures, production levels and achievement of design capacity;

- (g) all facilities and systems of treatment and control which are installed and used by the holder of a permit to achieve compliance with the permit are properly operated and maintained at all times;
- (h) the following are carried out and maintained as determined by the Authority at all times to achieve compliance with any term or condition of the permit:
 - (i) best management practices;
 - (ii) emergency response plans and procedures;
 - (iii) pollution prevention measures;
 - (iv) laboratory controls;
 - (v) quality assurance procedures; and
 - (vi) back-up or auxiliary facilities;
- (i) it is furnished with any information which it may request to determine whether there is compliance with the permit and if cause exists for varying, suspending or revoking the permit;
- (j) it, upon request, is furnished with copies of records required to be kept by the operator;
- (k) all instances of anticipated non-compliance with any term or condition of the permit be reported by the operator to the Authority in accordance with rule 21, including any planned changes in the start up, shut down, scheduled maintenance or safety measures of the facility which may result in non-compliance;
- (l) all instances of unanticipated non-compliance with any term or condition of the permit be reported by the operator to the Authority—
 - (i) verbally, where there is a threat or is likely to be a threat to human health or the environment, immediately upon becoming aware of the circumstances of the non-compliance, indicating the anticipated manner in which it may endanger human health or the environment;
 - (ii) verbally, where there is no threat to human health or the environment, within seven working days of the time that he became aware or ought to have become aware of the circumstances of the non-compliance;

(iii) in writing, and submitted within seven working days of the initial verbal report and the written report shall—

(A) contain a description of the non-compliance, its causes and the period of non-compliance including exact dates and times, the response, clean-up and countermeasures taken; or

(B) indicate the anticipated time during which non-compliance is expected to continue and why compliance cannot be achieved; and

(m) any other term or condition as may be specified by the Authority.

(2) Where the emitter facility contains more than one stack, the operator of an emitter facility may request, or the Authority may require, that the bubble approach be used to regulate the overall impact of emissions from the facility.

21. (1) An operator shall notify the Authority in writing of the cessation of the operation of the facility in respect of which the permit has been issued, within twenty-one working days of the event and pay the prescribed fee. Notice of operation changes after grant of permit

(2) An operator shall notify the Authority in writing of any proposed facility expansion, production increase, or process modification which shall result in—

(a) the release of air pollutants not authorised under the permit; or

(b) an increase in the quantity or concentration of one or more air pollutants in excess of the levels permitted under the permit,

at least ninety working days prior to the change and pay the prescribed fee.

(3) The notice in subrule (2) shall—

(a) indicate the proposed characteristics of air pollutant including the method of release, location of emission sources, flow rate, quantity, conditions and concentrations of constituents; and

(b) contain a map or other illustration showing the proposed location of any proposed release structure.

Change of
legal status
after grant of
permit

22. Where a holder of a permit—

- (a) dies;
- (b) is declared bankrupt;
- (c) transfers ownership of the facility;
- (d) goes into liquidation or receivership; or
- (e) becomes a party to an amalgamation,

the holder of the permit or where applicable, his agent or legal personal representative shall, within twenty working days, give the Authority notice in writing thereof.

Variation of
permit

23. (1) The Authority may vary a permit—

- (a) on its own initiative subject to subrule (7); or
- (b) on the application of the holder of a permit.

(2) Notwithstanding subrule (1), the Authority may, pursuant to the notice of operation changes under rule 21(2), require the operator to apply for a variation of the permit.

(3) An operator who receives a notice under subrule (2) shall comply with the requirements of that notice.

(4) An operator may apply to the Authority for a variation of his permit.

(5) An application under this rule shall be made in the approved form and accompanied by the prescribed fee.

(6) Where an operator makes an application under this rule to vary—

- (a) the specified methods of sampling, preservation and analysis;
- (b) the quantity or concentration of air pollutants released from the facility; or
- (c) the frequency of monitoring,

the application shall be supported by scientific and economic reasons.

(7) The Authority shall not vary a permit on its own initiative under subrule (1)(a) unless it has—

- (a) given written notice to the operator that it intends to do so;
- (b) specified in the notice the reasons for its intention to do so;
- (c) given the operator five working days from the date of the service of the notice to make submissions in relation to the intended variation, suspension or revocation; and
- (d) taken into consideration any submissions made by the operator.

(8) The Authority may, at the request of the holder of the permit, extend the time specified in subrule (7)(c).

(9) The Authority shall take into consideration any submissions made by the holder of the permit within five working days of service of the written notice under subrule (7) and may withdraw or uphold its decision accordingly.

(10) The Authority may vary a permit under subrule (1)(a)—

(a) where it appears to the Authority that an emergency has occurred; or

(b) where the Authority considers it appropriate to do so.

(11) Where the Authority varies a permit under subrule (1), it shall issue to the holder of a permit an amended permit.

(12) Subject to rules 15, 16 and 17, the Authority shall, within ninety working days of receipt of the application for a variation under subrule (2), determine whether a permit shall be varied.

(13) Where the Authority considers that it will be unable to make a determination within the period specified in this rule, it shall before the expiration of that period, notify the applicant in writing of a date by which the determination shall be made.

(14) The Authority shall not approve an application under subrule (2) where the concentration of the permitted substance will cause an increase in its concentration in the ambient air such that the resulting level will cause acute or chronic effects or significant harm to the environment.

24. (1) An operator shall not assign or transfer his permit to any person without the written consent of the Authority. Transfer of permit

(2) The Authority may, on the application of an operator, transfer the permit of the operator to another person.

(3) An application to transfer a permit shall be made in the approved form and accompanied by the prescribed fee.

(4) An application for the transfer of a permit shall contain—

(a) where the proposed transferee is an individual, the name and address of the proposed transferee;

- (b) where the proposed transferee is a registered company—
 - (i) the registered corporate name;
 - (ii) the names of the directors;
 - (iii) the registered address of the company;
 - (iv) the name and position of the person submitting the request on behalf of the registrant;
 - (v) the mailing address of the facility; and
 - (vi) a copy of the Registrar General's Certificate;
- (c) where the proposed transferee is an entity other than a registered company, including a trust, an unincorporated association, a partnership or a governmental entity—
 - (i) the name of the entity;
 - (ii) the names of the directors, if any;
 - (iii) the registered address of the entity;
 - (iv) the name and the position of the person submitting the application on behalf of the proposed transferee; and
 - (v) the mailing address of the facility;
- (d) the signature of the proposed transferee and the holder of a permit; and
- (e) such other particulars as the Authority may require.

(5) An application to transfer a permit shall be accompanied by the permit which is to be transferred.

(6) Subject to rules 16, 17 and 18, the Authority shall, within thirty working days of receipt of an application under this rule, approve or refuse the application.

(7) Where the Authority approves an application for a transfer under this rule, the Authority shall—

- (a) endorse on the permit the date on which the application was approved and the effective date of the transfer; and
- (b) substitute the name on the permit with that of the transferee.

Renewal of
permit

25. (1) Where an operator wishes to renew his permit, he shall submit an application for the renewal of the permit to the Authority in the approved form and pay the prescribed fee.

(2) An application for the renewal of a permit shall be made at least ninety working days before the expiration of the permit.

(3) Subject to rules 15, 16 and 17, the Authority shall, within ninety working days of receipt of an application under this rule, approve or refuse the application.

(4) Where the Authority considers that it will be unable to make a determination within the period specified in this rule it shall, before the expiration of that period, notify the applicant in writing of a date by which the determination shall be made and the permit shall, notwithstanding its expiration, be deemed to continue in force pending the determination of the application.

(5) Where the Authority renews an application under this rule, the permit shall be deemed effective from the anniversary date on which it was granted.

(6) A permit renewed under this rule shall be valid for a period specified therein but in no case shall the period exceed five years.

(7) An operator whose permit has been renewed shall pay the prescribed annual fee.

(8) The Authority may refuse an application under this rule where the operator has violated any term or condition of his permit.

(9) Where an application for renewal under this rule is refused by the Authority, the release of any air pollutant, which causes the maximum permissible levels specified under Schedule 1 or Schedule 2 to be exceeded, shall cease from the date specified in the notice.

26. (1) Subject to rule 28, the Authority may revoke or cancel a permit where it determines that—

Revocation or
cancellation
of permit

- (a) the continuation of the release authorized by the permit would result in acute or chronic effects or harm to the environment;
- (b) the operator has made a misrepresentation or wilful omission in obtaining the permit or in any report submitted to the Authority;
- (c) the operator has violated any term or condition of the permit;

- (d) the facility for which the permit has been issued has not been in operation for a period of twelve consecutive months; or
- (e) there has been any other change in circumstances relating to the permit that requires a permanent reduction in the release authorised by the permit.

(2) The revocation or cancellation of a permit under this rule shall be effective from the date specified in the notice of revocation or cancellation under rule 29(e).

Suspension of permit

27. (1) Subject to rule 28, the Authority may suspend a permit if it determines that—

- (a) acute or chronic effect or harm to the environment has resulted from or is about to be caused by the release authorized by the permit;
- (b) the operator has violated any term or condition of the permit;
- (c) a situation specified in rule 15 has transpired; or
- (d) there has been any other change in circumstances relating to the permit that requires either a temporary or permanent reduction in the release.

(2) Where a permit is suspended under this rule, the Authority, in suspending it or at any time while it is suspended, may require the operator to take such measures to deal with or avert the harm as the Authority considers necessary.

Notice of intension to suspend, revoke or cancel a permit

28. (1) The Authority shall not suspend, revoke or cancel a permit unless it has—

- (a) given written notice to the operator that it intends to do so;
- (b) specified in the notice the reasons for its intention to do so;
- (c) given the operator five working days from the date of the service of the notice of its intention to suspend, revoke or cancel, to make submissions in relation to the intended suspension, revocation or cancellation; and
- (d) taken into consideration any submissions made by the holder of the permit.

(2) The Authority may, at the request of the operator, extend the time specified in subrule (1)(c).

(3) Notwithstanding subrule (1), the Authority may without notice, suspend, revoke or cancel a permit, where it determines that there is clear and imminent danger which may cause acute or chronic effects or harm to human health or the environment and the reasons for the suspension or revocation shall be served on the operator within five working days of the decision.

(4) The Authority shall take into consideration any submissions made by the operator within five working days of service of its reasons under subrule (3) and may withdraw or uphold its decision accordingly.

29. The Authority shall, by written notice, inform the applicant or the operator, as the case may be, of the following decisions in relation to a permit: Notice of decision of the Authority

- (a) the refusal of an application for a permit under rule 17;
- (b) the refusal of an application for variation under rule 23;
- (c) the refusal of an application for a transfer under rule 24;
- (d) the refusal of an application for a renewal under rule 25(8);
- (e) the revocation or cancellation of a permit under rule 26;
- (f) the suspension of a permit under rule 27; and
- (g) the effective date of the notice.

30. An applicant or operator who is aggrieved by a decision of the Authority mentioned in rule 29, may appeal to the Commission. Appeals to the Commission

PART IV

MISCELLANEOUS

31. (1) Every operator of a registered emitter facility, shall, at any time after receipt of a registration certificate, where the Authority so directs, conduct an air quality assessment in accordance with a term of reference pursuant to subrule (2). Notice of requirement to conduct air quality assessment

(2) Where the Authority has determined that an air quality assessment should be undertaken by an operator in accordance with subrule (1), the Authority shall, by written notice, require the operator to conduct an air quality assessment and shall—

- (a) within sixty working days of the service of the notice, consult with the operator on the preparation of the terms of reference and prepare the final terms of reference for the conduct of the air quality assessment; and

(b) notify the operator in writing that the terms of reference is available for collection at the Authority's office before a specified date, upon payment of the prescribed fee.

(3) The terms of reference referred to at subrule (2) may—

(a) specify the qualifications of persons conducting the air quality assessment;

(b) specify the period within which an air quality assessment shall be submitted to the Authority; and

(c) include any other terms as the Authority considers appropriate.

(4) An operator who receives a notice under subrule (2) shall comply with the requirements of such notice.

(5) After submission of an air quality assessment, an operator shall, on the direction of the Authority, monitor emissions and submit reports and any other information at such times as the Authority may reasonably specify.

Determination
of air quality

32. (1) For the purpose of these Rules, air quality shall be determined through the use of any one or any combination of the following methods which may be approved by the Authority:

(a) measurement of actual chemical concentrations;

(b) measurements of parameters that represent chemical constituents;

(c) engineering calculations;

(d) modelling of meteorological and pollutant dispersion characteristics; or

(e) any other method as determined by the Authority.

(2) The Authority in approving any method under subrule (1) shall consider—

(a) the need for accuracy;

(b) the economic constraints of the parties; and

(c) access to appropriate monitoring locations.

Emergency
procedures

33. Where an emergency occurs, the operator of a registered emitter facility shall—

(a) immediately implement the emergency response plan for the facility;

- (b) take all reasonable measures to ensure that all fires, explosions and releases do not occur, spread or recur;
- (c) take all reasonable measures to reduce the emissions of air pollutants and to reasonably protect human health and the environment;
- (d) provide adequate notice of the emergency to the community and appropriate governmental entities;
- (e) immediately notify the Authority of the nature of the emergency, the specific location and the processes involved; and
- (f) within seven working days from the start of an emergency, submit to the Authority a written report stating—
 - (i) the cause of the emergency;
 - (ii) the duration and period of time of the emergency;
 - (iii) whether or not the emergency has been contained and if not, the anticipated time by which the emergency is expected to be contained;
 - (iv) the steps taken or intended to be taken to prevent, reduce or eliminate the recurrence of the emergency;
 - (v) the amounts and periods of release of the materials; and
 - (vi) any known or suspected unauthorised releases during the emergency.

34. (1) The Authority shall establish and maintain a register of emitter facilities registered under Part II which shall be called the “Register of Emitter Facilities” and which—

- (a) shall be open to the public; and
- (b) may be kept in any form, including electronic form.

(2) Subject to rules 35 and 36, the Register of Emitter Facilities shall contain a copy of—

- (a) every request for registration under these Rules;
- (b) every registration certificate;
- (c) every request and terms of reference for an air quality assessment and the results of every air quality assessment under these Rules;
- (d) every application for a permit;
- (e) all additional information supplied pursuant to rules 12(1)(b) and 14; and
- (f) every permit including a renewed, transferred or varied permit.

(3) The Authority shall, at the request of any person in the approved form and upon payment of the prescribed fee, supply an extract from the Register of Emitter Facilities.

Removal from
the register of
Emitter
Facilities

35. The Authority may strike the name of an operator and his facility off the Register of Emitter Facilities where—

- (a) the registered emitter facility has not been in operation for a period of twelve consecutive months; or
- (b) his permit has been revoked or cancelled pursuant to rule 26.

Confidentiality
claims

36. (1) An operator may, upon payment of the prescribed fee, assert a claim, giving reasons, in accordance with the form approved by the Authority, that any of the information supplied to the Authority under these Rules—

- (a) is a trade secret;
- (b) is confidential business information; or
- (c) if disclosed, would be contrary to the public interest,

and may request that such information be omitted from the Register of Emitter Facilities.

(2) Where the Authority receives a claim under subrule (1), it may request that the operator provide additional information in respect of such claim within a specified time.

(3) The Authority shall reject a claim under this rule where—

- (a) the operator has not disclosed the basis for the claim;
- (b) the basis of the claim which is disclosed is determined to be invalid; or
- (c) it is determined that the public interest in disclosing the information clearly outweighs any prejudice to the applicant.

(4) An operator who is aggrieved by the rejection of a claim under subrule (3) may appeal to the Commission.

(5) The Authority shall omit the information from the Register of Emitter Facilities where—

- (a) the Authority upholds the claim;
- (b) the claim is pending appeal to the Commission; or
- (c) the claim is upheld on an appeal to the Commission.

(6) A determination under this rule shall be made within twenty working days of receipt of an application.

(7) Where the Authority requests additional information under subrule (2), a determination shall be made within twenty working days of receipt of such information.

37. (1) The Authority may exempt an operator from the requirement to hold a permit where it determines that the operator has demonstrated to the satisfaction of the Authority that the emitter facility has at least two consecutive years—

Exemption
from
requirement
to hold
permit

- (a) complied with the terms and conditions of his permit; and
- (b) not caused the maximum permissible levels of Schedule 1 and Schedule 2 to be exceeded.

(2) An operator to whom an exemption is granted under subrule (1) shall comply with rule 10.

38. For the purpose of these Rules, a notice is effective from the date of its service.

Effective date
of notice

39. (1) Any notice issued by the Authority under these Rules shall be served in the case of—

Service of
notices

- (a) an individual, by sending it by registered mail to the last known address of that individual;
- (b) a registered company, by sending it by registered mail to its registered office; or
- (c) any business other than a registered company, including a trust, unincorporated association, partnership or governmental entity, by sending it by registered mail to its last known address.

(2) For the purposes of subrule (1), service shall be deemed effective on the seventh day after posting.

40. Any breach of any of these Rules shall be a breach of an environmental requirement and shall be enforceable under Part VI of the Act.

Breach of
environmental
requirement

41. Notwithstanding the grant of a Certificate of Environmental Clearance under the Act, an operator shall meet the requirements of these Rules.

Certificate of
Environmental
Clearance

Application of
Schedule 2 42. (1) Schedule 2 shall not apply to any operational release from vehicles or any release from vehicles used by a governmental entity for the purposes of insect vector control.

(2) For the purposes of this Rule, “operational release” means any release of pollutant from a vehicle originating from the internal combustion of fuel in the engine when used to provide the motive power for the vehicle but does not include pollutant releases from activities occurring on the vehicle not associated with the generation of motive power for the vehicle.

Savings
Ch. 12. No. 4 43. Nothing in these Rules shall affect the operation of—
 (a) the Public Health Ordinance;
 (b) the common law regarding nuisance; and
 (c) any other written law.

SCHEDULE 1

(Rules 2,10,13,19,25,37)

MAXIMUM PERMISSIBLE LEVELS FOR AMBIENT AIR

No.	Substance	Short-Term Maximum Permissible Levels		Long-Term Maximum Permissible Levels	
		Maximum Permissible Levels	Averaging Time	Maximum Permissible Levels	Averaging Time
Particulates					
1	Total Suspended Particulate (TSP)	150 $\mu\text{g}/\text{m}^3$	24 hours		
2	PM ₁₀	75 $\mu\text{g}/\text{m}^3$	24 hours	50 $\mu\text{g}/\text{m}^3$	1 year
3	PM _{2.5}	65 $\mu\text{g}/\text{m}^3$	24 hours	15 $\mu\text{g}/\text{m}^3$	1 year
Non-Metallic Inorganic Substances					
4	Carbon monoxide (CO)	100 000 $\mu\text{g}/\text{m}^3$	15 minutes		
		60 000 $\mu\text{g}/\text{m}^3$	30 minutes		
		30 000 $\mu\text{g}/\text{m}^3$	1 hour		
		10 000 $\mu\text{g}/\text{m}^3$	8 hours		
5	Nitrogen dioxide (NO ₂)	200 $\mu\text{g}/\text{m}^3$	1 hour	40 $\mu\text{g}/\text{m}^3$	1 year
6	Sulfur dioxide (SO ₂)	500 $\mu\text{g}/\text{m}^3$	10 minutes	50 $\mu\text{g}/\text{m}^3$	1 year
		125 $\mu\text{g}/\text{m}^3$	24 hours		
7	Ozone (O ₃)	120 $\mu\text{g}/\text{m}^3$	8 hours		
8	Sulfuric acid (H ₂ SO ₄)	100 $\mu\text{g}/\text{m}^3$	30 minutes		
9	Hydrogen sulphide (H ₂ S)	30 $\mu\text{g}/\text{m}^3$	30 minutes		
10	Ammonia (NH ₃)	3600 $\mu\text{g}/\text{m}^3$	30 minutes		
11	Total fluoride	1.0 $\mu\text{g}/\text{m}^3$	24 hours	0.4 $\mu\text{g}/\text{m}^3$	90 days
12	Hydrogen chloride (HCl)	100 $\mu\text{g}/\text{m}^3$	30 minutes		
13	Chlorine (Cl) and its compounds	300 $\mu\text{g}/\text{m}^3$	30 minutes		
14	Asbestos (fibres > 5 μm in length)	0.04 fibres/cm ³	24 hours		
15	Asbestos (total)	5 $\mu\text{g}/\text{m}^3$	30 minutes		
Metallic Substances					
16	Cadmium (Cd) and its compounds	5.0 $\mu\text{g}/\text{m}^3$ of total Cd in free and combined form	30 minutes		
17	Mercury (Hg) and its compounds	1.5 $\mu\text{g}/\text{m}^3$ of total alkyl Hg compounds	30 minutes		
		5.0 $\mu\text{g}/\text{m}^3$ of total Hg in free and combined form	30 minutes		

SCHEDULE 1—Continued
 MAXIMUM PERMISSABLE LEVELS FOR AMBIENT AIR—Continued

No.	Substance	Short-Term Maximum Permissible Levels		Long-Term Maximum Permissible Levels	
		Maximum Permissible Levels	Averaging Time	Maximum Permissible Levels	Averaging Time
18	Antimony (Sb) and its compounds	75 µg/m ³ of total Sb in free and combined form	30 minutes	Sb and its compounds	75 µg/m ³ of total Sb in free and combined form
19	Beryllium (Be) Compounds	0.01 µg/m ³	24 hours		
20	Lead (Pb)	10 µg/m ³ of total Pb in free and combined form	30 minutes	1.5 µg/m ³ 0.5 µg/m ³	3 months 1 year
Organic Substances					
21	Biphenyl (C ₆ H ₅) ₂	60 µg/m ³	1 hour		
22	Carbon disulfide (CS ₂)	330 µg/m ³	24 hours		
23	Ethylbenzene (C ₆ H ₅ C ₂ H ₅)	1000 µg/m ³	24 hours		
24	Formaldehyde (CH ₂ O)	65 µg/m ³	24 hours		
25	Mercaptan (as Methyl Mercaptan- CH ₃ SH)	20 µg/m ³	1 hour		
26	Polychlorinated Biphenyls (PCBs)	0.15 µg/m ³	24 hours	0.035 µg/m ³	1 yr
27	Xylenes (C ₆ H ₄ (CH ₃) ₂) (isomers and mixture)	2300 µg/m ³	24 hours		
28	Total Dioxin and Furans	0.5 pg TEQ/m ³	24 hours		

"PM₁₀" means Particulate Matter with an aerodynamic diameter of less than 10 µm;

"PM_{2.5}" means Particulate Matter with an aerodynamic diameter of less than 2.5 µm;

"ng" means nanogram or one-billionth of a gram which is expressed as 1 x 10⁻⁹ grams in scientific notation; and

"pg" means picogram or one-trillionth of a gram which is expressed as 1 x 10⁻¹² in scientific notation.

SCHEDULE 2
(Rules 2,10,13,19,25,37,42)
STACK RELEASE LIMITS

NO.	SUBSTANCE/PARAMETER	MAXIMUM PERMISSIBLE LIMITS mg/Nm ³
Particulate Substance		
1	Particulate matter	100 mg of particulate matter in each normal cubic metre of residual gases, (adjusted to a basis of 12 % CO ₂ for air emissions from fuel-burning equipment, if required by the specified test method)
Physical Parameter		
2	Opacity	20 % ¹
Non-Metallic Inorganic Substances		
3	Sulfur dioxide (SO ₂)	1000
4	Oxides of nitrogen (NO _x)	500 as NO ₂
5	Carbon monoxide (CO)	1000
6	Sulfuric acid (H ₂ SO ₄) mist or sulfur trioxide (SO ₃)	100 as SO ₃
7	Hydrogen sulfide (H ₂ S)	15
8	Ammonia (NH ₃)	50
9	Fluorine (F) and its compounds	5 as hydrogen fluoride (HF); or 5 as total fluoride
10	Acids and acid gases, as hydrogen chloride (HCl)	10 as HCl
11	Chlorine (Cl) and its compounds	5 as Cl
Metallic Inorganic Substances		
12	Lead (Pb) and its compounds	0.5 as Pb
13	Antimony (Sb) and its compounds	5 as Sb
14	Arsenic (As) and its compounds	0.8 as As
15	Cadmium (Cd) and its compounds	0.05 as Cd
16	Mercury (Hg) and its compounds	0.05 as Hg
17	Heavy metals (other)	5 as heavy metals (other)
Organic Substances		
18	Volatile Organic Compounds (VOCs)	20 as VOCs
19	Dioxins	0.2 ng TEQ/Nm ³ ²
20	Furans	0.2 ng TEQ/Nm ³

In order to calculate a TEQ, a toxic equivalent factor (TEF) is assigned to each member of the dioxin and dioxin-like compounds category. The TEF is the ratio of the toxicity of one of the

For the purposes of Schedule 2 -

¹ Opacity is to be measured by averaging opacity over any six-minute period.

² Toxic Equivalent (TEQ) is a calculated value that allows comparisons of the toxicity of different combinations of dioxins and dioxin-like compounds. The two most toxic compounds in the dioxin and dioxin-like compounds category are the comparison points. For example, a mixture weighing 10 g with a TEQ of 5 g would be as toxic as 5 g of either of those compounds.

SCHEDULE 2—Continued

STACK RELEASE LIMITS—Continued

Compounds in this category to the toxicity of the two most toxic compounds in the category, that is, 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin (commonly referred to as dioxin) and 1, 2, 3, 7, 8-pentachlorodibenzo-p-dioxin, which are assigned a TEF of 1. TEFs that have been established through international agreements currently range from 1 to 0.0001.

A TEQ is calculated by multiplying the actual grams weight of each dioxin and dioxin-like compound by its corresponding TEF (e.g., 10 grams \times 0.1 TEF = 1 gram TEQ) and then summing the results. The number that results from this calculation is referred to as grams TEQ.

For example, consider the following 60g mixture:

10 g of compound A, with a TEF of 1
20 g of compound B, with a TEF of 0.5
30 g of compound C, with a TEF of 0.2

The TEQ of this mixture would be –

$$(10 \text{ g} \times 1) + (20 \text{ g} \times 0.5) + (30 \text{ g} \times 0.2) = 26 \text{ g TEQ}$$

This mixture of 60 g of various compounds would be as toxic as 26 g of either of the two most toxic compounds.

Sampling and analysis to determine compliance with the standards listed in Schedules 1 and 2 shall be in accordance with such methods as are approved by Authority.

SCHEDULE 3
DESIGNATED ACTIVITIES

(Rule 2)

Category	Activity	Description
1. Food and Agriculture	(a) Farming activities on more than 40 ha of land	Aerosol application of pesticides and herbicides
	(b) Commercial Food, Beverage and Agriculture Processing	(i) Beer and Stout (ii) Rum and Other Spirits (iii) Fish Processing of more than 500 kg per day (iv) Milling Operations (v) Rendering Plants (vi) Sugar Manufacturing (vii) Oil and Fat Manufacturing (viii) Miscellaneous Food, Beverage and Agriculture processing of more than 500 kg per day
	(c) Commercial and Institutional Food Preparation	Use of equipment that produces grease, vapours, steam, fumes, smoke or odours
2. Stationary Fuel Combustion	Consumption of Fossil Fuel in Equipment at fixed facilities	(i) Commercial/Industrial/Institutional Electricity Generation (ii) Commercial Vehicle Repair and Storage Yards (iii) Transport Terminals (sea ports, airports, bus and rail terminals) (iv) Industrial Boilers
3. Wood Products	(a) Pulp and Paper	Pulp and Paper Production
	(b) Wood	(i) Plywood/Particle Board Manufacturing (ii) Commercial Wood Treatment (iii) Commercial Wood Working and Furniture Manufacturing (iv) Saw Milling
4. Petroleum and Related Industries	(a) Oil and Gas	(i) LNG Processing (ii) LPG Processing (iii) Lube Oil Manufacture (iv) Natural Gas Processing (v) Oil and Natural Gas Production (vi) Petroleum Refineries (vii) Waste Oil Refineries (viii) Fuel storage and transfer facilities (ix) Oil and Natural Gas Tank Farms (x) Bio-Fuel Production
	(b) Petrochemicals	Petrochemical Production
	(c) Vehicle Service Stations	Dispensing of Fuel
5. Chemical Products Industries	(a) Fibers Production	(i) Acrylic Fibers/Modacrylic Fibers Production (ii) Rayon Production (iii) Spandex Production

SCHEDULE 3—Continued
DESIGNATED ACTIVITIES—Continued

	Category	Activity	Description
		(b) Mineral Products	(i) Alumina Processing (ii) Production of Asphalt and Asphalt Products (iii) Ceramics Manufacture (iv) Chromium Refractories Production (v) Clay Products Manufacturing (vi) Concrete Batch Plants (vii) Concrete Blocks and Tiles (viii) Portland Cement Manufacturing (ix) Taconite Iron Ore Processing (x) Fiberglass Manufacturing and Processing (xi) Quarries (xii) Sand and Aggregate Stockpiling (xiii) Manufacture of Glass, Stone, Gypsum, Concrete or Plaster Products
		(c) Chemical Production	Organic Chemicals Production and Processes (inclusive of photographic chemicals, glass and explosives production and pharmaceutical processing)
		(d) Synthetic Organic Chemical Manufacture	Manufacture of Synthetic Organic Chemicals
6.	Metal Processing	(a) Ferrous Metals	(i) Coke By-Product Plants (ii) Direct Reduced Iron (iii) Ferroalloys Production (iv) Integrated Iron and Steel Manufacturing (v) Iron Carbide Production (vi) Iron Foundries (vii) Non-Stainless Steel Manufacturing - Electric Arc Furnace (EAF) Operation (viii) Roofing Sheets Manufacture (ix) Stainless Steel Manufacturing - Electric Arc Furnace (EAF) Operation (x) Steel Foundries (xi) Steel Mills (xii) Steel Pickling - HCl Process (xiii) Iron Sintering (xiv) Steel Manufacturing
		(b) Non-Ferrous Metals	(i) Lead Acid Battery Manufacturing (ii) Metal Foundries, Fabricators and Assembly (iii) Primary and Secondary Aluminium Production (iv) Primary and Secondary Copper Production Primary and Secondary Lead Smelting (v) Primary Magnesium Refining (vi) Secondary Zinc Production

SCHEDULE 3—Continued
DESIGNATED ACTIVITIES—Continued

	Category	Activity	Description
7.	Health Sector	Processes related to the Health Services Sector	(i) Crematoriums and Cremation Sites (ii) Medical Waste Incineration
8.	Polymers and Resins	Manufacture of Polymers and Resins	(i) Polymer and Resin Production (ii) Polymer and Resin Reconstitution
9.	Inorganic Chemical Manufacturing	(a) Manufacture of Inorganic Chemicals	(i) Ammonium Sulfate (NH ₄ SO ₄) Production (ii) Antimony Oxides Manufacturing (iii) Bleach Manufacture (iv) Chlorine Production (v) Chromium Chemicals Manufacturing (vi) Fume Silica Production (vii) Acid Production (such as Hydrochloric, Sulfuric, Nitric and Phosphoric acids-HCl, H ₂ SO ₄ , HNO ₃ , H ₃ PO ₄) (viii) Hydrogen Fluoride (HF) Production Paint and Dyes Manufacture (ix) Phosphate Fertilizers Production (x) Production of Matches (xi) Quaternary Ammonium Compounds Production (xii) Cyanide Chemicals Manufacturing [such as Sodium Cyanide (NaCN), Hydrogen Cyanide (HCN), Cyanuric Chloride (CNCI) ₃] (xiii) Pharmaceutical processing
		(b) Storage and Distribution of Inorganic Chemicals	Storage and Transfer Facilities
10.	Industrial Cooling	Use of industrial Cooling Equipment	Industrial Cooling Tower
11.	Industrial/ Commercial Electroplating	Metal Coating	(i) Chromic Acid Anodizing (ii) Decorative Chromium Electroplating (iii) Hard Chromium Electroplating (iv) Industrial Gases Processing
12.	Industrial/ Commercial Cleaning	(a) Solvents Use	(i) Dry Cleaning Machines (ii) Commercial Sterilization Facilities (iii) Halogenated Solvent Cleaners
		(b) Abrasive Cleaning	Sandblasting Facilities
13.	Coating	Surface Coatings	(i) Manufacture of Industrial/ Commercial surface coating (ii) Auto body Garages and Commercial Aerosol Paint Application Facilities (iii) Commercial Printing

SCHEDULE 3—Continued
DESIGNATED ACTIVITIES—Continued

	Category	Activity	Description
14.	Waste Handling	Waste Treatment and Disposal	(i) Waste Incineration including Cement Kilns burning Waste (ii) Municipal Sewage Treatment Plants (iii) Solid Waste Treatment, Storage and Disposal Facilities (TSDf) (iv) Waste to Energy Facilities
15.	Laboratories	Laboratory Operations	Industrial Commercial and Tertiary Education Laboratory Operations

Dated this 19th day of December, 2014.

G. SINGH
*Minister of the Environment and
Water Resources*