

Extraordinary



Federal Republic of Nigeria Official Gazette

No. 65

Abuja-14th October, 2009

Vol. 96

Government Notice No. 286

The following is published as Supplement to this *Gazette* :

| <i>S. I. No.</i> | <i>Short Title</i> | <i>Page</i> |
|------------------|---|-------------|
| 33 | National Environmental (Food, Beverages and Tobacco Sector) Regulations, 2009 | B 1211-1248 |

Printed and Published by The Federal Government Printer, Abuja, Nigeria
FGP 106/102009/1,000 (OL 59)

Annual Subscription from 1st January, 2009 is Local : N15,000.00 Overseas : N21,500.00 [Surface Mail] N24,500.00 [Second Class Air Mail]. Present issue N500.00 per copy. Subscribers who wish to obtain *Gazette* after 1st January should apply to the Federal Government Printer, Abuja for amended Subscriptions.

**NATIONAL ENVIRONMENTAL STANDARDS AND
REGULATIONS ENFORCEMENT AGENCY
(ESTABLISHMENT) ACT, 2007**

**NATIONAL ENVIRONMENTAL (FOOD, BEVERAGES AND
TOBACCO SECTOR) REGULATIONS, 2009**



ARRANGEMENT OF REGULATIONS

REGULATIONS

PART I

1. Environmental Governance
2. Planning
3. Emergency Response Plan
4. Installation of Anti Pollution Equipment
5. Polluter Pays Principle
6. Best Practices
7. Pollution Control Organisational System
8. Buy back or Extended Products Stewardship Programme
9. Chemical Usage
10. Banned or Restricted Chemicals
11. Permit
12. Management of Oil Station and Fuel Dumps Site
13. Equity
14. Community Relations
15. Effluent Limitation Standard
16. Restriction on the release of Toxic Effluent
17. Treatment of Effluent
18. Sludge Disposal Standards
19. Emission
20. Emission Control

- 21. Treatment Technologies
- 22. Noise Standards
- 23. Noise Abatement
- 24. Hearing Conservation Program
- 25. Noise Monitoring

PART II—SAMPLING PROCEDURES

- 26. Collection and Analysis of Samples
- 27. Spot Sampling for Physical or Chemical Parameters
- 28. Composite Sampling for Physical or Chemical Parameters
- 29. Sampling for Licence Classification
- 30. Sampling for other Parameters
- 31. Sampling for Microbiological Analysis
- 32. Air Sampling for Analysis
- 33. Noise Measurements

PART III—PERMITS (GENERAL PROVISION)

- 34. Procedures for Licensing and Permit

PART IV—INDUSTRIAL EFFLUENT OR AIR EMISSION
MONITORING AND REPORTING

- 35. Reporting Requirements
- 36. Authorized Signatory
- 37. Monitoring Records
- 38. Fees
- 39. Confidential Information and Public Access to Records

PART V—ENFORCEMENT

- 40. Duty of the Agency to Ensure Compliance with Conditions
- 41. Enforcement Notices
- 42. Enforcement Notice Reminder
- 43. Suspension of Permit

PART VI—OFFENCES

44. Contravention of Permit Condition
45. False Statement
46. Failure to comply with Abatement Measures
47. Failure to Report
48. Discharge of Effluent Beyond Permissible Level

PART VII—PENALTY

49. Penalty

PART VIII—INCENTIVES

50. Recognition for Environmental Leadership
51. Performance Criteria and Rating
52. NESREA Compliance Award
53. NESREA Green Mark

PART IX—INTERPRETATION, ETC

54. Interpretation
55. Citation.

SCHEDULES

S. I. 33 of 2009

**NATIONAL ENVIRONMENTAL STANDARDS AND
REGULATIONS ENFORCEMENT AGENCY
(ESTABLISHMENT) ACT, 2007**

**NATIONAL ENVIRONMENTAL (FOOD, BEVERAGES AND
TOBACCO SECTOR) REGULATIONS, 2009**

In exercise of the powers conferred on me by Section 34 of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007 and all other powers enabling me in that behalf, I, JOHN ODEY, Minister of Environment hereby make the following Regulations :

[30th September, 2009]

1. The purpose of these Regulations is to prevent and minimize pollution from all operations and ancillary activities of Food, Beverages and Tobacco Companies to the Nigerian environment.

Commence-
ment .
Environ-
mental
Governance.

2.—(1) Every Company shall submit to the Agency—

Planning.

(a) Environmental Impact Statement (EIS) for new industries and major developmental projects before commencement of operations.

(b) Environmental Audit Report (EAR) for existing industries every 3 years.

(c) Environmental Management Plan (EMP) as contained in Schedule IX.

Schedule IX.

(2) Companies and investments in the sector shall apply up-to-date, cost effective, efficient cleaner technologies to minimize pollution to the highest degree practicable.

(3) The National Standards for effluent or emission limitations represent minimum standards and different effluent standard shall be required based on the condition of the receiving medium.

(4) Industries emphasis on environmental planning shall be to prevent or reduce or eliminate pollutants at source and less emphasis shall only be placed on external hardware, which are end-of-pipe mechanisms.

(5) Every Company shall reduce the amount of packaging material used and the use of the three 'Rs' namely 'Reuse, Recover and Recycle shall be strictly enforced.

Emergency
Response
Plan.

Emergency
Response
Plan.

3.—(1) Every Company shall plan and set up machinery for combating pollution hazard and maintain equipment in the event of an emergency.

2. Every Company shall for the purposes of sub-regulation 1 of this regulation, have an emergency plan and a stock of pollution response equipment which shall be readily accessible and available to combat pollution hazards in the event of accidents such as accidental discharges as specified in Schedule VIII to these Regulations.

Schedule
VIII.

3. The owner or operator of a facility shall prepare an emergency response plan that describes the measures to be taken in respect of the discharge of deleterious substance ; to prevent any deposit or discharge out of the normal course of events of such substance and to mitigate the effects of such a deposit or discharge. The emergency response plan shall include such details as stated in Schedule VIII to these Regulations.

Installation
of anti-
pollution
equipment.

4.—(1) Every Company shall install anti-pollution equipment for the detoxification of effluent and emission emanating from it so as to meet the prescribed effluent and emissions standard.

(2) The installation of anti-pollution equipment made pursuant to sub-section 1 of this section shall be based on the Best Available Technology (BAT) or the Best Practicable Technology (BPT).

Polluter Pays
Principle.

5.—(1) The Polluter-Pays-Principle shall apply to every company that pollutes.

(2) The collection, treatment, transportation and final disposal of wastes shall be the responsibility of the company generating the wastes within the specified standards and guidelines.

(3) In the event of an incident resulting in an adverse impact on the environment whether socio-economically or health wise, the company shall be responsible for—

- (a) the cost of damage, assessment, control and clean-up ;
- (b) remediation ;
- (c) reclamation or restoration ;
- (d) compensation to affected parties ; and
- (e) cost of damage assessment and control.

Best
Practices
Schedule VI.

6.—(1) Implementation of cleaner production processes and pollution prevention measures must be employed to yield economic, social and environmental benefits as specified in Schedule VI to these Regulations.

(2) Pollution prevention programmes shall focus on reduction of use of water and more efficient use of process chemicals.

(3). All recyclable, damaged and disused packaging materials such as glass, plastics, metals, paper, wood, nylon, etc., shall be recycled.

7.—(1) Each Company shall put in place organizational system for pollution control, assign environmental Pollution Control Manager (PCM) to oversee pollution control and prevention duties. The organisational system shall be as described in Schedule XI to these Regulations.

Pollution
Control
Organisational
System.
Schedule XI.

(2) In addition to capacity building schemes, lecture courses and assessments shall be conducted to help environmental pollution control managers and operators to obtain required qualifications and certification by the Agency as prescribed in Schedule XI to these Regulations.

8.—(1) All manufacturers and importers of various brands of products shall establish a Buy Back Programme for bottles and other packagings for products and subscribe to an extended products stewardship programme as stated in Schedule X to these Regulations.

Buy Back
and extended
Products
Steward-
ship.
Schedule X.

(2) The Agency shall work with the sector to achieve this Buy Back Programme within a period of three years.

9.—(1) Every Company shall submit to the nearest office of the Agency the following information—

Chemical use.

(a) a list of the chemicals used in the manufacture of its products ;

(b) details of stored chemicals and storage conditions.

(c) a list of obsolete or abandoned chemicals and the proposed plan for their environmentally sound management.

(2) Every Company shall ensure that the use of—

(a) organic solvents are minimized ;

(b) ozone-depleting substances are in accordance with the provisions of the National Environmental (Ozone Layers Protection) Regulations made pursuant to the NESREA Act.

10. Use of restricted chemicals must be with a permit from the Agency as clearly stated in the National Environmental (Chemicals, Pharmaceuticals, Soap and Detergent Manufacturing Industries) Regulations, made pursuant to the NESREA Act.

Banned or
Restricted
Chemicals.

11.—(1) All permits (notices, order, consent or demand) shall be in writing

(2) No company shall—

(a) discharge or cause to be discharged any effluent, or oil in any form into water system, public drains, or underground injection or land without a permit from the Agency ;

(b) release hazardous or toxic substances into the water or land or air of Nigeria's ecosystem beyond the permissible limits as set out in Schedule I to these Regulations.

(3) Application for a permit is as set out in Part 3 to these Regulations.

(4) The permit forms shall be as set out in Schedule XIII to these Regulations or as specified by the Agency.

Management of oil station and fuel dumps site.

12.—(1) There shall not be contamination arising from leakage of surface or underground oil or fuel or chemicals storage tank likely to cause pollution of the environment including surface water and groundwater.

(2) A company shall have an impermeable base for any ancillary equipment and provide an appropriate bund wall in the event of any unanticipated discharge or spillage.

Equity.

13. Every Company shall be given equal treatment without preference as far as inspection and enforcement of relevant laws are concerned.

Community Relations.

14. Every Company shall have a sustainable community relations programme.

EFFLUENT

Effluent Limitation Standard Schedule I.

15.—(1) The National Environmental Standards in relation to effluent limitations for the environment shall be as set out in Schedule I to these Regulations.

(2) Any effluent shall be deemed to be non-compliant and polluted if—

(a) the concentration of any of its parameters exceeds the permissible limits as specified in the first column of Schedule I to these Regulations;

(b) it does not comply with the corresponding limit specified in the second or third column of Schedule I to these regulations, as the case may be ;

(c) it is discharged from a facility without pre-treatment.

(3) Such an effluent as mentioned in sub-regulation (2) of this regulation shall not be discharged from a company, without pre-treatment to national standard set out in Schedule I to these Regulations.

16.—(1) No Company shall discharge effluent onto land, into a watercourse or into a water body unless the company ensures that the parameters of the effluent do not exceed the permissible limits set out under Schedules I and IV to these Regulations.

Restriction
on the
release of
Toxic
Effluent
Schedules I
and IV.

(2) Notwithstanding sub-regulation (1) of this regulation, no company shall discharge or cause to be discharged any effluent into a water system used or earmarked as source of portable water supply.

(3) Notwithstanding sub-regulation (1) of this regulation, any company using an influent, the limits of concentration or value of any of the parameters of which exceeds the permissible limit for that parameter set out in Schedule I to these Regulations shall ensure that the concentration or value of the parameters of the effluent conforms to the prescribed standard.

17.—(1) Companies that discharge effluent into the environment shall treat the effluent to the permissible level as specified in Schedule I to these Regulations, to ensure assimilation by the receiving medium.

Treatment
of effluent.

(2) Every company shall :

(a) carry out effective treatment all the time that the plant or unit is operating.

(b) ensure environmentally sound management of sludge containing heavy metals or other toxics and dispose same in a landfill or designated disposal site as approved by the Agency.

(c) ensure the treatment and disposal of toxic organics contained in both effluent and sludge in a manner approved by the Agency.

(d) No company shall dilute effluent to achieve the standards contained in Schedule I to these Regulations.

(3) Treated effluent should be trihalomethanes-free.

(4) Granular Activated Carbon (GAC) or any other approved material shall be used to eliminate chlorine and trihalomethanes in water processing.

(5) Wastes that contain toxic organics shall be subjected to thermal treatment to effectively destroy or remove over 99.99% of toxic organics and the resulting residue shall be disposed of in an environmentally sound manner as prescribed by the Agency.

Sludge
Disposal
Schedule II.

18.—(1) No facility shall discharge sludge directly into any water body and any discharge to any part of the environment is prohibited except under a sludge disposal licence.

(2) Sludge disposed of onto land shall be classified and none of its components shall exceed the prescribed limit in Schedule II to these Regulations.

(3) Any other sludge beside purely domestic (organic) sludge and purely agricultural (organic) sludge will be treated as hazardous waste if it contains hazardous substances.

(4) Hazardous Sludge shall be treated and disposed off in a secure landfill approved by the Agency.

EMISSIONS

Emission
Standards
Schedule III.

19.—(1) Every Company shall comply with the prescribed Emission Standards in Schedule III to these Regulations.

(2) The Company shall be required to quantify and report sources and emissions data and also undertake emission reduction and implementation plan which shall be reviewed every three years by the Agency.

Emission
Control
Schedule III.

20.—(1) A Company with any source or potential source may be required, to measure the emission of every priority air pollutant emitted there from and to develop and implement a plan to control such emission in accordance with the standards as prescribed in schedule III to these Regulations.

(2) Any Company that causes or allows the generation of any odour from any source, that unreasonably interferes, or is likely to unreasonably interfere, with any other person's lawful use or enjoyment of his property shall use recognized best practices and procedures to reduce such odour to a reasonable minimum level, including any method for reducing odour as may be specified by the Agency.

(3) No Company shall burn, or permit to be burned, light fuel oil containing over 0.5% sulphur by weight as fired in an existing source or in a new source.

(4) No Company shall burn, or permit to be burned, medium fuel oil containing over 1.1% sulphur by weight as fired.

(5) Notwithstanding, heavy fuel oil with no more than 3% sulphur may be burned at a new or existing facility with new fuel combustion sources or a combination of new and existing fuel combustion sources if :

(a) one or more of such sources operate so that sulphur dioxide is absorbed by virtue of coming in contact with a product or with a scrubbing device or other material ; and

(b) the actual total sulphur dioxide emissions from the entire company facility are less than the allowable sulphur dioxide emissions.

21.—(1) A Company which discharges gaseous emission shall treat it to the permissible level as prescribed in Schedule III to these Regulations.

Treatment
Technologies
Schedule III.

(2) Treatment can be achieved through the use of appropriate treatment technologies for minimizing the release of significant pollutants to the air, these include :

(a) stack gas scrubbing, carbon absorption or combustion (for toxic organics),

(b) bag houses (for particulate matter removal)

(c) biological filters.

(d) cyclone or any other appropriate technology.

NOISE

22. Every Company shall evaluate its installations and ensure that routine controls are sufficient to prevent risks of noise pollution.

Noise
Standards.

23. Noise abatement measures must be in place to achieve either the levels prescribed in Schedule V to these Regulations or a maximum increase in background levels of 3 decibels (measured on the A scale) [dB(A)].

Noise
Abatement.

24.—(1) Every Company shall administer a continuing, effective hearing conservation program, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 90 decibels measured on the A scale (slow response) or, equivalent to a dose of fifty percent.

Hearing
Conservation
Program.

(2) For purposes of the hearing conservation program, employee noise exposures shall be computed, regardless of the provision and the use of Personal Protective Equipment.

(3) An 8-hour time-weighted average of 90 decibels shall be referred to as the action level.

Noise
Monitoring.

25. Monitoring shall be repeated whenever a change in production, process, equipment or control, increases noise exposures to the extent that :

- (i) additional employees may be subjected to risk at the action level ; or
- (ii) the attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet requirements of paragraph (i) of this regulation.

PART II—SAMPLING PROCEDURES

Collection
and Analysis
of Samples.

26. For the purposes of determining licence classification and licence compliance, the company shall examine samples according to standard analytical methods in a laboratory accredited by the Agency and Ministry of Environment.

Spot
Sampling
for Physical
or
Chemical
Parameters.

27. A spot sample for the purpose of analysis for all the tests including oil and grease, dissolved oxygen, pH, chlorine and sulphide shall be taken as follows :

(a) the whole sample volume is to be taken at one time, at the point of discharge or, if the discharge has stopped, at the nearest practicable point within one kilometre upstream and downstream of the point of discharge ;

(b) the sample shall be analysed immediately after collection where possible but not later than 24 hours after taking the sample, and the whole sample volume shall be used.

Composite
Sampling for
Physical or
Chemical
Parameters.

28. A composite sample for the purpose of analysis for all tests other than those for temperature and pH shall be taken by combining individual samples as follows :

(a) a minimum of five samples of equal volume of not less than 500 ml each shall be taken at the point of discharge or, if the discharge has stopped, at the nearest practicable point within one kilometre upstream and downstream of the point of discharge, at approximately equal intervals of time over a minimum period of four hours within any 24 hours period ;

(b) two of the composite samples, collected when the discharge has been stopped, will be used to prove the source and extent of pollution ;

(c) the samples shall be kept as cool as at site conditions licence and such sample analysis shall commence not later than 24 hours after taking the last sample ;

(d) where the discharge has stopped or is intermittent, two grab samples shall be collected at the nearest practicable point within one kilometre upstream and downstream each of the point of discharge.

29. The whole volume of spot sample and for further laboratory analysis shall be taken at one time at the point of discharge.

Sampling for
Licence
Classification.

30. If full laboratory facilities do not exist on the site, or in the absence of a calibrated Dissolved Oxygen (DO) meter, the oxygen in the sample may be "fixed" at the time of sampling by adding any of the following reagents ; 1 ml of manganese (II) sulphate followed by 1 ml of alkali-iodide-azide solution, (alkaline azide reagent, sulphuric acid, permanganate, oxalate, manganous sulphate and alkaline iodide) or any other approved scientific method :

Sampling for
other
Parameters.

Provided that :

(a) the stopper of the sample container shall be replaced and the solution shall be well mixed by shaking ;

(b) the remaining steps shall be carried out later in the laboratory.

31.—(1) When a number of samples for different purposes are to be taken from the same sampling point, the following precautions are to be observed :

Sampling
for
Microbio-
logical
analysis.

(a) the sample for bacteriological examination shall be collected first unless special investigations are necessary ;

(b) samples for bacteriological examination shall be kept strictly separate from all others to avoid contamination ;

(c) boxes for the transportation of samples shall be made of materials that can be disinfected regularly, and they shall not be used for carrying anything other than samples of water for bacteriological examination ;

(2) Sterile bottles used exclusively for bacteriological purposes that are fit for immediate use shall be provided by the laboratory performing the examination.

(3) Officers must ensure that the volume of each sample is at least 500 ml, and that at least one sample is taken at each sampling point.

Air
Sampling for
Analysis.

32. Measurements of air quality parameters shall take place at any Company, downwind and upwind as listed below :

(a) measurement of total suspended particulate shall be by gravimetric method using air sampler or by any other recommended scientific method such as —

(i) a minimum of two sampling periods (both 1-hour and 8-hours) shall be adopted ;

(ii) the heavy metals level of total suspended particulate shall be determined using any referenced standard method using atomic absorption spectrometer.

(b) gaseous pollutants shall be measured by passive sampling, active sampling or continuous sampling such as :

(i) passive sampling method shall require the submission of analysis certificate along with results and a minimum of three sampling periods (1-hour, 24-hours and 30-days) shall be adopted.

(ii) active sampling for NO_x shall use the Saltzman or any other recommended standard method.

(iii) active sampling for SO_2 shall use the West-Gaecke, hydrogen peroxide or conductimetry or any other recommended standard method.

(iv) active sampling for hydrocarbons shall use the adsorption on activated charcoal method.

(v) continuous sampling of any gaseous air pollutant shall use instrument with detection range accommodating the maximum allowable limit of measured parameter and such measurement shall last for at least 1 hour in every sampling location.

Noise
Measure-
ments :

33.—(1) Noise levels shall be measured with instrument having both A and C weighting, a resolution not more than 0.1 dB and fast or slow responses.

(2) Measurement shall be taken at least 3 metres from any barrier or other sound reflecting sources, at about 1.2 – 1.5 metres above ground level or working platform and shall last for at least 10 seconds.

(3) Daytime (07:00 – 22:00) and night time (22:00 – 7:00) measurements shall be taken at the fence line of any company.

PART III—PERMITS (GENERAL PROVISION)

Permits.

34. Procedure for application for permit including revocation of such permit when it has already been issued, are contained in the Permitting and Licensing System Regulations, 2009.

PART IV.—INDUSTRIAL EFFLUENT MONITORING AND REPORTING

35.—(1) The Permit holder subject to categorical standards, shall comply with reporting requirements under the Agency's Permit including Incidence Report and Monthly Effluent Data Sheet by submitting these documents to the Agency's Field Offices.

Reporting
Require-
ments.

(2) The Permit holder must submit to the Agency at least quarterly, on dates specified, a description of the nature, concentration and flow of the pollutants in the Monthly Effluent Data Sheet required to be reported.

(3) The report shall be based on sampling analysis performed in the period covered by the report. All reporting shall be in compliance with the format prescribed in Schedule XIII to these Regulations.

(4) The Permit holder shall report all sample results for parameters listed on the Effluent Limitations and Monitoring Requirement, on the Industrial or Commercial Discharge Monitoring Report forms prescribed in Schedule XIII to these Regulations.

Schedule
XIII.

(5) The Permit holder shall install (at its own cost) monitoring equipment approved by the Agency to facilitate the accurate observation, sampling and measurement of the quality of waste discharges as required by the permit. Such equipment shall be in working order and kept safe and accessible at all times. Whether owned by public or private organisation, such monitoring equipment shall be according to the specifications given by the Agency and other applicable construction standards. Plans and specifications for such work shall be submitted to the Agency, for review and comments before construction.

(6) The Permit holder discharging or proposing to discharge effluent to a general sewer or treatment plant shall maintain the following :

- (a) records of production ;
- (b) water consumption and discharge flow records ;
- (c) complete monitoring records as specified in these Regulations ;
- (d) process monitoring records ;
- (e) incident reports ;
- (f) waste handling records, and any other records necessary to demonstrate compliance with these Regulations.

(7) The Permit holder shall be required to file reports with the Agency if the permit holder :

(a) in any month commits a serious violation or fails to submit a completed Monthly Effluent Data Sheet ;

(b) exceeds an effluent limitation for the same pollutant at the same discharge point source by any amount for four out of six consecutive months ; and

(c) has discharges that could cause problems to the environment, including any sludge loadings.

Authorized
Signatory.

36.--(1) The Permit holder shall sign the report and attach a copy of the Certificate of analysis from the Agency's accredited laboratory.

(2) Each report must be signed by the appropriate officer as follows :

(a) a responsible corporate officer, if the Permit holder submitting the reports is a corporation.

(b) for the purpose of this paragraph, a responsible Corporate Officer means Chief Executive or Managing Director or Chairman of the corporation in charge of a principal business function or any designated person who performs similar policy or decision making functions for the corporation.

(3) All reports shall include the following certification statement :

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information herein submitted is, to the best of my knowledge and belief, true, accurate, and complete."

Monitoring
Records.

37. Such records shall be made available to the Agency, and shall be retained for a minimum of five (5) years and throughout the course of any pertinent litigation thereafter.

38.—(1) The Agency shall adopt charges and fees that shall include— Fees.

(a) fees for processing application for permit ;

(b) fees for reviewing discharge permits, prevention procedures and construction ;

(c) other fees as the Agency may deem necessary to carry out the requirements contained herein which may include emergency incident response and cost of personnel and equipment.

(2) These fees relate only to the matters covered by these Regulations and are separate from all other fees chargeable by the Agency and subject to review.

39. Public access shall also be governed by the Act. Effluent constituents and characteristics, however, shall not be recognized as confidential information.

Confidential Information and Public Access to Records.

PART III—ENFORCEMENT

40.—(1) The Agency has the primary responsibility of enforcing all applicable pre-treatment standards and requirements. On the basis of any information available to it, the Agency may take any enforcement action at any time as appropriate.

Duty of the Agency to ensure Compliance with Conditions.

(2) While a permit is in force it shall be the duty of the Agency to take such action under these Regulations as may be necessary for the purpose of ensuring that the conditions of the permit are complied with.

41.—(1) An enforcement notice shall be served if the Agency is of the opinion that a company has contravened, is contravening or is likely to contravene any condition of the permit.

Enforcement notices.

(2) An enforcement notice shall—

(a) specify the matters constituting the contravention or the matters making it likely that the contravention will arise, as the case may be ;

(b) specify the steps that must be taken to remedy the contravention or to remedy the matters making it likely that the contravention will arise, as the case may be ; and

(c) specify the period within which those steps must be taken.

(3) Sub-regulation 2 of this regulation shall apply whether or not the particular manner of operating the facility in question, is regulated by or contravenes a condition of the permit.

Enforcement
notice
Reminder.

42.—(1) Failure to comply with enforcement notice issued pursuant to regulation 41 sub-regulation 2 of this Regulations, within the specified period, a second notice shall be served.

(a) Failure to comply with the second notice (reminder) within the specified time limit will lead to the issuance of a suspension notice or any other punitive action as may be necessary.

(b) Enforcement notice shall be delivered by registered post or courier, hand delivery, newspaper publication or pasted at the registered premises of the organization.

Suspension
of permit.

43.—(1) Where a suspension notice is served under these Regulations the permit shall, on the service of such notice cease to have effect as stated in the notice.

(2) The Agency may withdraw a suspension notice after compliance by hand delivery or registered post.

PART VI—OFFENCES

Contravention
of Permit
condition.

44.—(1) It is an offence for a company to—

(a) fail to comply with or to contravene a condition of a permit ;

(b) fail to comply with the requirements of an enforcement notice, or a closure notice under these Regulations.

(c) fail without reasonable excuse, to comply with any requirement imposed by a notice served by the Agency.

False
Statement.

45.—(1) It shall be an offence for a company to make a statement which is known to be false or misleading particularly, where the statement is made :

(a) in purported compliance with a requirement to furnish any information imposed by or under any provision of these Regulations ;

(b) for the purpose of obtaining a permit for the company for variation, transfer or surrender of a permit ;

(c) to intentionally make a false entry in any record pertaining to the permit ; or

(d) with intent to deceive, to forge or use a document issued or authorized to be issued under a condition of a permit or required for any purpose under a condition of the permit.

(2) It shall be an offence to make a statement or have in possession a document that is likely to mislead or deceive the Agency.

Failure to
comply
with
Abatement
Measures.

46. —(1) It shall be an offence if a company fails to—

(a) take reasonable measures to remove or otherwise treat and dispose of any effluent to minimize adverse effects ;

(b) take measures required by the Agency after unauthorized release of effluent ;

(c) remediate the environment to the standard prescribed by the Agency ;

(d) furnish all information to the inspector ;

(e) remove equipment or contain materials causing release into the environment from place when requested by inspector ;

(f) produce document when requested by the inspector ;

(g) comply with the guidelines with respect to the handling, storing and transport of any effluent ;

(h) Ensure the use of Personnel Protective Equipment (PPE) while handling, storing, treating or disposing of effluent ;

(2) It shall be an offence if a company—

(a) handles effluent in a manner which causes adverse effect to human and the environment ;

(b) knowingly obstructs the inspectors from performing their duties ;

(c) dismisses or suspends or sanctions an employee who reports contravention of the Act ;

(d) impose penalty on employee who reports cases of contravention of the Regulations to the Agency ;

(e) transports, any effluent and sludge which is not covered by a manifest ;

(f) transports effluent and sludge which is not completely enclosed, covered and secured ;

(g) transports effluent and sludge in bulk without prior authorization from the Agency.

47. It shall be an offence if a company fails to—

(a) maintain records of all discharges ;

(b) file quarterly and annual reports of all discharges.

48. It shall be an offence for a company to—

(a) release effluent and sludge into the environment in excess of permissible level.

(b) fail to report release of effluent and sludge into the environment in excess of permissible level as contained in Schedules I and II to these Regulations.

(c) fail to take reasonable measures to prevent, reduce or remedy the adverse effect of effluent, sludge and emissions released into the environment.

Failure to report.

Discharge of effluent beyond permissible level.

PART VII—PENALTY

Penalty.

49.—(1) Any person who violates the provisions of regulations 44, 45, 46, 47 and 48 to these Regulations commits an offence and shall on conviction, be liable to a fine not exceeding N200,000:00 or to imprisonment for a term not exceeding two years or to both such fine and imprisonment and an additional fine of N5,000:00 for every day the offence subsists.

(2) Where an offence under sub-regulation 1 of this regulation is committed by a company, it shall on conviction, be liable to fine not exceeding N1,000,000:00 and an additional fine of N50,000:00 for every day the offence subsists.

PART VIII—INCENTIVES

Recognition for Environmental leadership.

50. Each Company and Organisation that demonstrates environmental leadership, adopt environmentally responsible practices, demonstrate commitment to environmental quality and maintain exemplary environmental compliance records shall be recognized and encouraged by the Agency.

Performance criteria and rating.

51. The environmental performance requirements shall be based upon agreed criteria and rating for each sector as contained in Schedule XII to these Regulations.

NESREA compliance Award.

52. The Agency shall recognize environmental compliance in five categories and reward deserving companies as contained in Schedule XII to these Regulations.

NESREA Green Mark.

53.—(1) The Agency shall institute and certify the best environmentally performing company or organization with the NESREA Green Mark ()

(2) The Logo of the NESREA Green Mark () shall only be used by companies and organizations certified and duly recognized by the Agency.

PART IX—INTERPRETATIONS, ETC.

Interpretation.

54. In these Regulations—

"Act" means the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007 ;

"Agency" means the National Environmental Standards and Regulations Enforcement Agency (NESREA) established under section 1 of the Act ;

"Air Emission" means any emission or entrainment process emanating from a point, non-point or mobile source that results in air pollution.

"Air pollution" means any change in composition of the air caused by smoke, soot, dust (including Fly-ash), cinders, solid particle of any kind, gases, fumes, aerosols and odorous substances.

"Ambient Air" means air occurring at a particular time and place out of structure.

"*Designated Officer*" means a person who has been appointed by the Agency to carry out activities designated under these Regulations.

"*Director-General and Chief Executive Officer (DG and CEO)*" means the Director General of the National Environmental Standards and Regulations Enforcement Agency, (NESREA) ;

"*Effluent*" means waste water treated or untreated—that flows out of a treatment plant, sewer, or industrial outfall resulting from the commercial or industrial use of water, generally refers to wastes discharged into surface waters.

"*Enforcement*" means actions to obtain compliance with environmental laws, rules, regulations or agreements or obtain penalties or criminal sanctions for violations.

"*Environment*" means the sum of all external conditions affecting the life, development and survival of an organism.

"*Environmental Audit (EA)*" means—

(a) an independent verification of current status of a party's compliance with applicable legislative requirements ; and

(b) an independent evaluation of a party's environmental compliance, policies, practices and control.

"*Environmental Impact Assessment (EIA)*" means the process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made ;

"*Environmental Impact Statement (EIS)*" means a document required of development Agencies by NESREA for major projects or legislative proposals significantly affecting the environment . A tool for decision making , it describes the positive and negative effects of the undertaking and lists alternative actions.

"*Emission*" means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in a facility into the air, water or land ;

"*Emission limit*" means the mass, expressed in terms of specific parameters, concentration or level of an emission, which may not be exceeded during one or more periods of time ;

"*Extension*" means an increase in size, volume or other physical dimensions of an activity such that the increase may cause an adverse effect if not properly mitigated ;

"*Company*" means a Food, Beverages and Tobacco manufacturing and processing outfit ;

"*Grey water*" means waste water resulting from the use of water for domestic purposes, but does not include human excreta ;

"*Hazardous Wastes*" means solid, liquid, or gas wastes that can cause death, illness, or injury to people or destruction of the environment if

improperly treated, stored, transported, or discarded. Substances are considered hazardous wastes if they are ignitable (capable of burning or causing a fire), corrosive (able to corrode steel or harm organisms because of extreme acidic or basic properties), reactive (able to explode or produce toxic cyanide or sulfide gas), or toxic (containing substances that are poisonous). Mixtures, residues, or materials containing hazardous wastes are also considered hazardous wastes (listed hazardous wastes).

"*Influent water*" means either processed waste water or raw water from a river, stream, spring or canal, or water abstracted from underground and used by a facility ;

"*Inspection Officer or Inspector*" means a provincial officer who has the legal authority to enter a company to conduct an inspection under environmental legislation (Acts), guidelines and policies.

"*Large Scale Business*" means any facility that has more than fifty employees ;

"*Medium Scale Business*" means any facility that has from ten to fifty employees ;

"*Minister*" means the Minister responsible for environment.

"*Modification*" means a change in any activity that may cause an adverse effect if not properly mitigated and includes, but not limited to, the expansion of the same process, addition of product lines and replacement of equipment with different technology other than that presently in use ;

"*Other facility wastewater*" means effluent originating from the washing and general maintenance of a facility ;

"*Permit*" means an official document, authorization, license, or equivalent control document issued by the Agency to implement the requirements of these regulations to discharge effluent especially for a limited period of time ;

"*Permitt holder*" means an individual or group of individual(s)/organization(s)/facility(s) that have been empowered by the permit to discharge effluent ;

"*Person*" means a natural juristic personality including a company ;

"*Sludge*" means liquid or solid sediments and other residue from a municipal sewage collection and treatment system and liquid or solid and other septic from septic or holding tank pumping from commercial, industrial or residual establishments ;

"*Small Scale Business*" means any facility that has less than ten employees

"*Spot sampling*" means sample of liquid or sediments obtained at a specific depth inside a tank using a bottle. Spot samples are analyzed to determine the gravity of the oil, base sediment and water of the fluid in the tank ;

"Treated sludge" means the sludge which has undergone biological, chemical, heat treatment, long term storage or any other appropriate process so as to reduce or completely eliminate its toxicity or hazards to human and the environment ;

"Three Rs" means Reduce, Reuse, and Recycle ;

"Water bodies" means underground water, river, stream, spring, canal, reservoir, well, lake, lagoon, ocean etc ;

"Water efficient device" means any device that minimizes the use of water in the production process ;

"Wastewater system" means a sewer, conduit, pump, engine or other appliance used or intended to be used for the reception, conveyance, removal, treatment and disposal of effluent ; and does not include house sewers ;

"Watercourse" means any natural or artificial channel, pipe or conduit, excluding the sewerage system, carrying, or that may carry, and discharging water directly or indirectly into a water body ;

54. These Regulations may be cited as the National Environmental (Food, Beverages and Tobacco Sector) Regulations 2009.

Citation.

SCHEDULE I

(Regulations 11(2) (b) ; 15(1), (2) (a), (3) ; 16(1) ; 17(1) ; and 48 (b)

EFFLUENT LIMITATION STANDARDS FOR FOOD, BEVERAGES AND TOBACCO SECTOR

| Parameter | Unit | Maximum permissible limit |
|----------------------------------|------|---|
| Colour | — | 7(436nm, yellow) 5(525nm, red) 3(620nm, blue) |
| Appearance | | Colourless |
| Temperature | °C | 40 |
| Temperature increase | °C | <3a |
| pH | — | 6.5-8.8; 6-9 |
| Acidity | mg/l | |
| Alkalinity | mg/l | 150 |
| Chloride | mg/l | 250 |
| Total Solid | | |
| Sodium | mg/l | 200 |
| Total Suspended Solids (TSS) | mg/l | 25 |
| Total dissolved Solid | mg/l | 500 |
| Sulphate | mg/l | 250 |
| Turbidity | NTU | 5.0 |
| Nitrate as N | mg/l | 10 |
| Chemical Oxygen Demand (COD) | mg/l | 60; 90 |
| Biochemical Oxygen Demand (BOD5) | mg/l | 30; 50 |
| Sulphide | mg/l | 0.2 |
| Ammonia as Nitrogen | mg/l | 1.0 |
| Total Nitrogen | mg/l | 10 |

| Parameter | Unit | Maximum permissible limit |
|--------------------------------|-----------|---------------------------|
| Free Chlorine | mg/l | 0.5 |
| Total Phosphorus | mg/l | 2.0 |
| Dissolved Oxygen | mg/l | |
| METALS (mg/L) | | |
| Chromium (hexavalent) | mg/l | 0.05 |
| Lead | 0.05 | |
| Nickel | mg/l | 0.05 |
| Manganese | mg/l | 0.2 |
| Cadmium | mg/l | 1.0 |
| Cobalt | mg/l | 0.05 |
| Copper | mg/l | 0.5 |
| Molybdenum | mg/l | 0.01 |
| Total Chromium | mg/l | 1.0 |
| Zinc | mg/l | 2 |
| OTHER PARAMETERS | | |
| Pheno ^o | mg/l | 0.5 |
| Oil & Grease | mg/l | 10 |
| Total Pesticides | mg/l | 0.025 |
| Pesticides (each) ^o | mg/l | 0.05b |
| Total organic halides | mg/l | 1 |
| Detergents (as LAS*) | mg/l | 15 |
| MICROBIAL PARAMETER | | |
| Coliform bacteria ^o | MPN/100ml | 400 |

(a) At the edge of scientifically established mixing zone which takes into account ambient water quality, receiving water use, potential receptors and assimilative capacity, the effluent should result in a temperature increase of no more than 3 °C at the edge of the zone where initial mixing and dilution takes place. Where the zone is not defined, use 100 meters from the point of discharge.

(b) 0.05 mg/L for total pesticides (organophosphorus pesticides excluded);
0.10 mg/L for organ phosphorus pesticides.

Note: effluent requirements are for direct discharge to surface waters. The liquid effluent should not be coloured.

* Linear Alkylate Sulphonate

* World Bank value

SCHEDULE II (Regulations 18(2) and 48 (b))

SLUDGE DISPOSAL PERMISSIBLE LIMIT

| <i>Dry Sludge Generation From Wastewater Treatment</i> | |
|--|-------------------------------|
| Parameters | Sludge Production Kg DS/tonne |
| Sludge (total) | 200 |
| Primary Treatment | |
| Mixing- sedimentation | 80 |
| Mixing-Chemical treatment+ sedimentation | 150-200 |
| Mixing chemical treatment+ Flotation | 150-200 |

SCHEDULE III (Regulations 19(1); 20(1) and 21(1))

AIR EMISSION GUIDELINES FOR FOOD, BEVERAGES AND TOBACCO SECTOR

The ambient air quality standards of the Agency should be strictly complied with Ambient Air Quality For Nigeria

| <i>Parameter</i> | <i>Duration</i> | <i>Concentration</i> |
|--------------------|-----------------|---------------------------|
| SULPHUR DIOXIDE | 1 HOUR | 425 μ /M ³ |
| NITROGEN DIOXIDE | 1 HR | 313 UG/M ³ |
| PARTICULATE MATTER | 1HR | 250 UG/M ³ |
| CARBON MONOXIDE | 1HR | 30,000 UG/M ³ |

SCHEDULE IV (Regulation 16(1))

SOIL QUALITY STANDARDS FOR FOOD, BEVERAGES AND TOBACCO SECTOR

During routine operations of these industries specifics, there may be soil contamination and to preserve the environment, the below listed soil quality levels must not be exceeded in any area of the industrial activities.

| <i>Parameter</i> | <i>Unit</i> | <i>Standard</i> |
|------------------|------------------|-----------------|
| ARSENIC | M/KG DRY WEIGHT | 20 |
| BARIUM | MG/KG DRY WEIGHT | 400 |
| CADMIUM | MG/KG DRY WEIGHT | 3 |
| CHROMIUM | MG/KG DRY WEIGHT | 100 |
| COBALT | MG/KG DRY WEIGHT | 50 |
| COPPER | MG/KG DRY WEIGHT | 100 |
| LEAD | MG/KG DRY WEIGHT | 161 |

| <i>Parameter</i> | <i>Unit</i> | <i>Standard</i> |
|------------------|------------------|-----------------|
| MERCURY | MG/KG DRY WEIGHT | 4 |
| MOLYBDENUM | MG/KG DRY WEIGHT | 40 |
| NICKEL | MG/KG DRY WEIGHT | 70 |
| TIN | MG/KG DRY WEIGHT | 50 |
| ZINC | MG/KG DRY WEIGHT | 421 |
| BENZENE | MG/KG DRY WEIGHT | 0.1 |
| TOLUENE | MG/KG DRY WEIGHT | 0.1 |
| XYLENE | MG/KG DRY WEIGHT | 0.1 |
| STYRENE | MG/KG DRY WEIGHT | 0.1 |
| HEXANE | MG/KG DRY WEIGHT | 0.5 |
| HEPTANE | MG/KG DRY WEIGHT | 0.5 |
| FLUORINE | MG/KG DRY WEIGHT | 100 |
| CYANIDE | MG/KG DRY WEIGHT | 5 |
| PHENOL | MG/KG DRY WEIGHT | 10 |

SCHEDULE V

(Regulation 23)

NOISE STANDARDS
PERMISSIBLE NOISE EXPOSURE LEVELS

| <i>Duration per day (hours)</i> | <i>Permissible Exposure Limit (dB)</i> |
|---------------------------------|--|
| 8 | 90 |
| 6 | 92 |
| 4 | 95 |
| 3 | 97 |
| 2 | 100 |
| 1½ | 102 |
| 1 | 105 |
| ½ | 110 |
| ¼ or less | 115 |

NOTE : Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

SCHEDULE VI

(Regulation 6(1))

BEST PRACTICES

- (a) All effluent generated shall be quantified in volume(s).
- (b) Every industry shall install :
- *anti-pollution equipment for the detoxification of effluent and sludge ;
 - *efficient effluent treatment plant based on the Best Practicable Technology (BPT); and
 - *containment equipment for spills in case of accidental discharge
- (c) Every company shall adopt in-plant waste reduction and pollution prevention strategies.
- (d) An unusual or accidental discharge of waste from a company shall be reported to the nearest Office of the Agency within 24 hours of the discharge.
- (e) Every company shall have a buffer zone between it and the nearest human settlement.
- (f) There shall be appropriate bund walls around tank farms for containment in case of accidental discharges.

SCHEDULE VII

(Regulation 10)

BANNED/RESTRICTED CHEMICALS LIST OF BANNED CHEMICALS

1. 2,4,5-T
2. Aldrin
3. Binapacryl
4. Captafol
5. Chlordane
6. Chlodimeform
7. Chlorobenzilate
8. DDT
9. Dieldrin
10. Dinoseb and dinoseb salts
11. DNOC and its salts (such as ammonium salt, potassium salt and sodium salt)
12. EDB (1, 2 dibromoethane)
13. Ethylene dichloride
14. Ethylene oxide
15. Fluoroacetamide
16. HCH (mixed isomers)
17. Heptachlor
18. Hexachlorobenzene

19. Monocrotophos
20. Parathion (all formulations—acrosols, dustable powder (DP), emulsifiable concentrate (EC), granules (GR) and wettable powders (WP)—of this substance are included, except capsule suspensions (CS))
20. Pentachlorophenol
21. Dustable powder formulations containing a combination of benomyl at or above 7%, carbofuran at or above 10% and thiram at or above 15%
22. Methamidophos (Soluble liquid formulations of the substance that exceed 600 g active ingredient/l)
23. Methyl-parathion (emulsifiable concentrates (EC) with 19.5%, 40%, 50%, 60% active ingredient and dusts containing 1.5%, 2% and 3% active ingredient).
24. Phosphamidon (Soluble liquid formulations of the substance that exceed 1000 g active ingredient/l)
25. Crocidolite
26. Tris(2,3-dibromopropyl) phosphate

LIST OF RESTRICTED CHEMICALS
(to be used with permit from NESREA)

1. Methyl-parathion (emulsifiable concentrates (EC) with 19.5%, 40%, 50%, 60% active ingredient and dusts containing 1.5%, 2% and 3% active ingredient).
2. Actinolite asbestos.
3. Amosite, asbestos
4. Polybrominated Biphenyls (PBBs)
5. Polychlorinated Biphenyls (PCBs)
6. Polychlorinated Terphenyls (PCTs)
7. Tetraethyl lead
8. Tetramethyl lead
9. Tremolite
10. Arsenic
11. Mercury
12. Alkyl-phenol-ethoxylate

GUIDE TEMPLATE FOR EMERGENCY PROCEDURES IN INDUSTRY

CONTENTS

Step 1—ESTABLISH A PLANNING TEAM

There must be an individual or group in charge of developing the emergency management plan.

1. Form the Team
2. Establish Authority
3. Issue a Mission Statement
4. Establish a Schedule and Budget

Step 2—ANALYZE CAPABILITIES AND HAZARDS

This step entails gathering information about current capabilities and about possible hazards and emergencies, and then conducting a vulnerability analysis to determine the company capabilities for handling emergencies.

1. Where Do You Stand Right Now?
2. Meet with Outside Groups
3. Identify Codes and Regulations
4. Identify Critical Products, Services and Operations
5. Identify Internal Resources and Capabilities
6. Identify External Resources
7. Do an Insurance Review
8. Conduct a Vulnerability Analysis
9. List Potential Emergencies
10. Estimate Probability
11. Assess the Potential Human Impact
12. Assess the Potential Business Impact
13. Assess the Potential Property Impact
14. Assess Internal and External Resources
15. Add the Columns

Step 3—DEVELOP THE PLAN

Emergency planning must become part of the corporate culture. Look for opportunities to build awareness ; to educate and train personnel ; to test procedures ; to involve all levels of management, all departments and the community in the planning process ; and to make emergency management part of what personnel do on a day-to-day basis.

- (a) Plan Components
- (b) The Development Process

Step 4—IMPLEMENT THE PLAN

Implementation means more than simply exercising the plan during an emergency. It means acting on recommendations made during the vulnerability

analysis, integrating the plan into company operations, training employees and evaluating the plan.

(a) Integrate the Plan into Company Operations

(b) Conduct Training, Drills and Exercises

Source: www.fema.gov/about/index.shtm

SCHEDULE IX

(Regulation 2(1) (d))

GUIDELINE FOR PREPARING ENVIRONMENTAL MANAGEMENT PLAN (EMP)

An Environmental Management Plan (EMP) describes the process that an organization will follow to maximize its compliance and minimize harm to the environment. This plan also helps an organization map its progress toward achieving continual improvements.

Regardless of the organization's situation, all environmental plans must include the following elements :

- * Policy ;
- * Planning;
- * Implementation and Operation ;
- * Checking and Corrective Action ;
- * Management Review and commitment.

POLICY

Policy statements are important to an organisation because they help anchor the organisation on a core set of beliefs. These environmental guiding principles will enable all members of an organisation to focus on the same objective. They provide an opportunity for outside interests to understand the operation of the organisation. The policy should be focused, concise and easy to read. The environmental policy should address the following--

- * Compliance with legal requirements and voluntary commitments ;
- * minimising waste and preventing pollution ;
- * Continual improvement in environmental performance, including areas not subject to regulations ;
- * Sharing information on environmental performance with the community.

PLANNING

The planning should define the organisation's environmental footprints and set goals. Goals and objectives should be focused on maximising their positive impacts on the environment. When evaluating, the following elements should be considered :

- * Impacts on the environment through its activities, products and services ;
- * Legal requirements associated with protecting the environment ;
- * Meaningful and focused environmental objectives and targets.

IMPLEMENTATION AND OPERATION

Implementation and operation should define the activities that the organisation will perform to meet its environmental objectives and targets. This section should identify activity each person is responsible for, ensure completion and set targets for each of the identified activity. In addition, this area should specify employee training, communication and outreach activities that are necessary to ensure successful implementation of the plan.

CHECKING AND CORRECTIVE ACTION

The EMP should describe the process that will be followed to verify proper implementation and how problems will be corrected in a timely manner. Routine evaluation and continual improvement to the process is necessary to make sure that the plan successfully leads towards the completion of environmental objectives and targets.

MANAGEMENT REVIEW AND COMMITMENT TO IMPROVEMENT

Routine management review and support is a necessary and meaningful tool for the organization. This should identify the routine management evaluations that will be conducted to ensure that the plan is appropriately implemented to meet its environmental objectives.

SCHEDULE X

(Regulation 8(1))

GUIDELINES FOR CONSUMER PRODUCTS STEWARDSHIP PROGRAMME

As part of the Strategic Alliance Programme of the Agency, all manufacturers and importers of Food and Beverages products shall partner with the Agency to establish an effective consumer product Stewardship Programme.

The manufacturers and importers of Food, Beverages and Tobacco products shall submit a proposal for a consumer products stewardship program to the Agency for approval ; such a proposal shall include elements for successful implementation of the scheme ;

(a) the consumer products shall include but not limited to bottles, cans, teflon/polyethylene packaging, etc ;

(b) establish a process for the collection, handling, transportation and final treatment of a post-consumer beverage products regardless of who is the original brand owner ;

(c) incorporate the principles of a pollution prevention hierarchy by moving progressively from disposal to reduction, reuse, recycling and recovery of post-consumer products ;

(d) submit on or before June 30 in each year to the Agency , an annual report on their consumer products stewardship program during the previous fiscal year including, but not limited to, information respecting :

(i) the total amount of consumer beverage products sold and post-consumer products collected ;

(ii) the total amount of post-consumer beverage products processed or in storage ;

- (iii) the percentage of post-consumer beverage products that were treated or contained, reduced, reused, recycled or recovered ;
- (iv) efforts taken through consumer beverage products marketing strategies to reduce post-consumer products and packaging waste ;
- (v) the types of processes used to reduce, reuse, re-cycle or recover post- consumer beverage products, including but not limited to details of efforts to incorporate the priorities of a pollution prevention hierarchy by moving progressively from disposal to reduction, re-use, re-cycling and recovery of post-consumer paint products ;
- (vi) the location of return collection facilities or depots ;
- (vii) the location of any long-term containment or final treatment and processing facilities for post-consumer beverage ;
- (viii) the types of educational information and programs provided ;
- (ix) the process of internal accountability used to monitor environmental effectiveness ; and
- (x) any other information requested by the Agency.

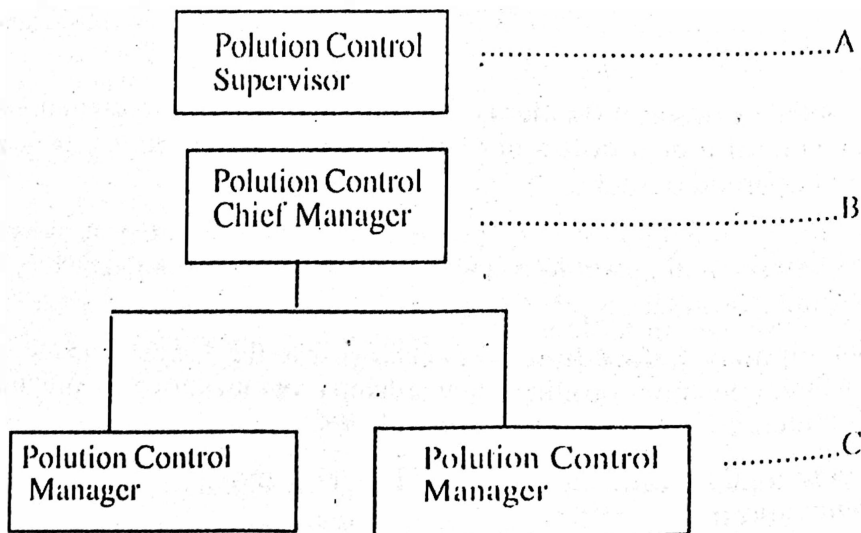
SCHEDULE XI

Regulation 7(1) and (2)

ORGANIZATIONAL SYSTEM AND THE FUNCTIONS OF POLLUTION CONTROL MANAGER(S)

Each Company shall be mandated by the Agency to have an organizational system that will carry out Internal Environmental Auditing of the company as well as liaises with NESREA and other Government Authorities. The Organizational system shall have Pollution Control Supervisor, Pollution Control Manager and Pollution Control Chief Manager who shall be elected or appointed. These shall be certified by the Agency through a National examination or qualifying examination.

ORGANIZATION FOR POLLUTION PREVENTION



FUNCTIONS :

A—Manages the pollution control issues of the company.

B—Assists Supervisor and directs the Managers (only applicable in companies where large amount of smoke and sewage is generated).

C—Deals with technical matters like inspection of the company and raw materials.

Note: C depends on the size of the facility; for a large facility there shall be PCM for Air, Land and Water.

SPECIFIC DUTIES OF THE POLLUTION CONTROL MANAGER (PCM)

The specific duties of the PCMs are :

- * To ensure that the responsibilities are very clear for all the staff involved in pollution control ;
- * To ensure that daily pollution control practices are complied with; and
- * To maintain smooth and proper environmental and safety communications within the company and the regulatory authorities as well as the host community.

CONCRETE POLICIES CONCERNING INDUSTRIES' POLLUTION CONTROL.

1. Management concerning pollution control at company's :

- * improvement and operation of effective environmental management system ;
- * communication with NESREA's headquarters ;
- * ability to know when a system is malfunctioning ;
- * documentation of the environmental management procedure and control of the records and documents ;
- * co-operation with interested parties such as other related companies' regulations.

2. Addressing corporate-wide environmental measures :

- * Recognition of the business risk relative to the environmental management system ;
- * Recourse management including maintenance of human resources for pollution control and their competency ;
- * Establishing a corporate-wide environmental management system including risk information feed-back system ;
- * Establishing a redundant monitoring, assessment and self-improvement system ;
- * Establishing a contingency plan and its verification.

SCHEDULE XII

(Regulations 51 and 52)

NESREA COMPLIANCE FLAG AWARD

In order to encourage voluntary compliance by the regulated community, the Agency has established NESREA compliance Flag Award as an incentive-based pollution mechanism. The award will be given on the basis of environmental performance ratings to deserving facilities who comply with regulations, guidelines and standards.

1. The environmental performance ratings will be disseminated to the public through the media and it is expected to significantly reduce environmental abuse and neglect. This rating will range from outstanding to non-compliant using five colour codes.

2. Green Flag represents the best performing company. The criteria for the NESREA Compliance Flag Award are as follows :

| | | |
|---|--------------|---------------------------------|
| THE FIVE LEVEL NESREA COMPLIANCE AWARD | Above 75% | Level 1 - Outstanding - Green |
| | 50% to 75% | Level 2 - Good - Blue |
| | 35% to 49.9% | Level 3 - Average - Yellow |
| | 25% to 34.9% | Level 4 - Poor - Red |
| | 15% to 24.9% | Level 5 - Non-compliant - Black |

For a company to be adjudged as having achieved 'excellent compliance', management commitment must have been demonstrated in addition to developing sustainable production technologies that can deliver environmental, economic and social benefits, good in-house keeping and robust waste management system, etc.

3.0. Major criteria.

3.1. Criteria for raw material sourcing and processing.

3.2. Criteria for production plant level environmental performance

- * Input Management ;
- * Process Management ;
- * Waste Management.

3.3. Criteria for product-use performance.

3.4. Criteria for waste handling and disposal performance.

3.5. Criteria for corporate environmental policy and management system—

- * Corporate policy related to environment ;
- * Procurement policy and supply chain management ;
- * Status of corporate environmental management and environmental management systems ;
- * Research and development ;
- * Health and Safety ;
- * Transparency.

3.6. Criteria for community and regulatory perception and compliance status—

- * Compliance with NESREA pollution control regulations and perception of NESREA officials ;

- * Perception of local community ;
- * Perception of local NGOs and media ;
- * Perception of other Agencies' officials.

4. SCORING SYSTEM

Scores are assigned to the various criteria based on their environmental impacts during the entire life cycle. Thus, though the broader criteria remain the same, the score vary substantially between sectors. This scoring scale is aimed at encouraging facilities to perform better than what is currently required by the regulations.

SCHEDULE XIII

(Regulation 35(3) and (4))

FORM I

MONTHLY DISCHARGE MONITORING REPORT (MDMR)
[NESREA DISCHARGE MONITORING REPORT]

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH

| |
|--|
| Facility Name and Address : Facility e-mail address : |
|--|

THAN THE

Mail To: National Environmental
Standards and Regulations
Enforcement Agency (NESREA),
No. 4, Oro-Ago Crescent,
Garki II,
Abuja.

SAMPLING POINT LOCATION -----

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

MONTH YEAR

SAMPLING DATES AND TIME-----

| |
|------------------|
| TYPE OF SAMPLING |
|------------------|

| PARAMETERS | WEEKLY RESULTS | | | | | | NESREA's Regulatory Limits |
|------------|----------------|-----|-----|-----|-----|---------|----------------------------------|
| PHYSICAL: | UNITS | 1ST | 2ND | 3RD | 4TH | Average | |

| | | | | | | | |
|------------------------------|----------------|--|--|--|--|--|--|
| Appearance | | | | | | | |
| Odour | | | | | | | |
| Temperature | ^o C | | | | | | |
| pH | | | | | | | |
| Conductivity | μ s/cm | | | | | | |
| Turbidity | NTU | | | | | | |
| Dissolved Oxygen (DO) | mg/l | | | | | | |
| Total Suspended Solids (TSS) | mg/l | | | | | | |
| Total Dissolved Solids (TDS) | mg/l | | | | | | |
| BOD | mg/l | | | | | | |
| COD | mg/l | | | | | | |
| INORGANIC: | | | | | | | |
| Chloride | mg/l | | | | | | |
| Nitrate | mg/l | | | | | | |
| Sulphate | mg/l | | | | | | |
| Sulphite | mg/l | | | | | | |
| Cyanide | mg/l | | | | | | |
| Nitrites | mg/l | | | | | | |
| Chromium (hexa-valent) | mg/l | | | | | | |
| Copper | mg/l | | | | | | |
| Zinc | mg/l | | | | | | |
| Lead | mg/l | | | | | | |
| Cadmium | mg/l | | | | | | |
| Manganese | mg/l | | | | | | |
| Silver | mg/l | | | | | | |
| Mercury | mg/l | | | | | | |
| Arsenic | mg/l | | | | | | |
| ORGANICS : | | | | | | | |

| | | | | | | | | | |
|--------------------|------|--|--|--|--------------|--|--|--|--|
| Phenols | mg/l | | | | | | | | |
| Oil & Grease | mg/l | | | | | | | | |
| MICRO-BIOLOGICAL: | | | | | | | | | |
| Faecal Coli form | mg/l | | | | | | | | |
| NOISE MEASUREMENTS | | | | | | | | | |
| LOCATIONS | | | | | NOISE LEVELS | | | | |

| | | | |
|---------------------------------------|-------------------------------|---|--|
| | | Signature with date of Principal Executive Officer or Authorized Agent : | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information submitted. |
| Signature of Certified Operator | Date (Month, day, year) | Date: | |
| | | Signature: | |

© NESREA 2008.

FORM 2

NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS ENFORCEMENT AGENCY (NESREA).

INCIDENT REPORT FORM

This is to be completed when accidental discharge, occupational illness or incident occurs. If an employee is injured or develops gradually a job-related illness as a result of his or her employment at the facility, He/she must complete and submit the "INCIDENT REPORT". If the employee is unable to complete the form, the supervisor must complete on his/her behalf.

Incident report ensures there is a record on file with the employer. In no way does this waive the employee's right to worker's compensation benefits. If an injury occurs, first aid may be appropriate treatment.

I. FACILITY :

Name and Address of Facility:-----

No. of Employee-----

Department where the Discharge Occurred-----

Place of the Accidental Discharge:-----

2. DISCHARGE :

Cause(s) of discharge ;

Did the discharge occur as a result of mechanical or technical or unskilled application? Please specify.

.....
Was the discharged gaseous, liquid or solid? Please specify.

.....
What was the nature of discharge, sludge, effluent or influent? Please specify.

.....
Into which medium was it discharged to, i.e. water body, land, or air? Please specify.

.....
* If water body, specify type of water; pond, stream, lake, river, etc.

.....
* If land ;

* Name and location (Geo-reference) of the land where discharge occurred.

.....
* Ways of disposing of discharge ; i.e. burying, burning, etc. Please specify.

.....
Was there any Previous Accidental Discharge of this kind? Yes No

If yes, when ?-----

How?-----

Who was or were the victim(s)?-----

DATED at Abuja this 30th day of September, 2009.

MR JOHN ODEY,
*Honourable Minister,
Ministry of Environment*