

*Extraordinary*



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# NATIONAL ENVIRONMENTAL (CONSTRUCTION SECTOR) REGULATIONS, 2011



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**NATIONAL ENVIRONMENTAL (CONSTRUCTION SECTOR,  
REGULATIONS, 2011**

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, MR JOHN ODEY, Honourable Minister, Federal Ministry of Environment hereby make the following Regulations.

[28th Day of April, 2011] Commence-  
ment.

**PART I—GENERAL PROVISIONS**

1. These Regulations may be cited as the National Environmental (Construction Sector) Regulations, 2011. Citation.

2.—(1) The purpose of these Regulations is to prevent and minimize pollution from Construction, Decommissioning and Demolition Activities to the Nigerian Environment. Thrust of these Regulations.

(2) Every facility shall comply with Duty of Care with respect to generation, transportation and disposal of wastes.

3.—(1) New projects in the construction sector shall apply Cost-Effective, up-to-date, efficient, Best Available Technology (BAT) to minimize pollution to the barest degree practicable. Planning.

(2) Any operator applying new design techniques shall evaluate the proposed installations and ensure that control measures are sufficient to prevent risks of pollution or accident.

(3) Every operator or facility shall :

(a) carry out an Environmental Impact Assessment (EIA) for new projects or modification including expansion of existing ones before commencement of activity ;

(b) submit an Environmental Audit Report (EAR) of its project/operational base on a three (3) yearly basis or as may be required by the Agency ; and

(c) submit an Environmental Management Plan (EMP) as contained in Schedule III.

(4) Without prejudice to sub-regulation (3)(b) of this regulation, where a project is to be decommissioned, transferred or alienated for any reason whatsoever, an Environmental Audit shall be conducted and submitted to the Agency by the owner/operator for verification and approval.

(5) There shall be routine Environmental Monitoring throughout the various phases of the project.

Best  
Practices.

4.—(1) Every facility shall implement programmes on best practices as set out in Schedule I of these Regulations.

(2) Every facility shall provide base for ancillary equipment and bund wall for containment of waste oil in the event of any unanticipated discharge or spillage.

(3) Every operator of construction facility/site shall ensure :

(a) it has a functional, adequate and appropriate drainage system for the project ;

(b) the separation or diversion of clean water runoff to prevent it from mixing with water containing high solid particle content ;

(c) it minimizes the volume of water to be treated prior to release (same as storm water control system) ;

(d) the use of color coding for the drainage system such as blue for surface water drains and red for foul water drains ;

(e) safe movement of materials and fuel to and from site ;

(f) tanks are clearly labelled with their contents and storage capacity ;

(g) workers are trained to carry out the outlined procedures in the Emergency Response Plan as specified in Schedule II to these Regulations ;

(h) absorbent materials and other containment equipment (e.g. spill kits) suitable for the construction type, are available in adequate quantity on site ; and

(i) all tanks are properly covered.

(4) The operator shall ensure :

(a) high standard of housekeeping ;

(b) that dust/particulate matter arising from loaded trucks entering or leaving the site is kept to a minimum level by the use of tarpaulin materials as cover and that water sprays or other dust suppression or collection methods are used at every dusty place where work is carried out ;

(c) appropriate use of Personnel Protective Equipment (PPE) by all persons at construction site as in Schedule VI to these Regulations ;

Emergency  
Response  
Plan.

5. Every facility shall have an Emergency Response Plan in accordance with the guide template specified in Schedule II to these Regulations.

## PART II—SPECIFIC PROVISIONS

6.—(1) The operator/facility shall submit a Site Waste Management Plan (SWMP) to the Agency for all new construction projects that will require mandatory Environmental Impact Assessment (EIA) or such projects that may generate significant waste.

Site Waste  
Management  
Plans.

(2) A SWMP shall contain :

- (a) types of waste to be generated on site ;
- (b) identity of the waste manager/contractor and the registration number ;
- (c) waste destination ; and
- (d) environmental permit held for the site where the waste is to be managed.

(3) A SWMP shall be updated throughout the course of the project as the need arises.

(4) At the end of the project, a report on the Waste Management Status shall be submitted to the Agency before close-out.

(5) The collection, treatment, transportation and final disposal of wastes within extant standards and guidelines, shall be the responsibility of the operator generating the wastes.

(6) A record shall be kept of waste generated on daily basis during the project's life span.

7.—(1) The Operators of construction sites shall be required to obtain Construction Storm Water Discharge Permit from the Agency.

Storm Water  
Discharge  
Permit.

(2) To obtain a Construction Storm Water Discharge Permit, the operator shall be required to—

- (a) submit a Notice of Intent (NOI) or Permit Application.
- (b) develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) that describes the :
  - (i) physical characteristics of the site ;
  - (ii) potential sources of pollutants ;
  - (iii) erosion prevention measures ; and
  - (iv) sediment control and storm water management practices.

(c) Submit a Notice of Completion (NOC) at the end of construction activities or when another party assumes control of the site ; and

(d) Provide any other requirements as may be determined by the appropriate statutory authority from time to time.

**Lighting  
Activities.**

8. Where the level of illumination created in the course of construction activity does not conform with the minimum limits as prescribed in Schedule VIII, to these Regulations and is such that can cause or have the potential to cause disturbance to the surrounding community, the Agency shall serve the operator with an abatement notice which may require the operator to—

- (a) minimize the nuisance ; and/or
- (b) restrict or prohibit the nuisance ;

**Control of  
Dust and  
Fugitive  
Emission.**

9.—(1) Where the level of dust and other fugitive emission generated in a construction activity is high, the Agency shall :

- (a) restrict such activity ;
- (b) take steps to reduce the impact of such activity ; or
- (c) issue a Stop Work Order for such activity.

(2) Every operator shall ensure :

(a) minimisation of dust from material handling sources, such as conveyors and bins, by using covers or control equipment (water suppression, bag house and cyclone, etc) ;

(b) minimisation of dust from open area sources, including stock piles, by using control measures such as installing enclosures and covers, and increasing the moisture content ;

(c) implementation of dust suppression techniques such as application of water or non-toxic chemicals to minimize dust from vehicular movements ;

(d) selective removal of potential hazardous air pollutants, such as asbestos, from existing infrastructure prior to demolition ;

(e) appropriate management of emissions from mobile sources ; and

(f) prohibition of open burning of solid as prescribed in extant Regulations.

**Noise  
Control.**

10. Noise generated within the work site shall be within permissible limits as prescribed under the National Environmental (Noise Standards and Control) Regulations, 2009), S.I. No. 35, and as specified in Schedule VII to these Regulations.

**Monitoring.**

11.—(1) Noise level shall be monitored monthly throughout the construction process or as otherwise authorised by the Agency.

(2) Notwithstanding sub-regulation (1) of this regulation, monitoring shall be carried out whenever there is a change in operation process or equipment that increases noise exposure to the extent that :

- (a) Additional employees may be subjected to risk at the action level ; or
- (b) The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements of extant regulations.

12.—(1) Every operator shall ensure that construction activities—

- (a) are not detrimental to environment and human health ;
- (b) do not prevent, or interfere with third party rightful use of land ; and
- (c) do not interfere with the use of public space and land ; and
- (d) shall put in place organizational system for pollution control and shall assign environmental pollution control and prevention duties to an Pollution Control Manager (PCM) with duties described in Schedule IV to these Regulation.

Avoiding  
Nuisance.

(2) Every operator shall ensure that the site is regularly checked for any waste, evidence of vermin, noise, smell/odour and other emissions near the boundary of the site during different operating conditions and submit a report to the Agency.

(3) Every operator shall ensure that working or receiving deliveries are programmed to minimize nuisance in residential areas.

13.—(1) Every operator shall ensure that trained personnel carry out appropriate assessment of the contents and quantity of hazardous substances including those in petroleum-based products in building systems and process equipment and remove such prior to decommissioning activities.

Hazardous  
Substances.

(2) Any operator or owner that excavates soils containing hazardous substances shall be responsible for its appropriate disposal and shall ensure comprehensive environmental response as applicable.

(3) Any operator or owner that excavates and spreads soils containing pollutants buried by previous owner shall be responsible for the appropriate clean up and disposal.

(4) An operator or owner shall be responsible for the proper management, transport and disposal of the contaminated soil.

(5) The operator shall check and classify contents of waste containers before re-use, recycling, recovery or disposal of waste.

(6) The operator or owner shall take necessary measures for the disposal of all containers of all hazardous substances as prescribed in extant National Regulations.

(7) The operator shall handle and treat the following as hazardous: Fluorescent tubes, lamp ballasts, old irreparable transformers, cables and other electrical/electronic devices within the buildings containing polychlorinated biphenyls (PCBs), heavy metals, lead paint waste, asbestos, etc.

(8) The use of lead based paints for painting of building structures and/or other infrastructure is hereby prohibited.

Use of  
Asbestos.

14.—(1) The use of asbestos at construction sites is prohibited.

(2) The operator/facility shall remove all asbestos-containing materials from a structure being demolished or renovated before any activity is carried out that would break up, dislodge or similarly disturb the materials or prevent access to materials for subsequent removal.

(3) Prior to the commencement of any demolition or renovation, the affected structure or part of the structure where the work is to take place must be thoroughly inspected and assessed for the presence of asbestos by person(s) certified by the Agency and other relevant bodies.

(4) The types and quantities of asbestos-containing materials shall be determined by the inspector who shall make recommendations for the need to remove and dispose appropriately, asbestos-containing materials.

(5) Prior to all demolition activities, including those where no asbestos material is present, a notification by the demolishing contractor must be sent to the Agency.

Spent oil.

15. Spent oil shall be disposed off in an environmentally friendly manner as approved by the Agency.

Prevention  
and Control  
of Explosion  
Hazards.

16. Any operator whose activities involve blasting shall do so in accordance with Schedule IX to these Regulations.

Exposure to  
Radiation.

17. Every operator shall ensure compliance with the radiation exposure limits as set by extant Regulations by all workers that may be exposed to radiation in the course of their duties.

Polluter-  
Pays-  
Principle.

18. In the event of an incident resulting in an adverse impact on the environment whether socio-economically or health wise, the facility shall make such report using the format specified in Schedule V to these Regulations and shall be responsible for :

- (a) the cost of damage assessment, control and clean-up ;
- (b) remediation ; and
- (c) reclamation and or restoration.

19. Every Construction facility shall have a sustainable community relations program. Community Relations.

20. An operator of a project shall comply with close-out procedures as outlined in Schedule X to these Regulations. Close-out.

#### PART III—PERMIT

21. Procedures for application for permits or licences or revocation of such permits when it has already been issued, are contained in the National Environmental (Permitting and Licensing System) Regulations, 2009, S.I. 29. Permit.

#### PART IV—ENFORCEMENT

22.—(1) An enforcement notice shall be served if the Agency is of the opinion that an operator 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 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.

23. Every facility shall be given equal treatment without preference as far as inspection and enforcement of relevant laws are concerned. Equity.

24.—(1) Failure to comply with the notice issued pursuant to regulation 22 of these Regulations within the specified period, a second notice shall be served. Enforcement Notice Reminder.

(2) 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.

Mode of  
Delivery.

25. Enforcement notice shall be delivered by hand, registered post/courier, electronic transmission, or posted at the facility/registered premises of the organization.

Suspension  
Notice.

26.—(1) Where a suspension notice has been 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 verification of compliance.

(3) Notwithstanding the provisions of these Regulations, the Agency shall, where the violation of the terms of an enforcement notice persists, enter and seal such facility to compel compliance.

#### PART V—OFFENCES

Offences.

27.—(1) It is an offence for an operator or owner of a project to—

(a) fail to comply with or 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.

(2) It shall be an offence for an owner or operator of a project 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 facility 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, forge or use a document issued or authorized or be issued under a condition of the permit.

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

(4) It shall be an offence if an operator 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; (furnish all information to the inspector) ;

(d) remove equipment containing materials causing release into the environment from a place when requested by the inspector ;

(e) produce document(s) when requested by the inspector ;

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

(g) ensure the use of Personnel Protective Equipment(PPE) while handling, storing, treating, or disposing of effluent .

(5) It shall be an offence if an operator :

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

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

(c) dismisses, suspends or sanctions employee (s) who report contravention of the NESREA Act ;

(d) imposes penalty on any employee who reports cases of contravention of these Regulations.

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

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

(g) transports effluent without prior authorization from the Agency ;

(h) transports sludge in bulk without prior authorization from the Agency.

(6) It shall be an offence if an operator of a project fails to—

(a) file annual report on effluent and sludge discharges ;

(b) maintain books or record of effluent and sludge discharges ;

(c) Submit records or receipt of removal of effluent and sludge within the time frame prescribed by these Regulations.

(7) No operator shall—

(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 these Regulations ;

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

## PART VI—PENALTIES

## Penalties.

28.—(1) Any person who violates the provisions of regulation 27 of these Regulations commits an offence and shall on conviction, be liable to a fine not exceeding ₦200,000 or to imprisonment for a term not exceeding six months and an additional fine of ₦5,000.00 for every day the offence subsists.

(2) Where an offence under Regulation 27 of this regulation is committed by a body corporate, it shall on conviction, be liable to a fine not exceeding ₦5,000,000 and an additional fine of ₦50,000 for every day the offence subsists.

## PART VII—INTERPRETATIONS

## Interpretations.

29. In these Regulations unless the context otherwise requires—

“Agency” means the National Environmental Standards and Regulations Enforcement Agency (NESREA).

“Asbestos” means naturally occurring silicate mineral with long thin fibrous crystals.

“Asbestos containing materials” means materials containing asbestos including insulation, roofing tiles, roofing sheets, pipes, etc.

“Assessment” means any method used to measure, calculate, predict or estimate the level of a relevant pollutant.

“BAT” means Best Available Technology—Is a term applied with regulations on limiting pollutant discharges with regard to the abatement strategy. It is also the best economically achievable technology that reduces negative impacts on the environment.

“Blasting” means the process of breaking rock or ores into smaller fragments by the detonation of explosive compounds buried under the rocks or ores.

“Bund wall” means a secondary containment area constructed to prevent escape of pollutants from contaminating the soil characteristics.

“Close-out” means decommissioning activities in the end of a construction project.

“DG/CEO” means the Director General/Chief Executive Officer of the National Environmental Standards and Regulations Enforcement Agency.

“Duty of Care” means the legal duty of everybody who has control of waste to ensure that it is managed safely and transferred only to somebody authorized to take it or duty to dispose of waste carefully.

“Environment” includes water, air or land and means the sum of all external conditions affecting the life, development and survival of an organism.

“Facility” means physical set-up or equipment for construction activities

*"Fugitive emission"* means air pollutants that may not be readily obvious.

*"hazardous substance"* means element, compound, mixture, solution which because of its quantity/concentration, physical or chemical infectious characteristics, may—

(a) cause or significantly contribute to an increase in mortality, or incapacitating reversible illness or ;

(b) pose substantial hazards to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed ; and

(c) exhibit the following characteristics — ignitability, corrosivity, reactivity and toxicity.

*"Hazardous waste"* means any waste or combination of waste that exhibits ignitable, corrosive, reactive, toxic characteristics and poses a substantial danger, now or in the future to human, animals or plants life which therefore cannot be handled or disposed of without special precaution.

*"Inspector"* means an official of the Agency designated to ensure compliance with the guidelines, standards and regulations.

*"In-situ"* means in place or on the spot.

*"Level"* means the concentration of a relevant pollutant.

*"manifest"* means a document containing detailed information of the waste generated from source to final disposal for monitoring purposes.

*"Minister"* means the Honourable Minister of Environment.

*"Muisance"* means unfavourable or environmentally deleterious impact condition.

*"Operator"* means person or body corporate who is owning, developing, executing, using or managing a construction project or any combination of these.

*"Overburden"* means soil removed in order to access an ore or mineral body e.g. surface soil, vegetation.

*"Permissible"* means allowable or acceptable by law or rules.

*"Regulator"* means the Agency or its authorized officers.

*"Spent oil"* means oil that has been used and of no further use or value.

*"Storm water"* means surface run-off that results from rain.

*"Transportation"* means conveyance or haulage of construction materials or construction waste.

*"Treatment"* means an act of subjecting the effluent to physical, chemical or biological action, other than dilution, in order to reduce or eliminate deleterious substances.

*"Water body"* means ocean, marine, estuarine, wetlands, rivers, dams, lakes, ponds, mine pits.

## SCHEDULE I

Regulations 4 (1)

## BEST PRACTICES

- (a) All run off or storm water generated at construction site shall be characterised before final discharge.
- (b) Every construction site shall install—
  - (i) anti-pollution equipment for the detoxification of liquid and solid wastes ;
  - (ii) efficient effluent treatment plant based on the Best Practicable Technology (BPT) ; and
  - (iii) containment equipment for spills in case of accidental discharge.
- (c) Every operator shall adopt in-situ waste reduction and pollution prevention technology.
- (d) An unusual or accidental discharge of waste from a construction site shall be reported to the nearest office of the Agency within 24 hours of the discharge. (See report format in Schedule V).
- (e) There shall be appropriate bund walls around tank farms for containment in case of accidental discharges.
- (f) Every construction site shall be screened from its environment.

## SCHEDULE II

Regulation 4 (3) (g) ; 5

## GUIDE TEMPLATE FOR EMERGENCY PROCEDURES IN CONSTRUCTION INDUSTRY

## 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 operator's 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.

#### STEP 3—DEVELOP THE PLAN

1. Emergency planning must become part of the corporate culture.
2. Look for opportunities to build awareness; 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.
3. Plan Components.
4. The Development Process.

#### STEP 4—IMPLEMENT THE PLAN

1. 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.
2. Integrate the Plan into Company Operations.
3. Conduct Training, Drills and Exercises.

### SCHEDULE III

### *Regulation 3 (3) (c)*

#### GUIDELINES 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 towards achieving continual improvements, regardless of the organization's situation and all environmental plans shall 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. The EMP should identify activity each person is responsible for, ensure completion and set targets for each of the identified activities. 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 are a necessary and meaningful tools for the organization. These should identify the routine management evaluations that will be conducted to ensure that the plan is appropriately implemented to meet its environmental objectives.

## SCHEDULE IV

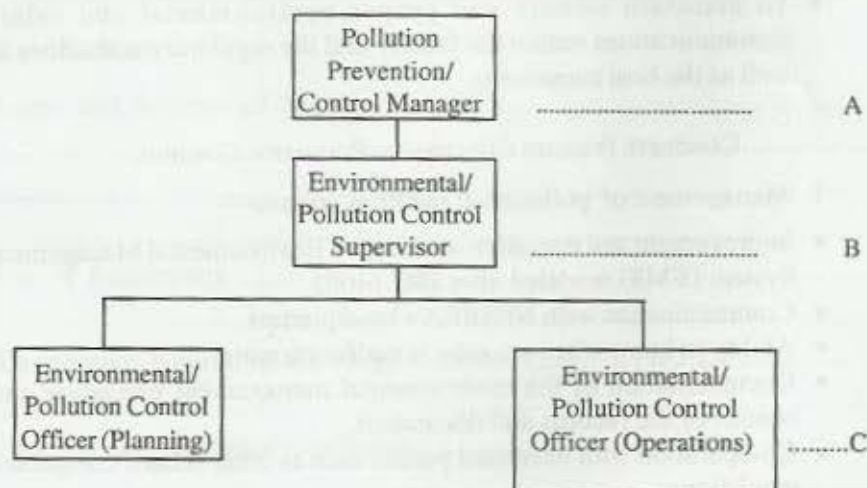
Regulation 12(d)

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

Each Construction facility shall be mandated by the Agency to have an organizational system that will carryout Internal Environmental Auditing of the facility as well as liaise with NESREA and other Government Authorities.

The Organizational system shall have Environmental/Pollution Control Manager, Environmental/Pollution Control Supervisor and Environmental/Pollution Control Officers with relevant scientific background as minimum qualification. These shall be certified by the Agency.

## ORGANIZATION FOR POLLUTION PREVENTION



FUNCTIONS :

- A— Manages the pollution prevention and control issues of the facility.
- B— Supervises and directs the Environmental/Pollution Control Officers (only applicable in facilities where large amount of smoke and sewage is generated).
- C— Deals with technical matters like inspection of the facility 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 PREVENTION AND 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 prevention and control ;
- To ensure that daily pollution prevention and control practices are complied with ; and
- To maintain smooth and proper environmental and safety communications within the facility and the regulatory authorities as well as the host community.

CONCRETE POLICIES CONCERNING POLLUTION CONTROL

1. Management of pollution at facilities and site—

- improvement and operation of effective Environmental Management System (EMS) modeled after ISO.14001.
- 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.
- Resource management including maintenance of competent human resources for effective pollution control.

- 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 V

Regulation 18

NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS  
ENFORCEMENT AGENCY (NESREA)

## INCIDENT REPORT FORM

This report 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/her employment at the facility, he or 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 reporting ensures there is a record on file with the employer. In no way does this waive the employee's right to workers' compensation benefits. If an injury occurs, first aid may be the appropriate treatment.

All accidental discharges/emergencies/accidents should be reported to NESREA within 48 hours.

## 1. FACILITY :

Name and Address of Facility : .....

.....

.....

No. of Employees : .....

.....

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/technical/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 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/were the victim(s) ?.....

.....

## SCHEDULE VI

Regulation 4(4)(c)

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT ACCORDING  
TO HAZARD TYPE

<i>Objective</i>	<i>Workplace Hazards</i>	<i>Suggested PPE</i>
Eye and Face Protection.	Flying particles, molten metal, liquid chemicals, gases or vapors, light radiation.	Safety glasses with side – shields, protective shades, etc.
Head Protection	Falling objects, inadequate height clearance and overhead power cords.	Plastic helmets with top and side impact protection.
Hearing Protection	Noise, ultra-sound.	Hearing protectors (ear plugs or ear muffs).
Foot Protection	Falling or rolling objects, pointed objects. Corrosive or hot liquids	Safety shoes and boots for protection against moving and falling objects, liquids and chemicals.
Hand Protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures.	Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.
Respiratory Protection.	Dust, fogs, fumes, mists, gases, smokes, vapors.	Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.
	Oxygen deficiency.	Portable or supplied air (fixed lines). On-site rescue equipment.
Body/Leg Protection.	Extreme temperatures, hazardous materials, biological agents, cutting and laceration.	Insulating clothing, body suits, aprons etc of appropriate materials.

## SCHEDULE VII

Regulation 10

PERMISSIBLE NOISE LIMITS FOR VARIOUS WORKING ENVIRONMENTS		
<i>Location/Activity</i>	<i>Equivalent level (<math>LA_{eq}</math>, 8h)</i>	<i>Maximum <math>LA_{max}</math>, fast</i>
Heavy Industry (no demand for oral communication)	85 dB(A)	110 dB(A)
Light industry (decreasing demand for oral communication)	50-65 dB(A)	110 dB(A)
Open offices, control rooms, service counters or similar	45-50 dB(A)	—
Individual offices (no disturbing noise)	45-50 dB(A)	—
Classroom lecture halls	35-40 dB(A)	—
Hospitals	30-35 dB(A)	40 dB(A)
Residential Areas within working environment	Day time : 55 dB Night time : 45 dB	

## SCHEDULE VIII

Regulation 8

MINIMUM LIMITS FOR WORKPLACE ILLUMINATION INTENSITY	
<i>Location/Activity</i>	<i>Light Intensity</i>
Emergency light	10 lux
Outdoor non working areas	20 lux
Simple Orientation and temporary visits (machine storage, garage, warehouse)	50 lux
Workspace with occasional visual tasks only (corridors, stairways, lobby, elevator, auditorium, etc.)	100 lux
Medium precision work (simple assembly, rough machine works, welding, packing, etc.)	200 lux
Precision work (reading, moderately difficult assembly, sorting, checking, medium bench and machine works, etc), offices	500 lux
High precision work (difficult assembly, sewing, colour inspection, fine sorting, etc),	1,000-3,000 lux

## SCHEDULE IX

## Regulation 16

## BLASTING GUIDELINES

- (1) The disposition and detonation of explosives in the construction industry shall only be carried out by a licensed individual or body corporate.
- (2) The operator shall ensure the use of appropriate blasting design and procedure.
- (3) A consistent blasting schedule shall be adopted, minimizing blast-time changes.
- (4) Specific warning devices and procedures shall be implemented before each blasting activity to alert all workers and third parties in the surrounding areas. Warning procedures shall include traffic limitation along local roadways and railways.
- (5) Community awareness and emergency preparedness and response planning shall be undertaken, including control of third party access to blasting areas.
- (6) Specific personnel training on explosives handling and safety management shall be conducted.
- (7) Blasting sites and post-blast shall be checked by qualified personnel for malfunctions and unexploded blasting agents, prior to resumption of work.
- (8) Magazines shall be safely secured and adequate attention shall be given to all explosive-handling phases to prevent theft/improper use.
- (9) Operators shall ensure that the disruptions of aquatic life and marine environment are minimal in the course of their construction activities.

## CLOSE-OUT GUIDELINES

At close-out,

- (1) All machineries, equipment and make shift buildings including their foundations shall be removed and the sites re-vegetated ;
- (2) All excavations shall be back filled.
- (3) All scrap materials, chemicals, explosives and hazardous materials shall be disposed of, in a manner that is of an environmentally acceptable standard.
- (4) The land surface distorted by construction activities shall be reclaimed after completion of project to a standard that considers the previous and future potential of the area.
- (5) Vegetation cover, such as native local plants, overburden, or spoils feasible for sustaining growth should be removed in separate operations and segregated for later use during site reinstatement, and materials to be used for site reinstatement shall be stockpiled and protected from wind, water erosion as well as from contamination.
- (6) Every facility shall provide effective short term measures for slope stabilization, sediment control and subsidence control until long term measures for the operational phase can be implemented.

DATED at Abuja this 28th day of April, 2011

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