OIL AND GAS PIPELINES REGULATIONS

ARRANGEMENT OF REG ULATIONS

OIL AND GAS PIPELINE REGULATIONS
[S.1. 14 of 1995.]

[17*th June*, 1995]

[Comrnencernent.]

PART I

Preliminary

1. **Permit to survey pipeline route, etc.**

(1) No oil pipeline licence shall be granted or renewed unless the route of-

(a) the pipeline has been surveyed; or

(b) in the case of a renewal, the pipeline has been re-surveyed.

(2) No surveyor re-survey shall be carried out under paragraph (1) of this regulation unless a permit to survey has been obtained in accordance with the provisions of sections 4 and 5 of the Oil Pipelines Act.

[Cap. 07.]

(3) An application for a permit to survey shall be accompanied with ten copies of the topographical map of the proposed route of the pipeline drawn on scale-

(a) I :50,000, for a pipeline that is not more than fifty kilometres long;

(b) I: 100,000, for a pipeline that is over fifty kilometres but not more than 100 kilometres long; and

(c) I :250,000, for a pipeline that is over 100 kilometres long.

2. **Application for licence to construct and operate a pipeline**
(1) Application for a licence to construct a pipeline shall-

(a) be made during the validity of a permit to survey; and

(b) be in accordance with the provisions of Part III of the Oil Pipelines Act.

(2) The application shall also be accompanied with the following, that is-

(a) a statement indicating-

(i) the services to be rendered by the pipeline;
(ii) the specification of the pipeline;

(iii) the characteristic of the fluids to be conveyed through the pipeline; and
(iv) the total estimated cost of construction of the pipeline;

(b) a survey description, in accordance with the Nigerian National Grid, of the total route of the pipeline, indicating the width of the right of way, with the co-ordinates of the various points of intersection;

(c) ten copies of the plan of the pipeline showing-
(i) the proposed route of the pipeline marked in red and the sections and quarter sections;

(ii) the location of each point at which there is a change in the outside or the nominal diameter of the pipeline, the wall thickness of the pipeline material, the type and grade of the pipeline and the designed maximum operating pressure;

(iii) the direction of fluid flow along the pipeline;

(iv) the location, shown by symbols, of any installation along the pipeline;
(v) the location of the points at which the new pipeline would cross any other pipeline, stating the owner of the pipeline being crossed;

(vi) the relative position of any existing pipeline in the same right of way of the new pipeline;

(vii) any pipeline within a distance of 1 00 metres of the new pipeline, stating the owner of that pipeline;

(viii) the regional topography of the area along the pipeline route, within a distance of 100 metres on both sides, including any watercourse that the new pipeline would cross;

(d) two copies of the plan of the pipeline showing-

(i) the location of any anchor or expansion loop;
(ii) the location and operating details of corrosion prevention devices, main line valves and any emergency shut-down devices;
(iii) the pig lunching and receiving points and any tie-in-points with operating details;

(e) a hydraulic profile of the pipeline indicating the position of any pumping or booster station;

(f) the ancillary facilities along the pipeline or at its terminal ends, including compressor stations, manifolds and metre banks, giving a general description of each facility and its proposed operation parameter; and

(g) two copies of the plan and profile of the pipeline, indicating the manner in which the new pipeline would cross any highway, railroad, waterway or any other pipeline along the route.

(3) No licence to construct a pipeline shall be granted or released unless a list of the

construction companies being considered for the construction work has been submitted to and approved by the Department of Petroleum Resources (in these Regulations referred

to as "the Department") in accordance with the provisions of the Petroleum (Drilling and Production) Regulations 1969, as amended.

[L.N. 69 of 1969.]

PART II

Design, construction and inspection, etc., of oil pipelines

3. **Pipeline design**

(1) The design of a pipeline for the purposes of these Regulations shall be-

(a) such that it shall be suitable for the transportation of liquid petroleum, including crude oil, refined products, natural gas liquid condensate and liquified petroleum gas; and

(b) as set out in this Part of these Regulations.

(2) The design for the relocation, replacement and upgrading of an existing pipeline shall also conform with the provisions of paragraph (1) of this regulation.

4. **Standard of design**

(1) The standard of design for the pipeline shall be as follows, that is-

(a) it shall conform with-
(i) the ASTM A 106 Grade B or API 5L Grade B or any acceptable equivalent standard, as the minimum requirement for a low pressure range or small diameter pipeline; and

(ii) any of the API 5 LX grade range, for a high working pressure or large diameter pipeline, where a lower grade would require excessively thick walls to cope with the desired working pressure;

(b) the pipeline shall be seamless and be Electric Resistance Welded (ERW) or Double Submerge Arc Welded (DSA W);

(c) the design shall be in accordance with the ANSI/ASME B 31.4-1979 standard code and any subsequent revision, published by the American Society of Mechanical Engineers under the title "Liquid Petroleum Transportation Systems".

(2) **In** addition to the pipeline being in conformity with the ANSI/ ASME B 31.4-1979 code special attention shall be paid to the following matters, that is-

(a) where a pipeline is to be laid at sea or river-bed without burial, the wave and current loads on the pipeline shall be taken into account in the stress calculation of the pipeline;

(b) where applicable, the calculation of limit stress due to sustained load, thermal expansion and occasional loads shall conform strictly with paragraphs 402.3.2. and 402.3.3. of the ANSI/ASME B 31.4-1979 code;

(c) the design and materials selection of the pipeline components, including tees, elbows, bends, valves and fittings shall in all respects conform with Parts II and III of Chapter n of the ANSI/ASME B 31.4-1979 code;

(d) no used fitting of an existing pipeline shall be used on a new pipeline unless its original specification has been identified and confirmed to be capable of performing the new service;

(e) the threaded joints at the internal and external portions of the pipe shall be of the Tapered Pipe Thread type and conform with the API standard 5B or NPT threads in accordance with ANSI B2-1;

(f) the least nominal wall thickness of the threaded portion of the pipe shall not be less than the value specified in ANSI B. 36.10;

(g) all threaded joints of the pipe shall be of those sections of the pipeline that are above the ground;

(h) if two or more pipelines are to be so connected that one will operate at a pressure higher than the other, they shall be so designed that the pipeline system operating at the lower pressure shall not be subjected to any pressure greater than that for which it is licensed;

(i) any pipe fitting valve or equipment connected to the pipeline shall have the manufacturer's rating which is equal to or greater than the proposed maximum operating pressure of the pipeline.

Construction

5. **Construction of pipeline**

The procedure to be followed, the specification requirements and the other matters that shall be considered in the construction of a new pipeline or in the replacement of an existing pipeline shall be as follows, that is-

(a) no person granted a licence to construct a new pipeline or replace an existing pipeline shall begin construction work unless he has given the Department written notice of his intention to do so;

(b) any metallic pipeline material to be buried shall be coated with-

(i) coal-tar enamel, asphalt enamel, polyethylene tape, epoxy, asphalt mastic, urethane or extruded polyethylene; or

(ii) any other material specially approved by the Department for that purpose;

(c) a surface pipeline shall be painted, raised and maintained above ground on permanent supports;

(d) the pipeline construction shall-

(i) follow the steps outlined in Chapter V of the ANSI/ASME B 31.4- 1979 code; and

(ii) be carried out in a way that shall cause the least disturbance to the environment;

(e) special precautions shall be taken to protect the pipeline from wash-ours, unstable soil, landslide or any other hazards that may cause the pipeline to shift or be subjected to abnormal loads;

(f) ditching for the pipeline shall be in accordance with good pipeline practice;

(g) consideration for public safety shall be in accordance with the provision of APRP 1102 or any other recognised equivalent standards;

(h) the minimum soil coverage of a pipeline shall be-

(i) in the case of dry land, 0.9 metre;

(ii) in the case of a river crossing and river-beds, 1 metre;

(iii) in the case of drainage ditch, railroad and highway crossing, 1.2 metres;

(iv) in the case of a rocky area, 0.6 metre;
(v) in the case of a swamp, 0.6 metre; and

(vi) in the case of a shipping channel, 1.5 metres;

(i) the pipeline welding shall be in accordance with the provisions of API 110411107 and welding inspection shall be by non-destructive method using the radiographic method set out in API 1104-1973 or its subsequent editions;

(j) in addition to the specific requirements of the relevant government agency responsible for railroad and highway crossings, the following precautions shall be taken at railroad and highway crossings, that is-

(i) any installation of carrier pipe or casing shall be in accordance with API RP 1102;

(ii) the casing shall either be insulated from its carrier pipe support and extend to both sides of the railroad or highway or the crossing shall be of a thicker wall pipeline covered with compacted fill and protective reinforced concrete slab;

(iii) a surface line shall be similarly buried with casing protection or special construction as specified in sub-paragraph (ii) of this paragraph at such crossings;

(iv) a pipeline warning sign shall be conspicuously displayed by the licensee at the entry and exit points of the railroad, highway, river or any other pipeline crossing;

(k) the licensee shall, before commencing any ground disturbance in a populated or controlled area-

(i) locate the position and alignment of the pipeline with marking and distinguishable warning signs at such intervals as may be specified by the Department;

(ii) identify any pipeline within thirty metres radius of its area of ground distance during the construction of the pipeline;

(l) if there is an indication that a pipeline is within thirty metres radius of the pipeline or a pipeline crossing, the licensee or any other person undertaking construction within that radius shall locate the pipeline and mark it so that it

can be identified and avoided by the construction equipment and no person

shall excavate within one metre radius of the pipeline so located;

(m) the Department may direct that an existing pipeline or pipeline crossing located within the construction zone of the new pipeline in a populated or controlled area shall, during the period of ground disturbance in its vicinity, be-

(i) completely depressurized; or

(ii) operated at reduced pressure; or

(iii) otherwise protected;

(n) mainline block valves shall be installed-

(i) on the upstream side of major river crossings;
(ii) at pump stations; and

(iii) at other sensitive locations of the pipeline, including industrial, commercial and densely populated areas where construction activities may pose particular risks of damage to the pipeline, the right of way of the pipeline shall be clearly marked in those areas with signs for ease of iderui fication;

(iv) check valves shall be installed on the downstream of river crossings;
(v) the licensee shall, not later than six months after completion of construction, submit two copies of the as-built plan of the pipeline on the same scale as that of the plan submitted with the application for the pipeline licence.

Inspection and testing

6. **Commencement of inspection and testing**

The licensee shall, on completion of the construction of the pipeline, give the Department not less than seven days' notice of its intention to commence inspection and testing of the pipeline.

7. **Inspection and testing guidelines**

The guidelines for the inspection and testing of a pipeline are as follows, that is-

(a) the pipeline shall be inspected visually and examined radiographically in accordance with the procedure set out in Chapter VI of the ANSI ASME B 31.4 1979 code or its subsequent revisions;

(b) pressure tests shall be conducted by hydrostatic method and in such manner as shall ensure the protection of life, property and the general environment of the pipeline;

(c) the entire length of the pipeline shall be tested to the designed rated pressure;

(d) an in-line pressure vessel or a pre-fabricated manifold on the pipeline shall be tested to the manufacturer's specifications in accordance with the Mineral Oils (Safety) Regulations 1963;

[LN. 45 of 1963.)

(e) the pressure recording instruments to be used for testing shall have a valid

calibration certificate which shall not be more than a year old;

(f) the accuracy of the pressure recording instrument shall be within two per cent of its range;

(g) the chart record of the test shall be continuous and legible and the test result and any remedial action taken shall be submitted to the Department for approval before the pipeline is commissioned;

(h) except with the permission of the Department, the duration of pressure tests-

(i) shall not be less than 24 hours of continuous testing in the case of leaks and material failures, and

(ii) may be less than 24 hours of continuous testing but not less than one hour in the case of buried pipelines of not more than 100 metres in length and all surface running pipelines;

(i) all buried pipelines shall be tested to a pressure of not less than 1.25 times the maximum designed operating pressure;

(j) surface pipelines transmitting liquid petroleum or gas shall be tested up to a pressure of not less than 1.4 times the maximum designed operating pressure;

(k) unless otherwise authorised or permitted by the Department-

(i) the actual test pressure throughout the duration of the test shall not exceed 1 10 per cent of the minimum yield strength of the pipe material and the test equipment shall appropriately be pre-set not to produce above that pressure;

(ii) the test medium shall be water;

(iii) the pipeline shall be tested to a minimum pressure of not less than 700 kilopascals;

(l) the maximum test pressure in all cases shall not result in a hoop stress greater than 110 per cent of the specified maximum yield strength of the pipe material based on its nominal wall thickness; and

(m) valves and fittings on the pipeline shall not, during the test, be subjected to a pressure greater than the manufacturer's test pressure rating.

8. Environmental protection guidelines

Where-

a) the test pressure results in a hoop stress greater than 75 per cent of the specified minimum yield strength of the pipeline based on its nominal wall thickness; or

(b) the pipeline crosses or passes within 100 metres of a watercourse, the operator shall assure the Department that adequate contingency plans have been made for protecting the environment.

Operation and maintenance

9. **Operating and maintenance guidelines**

The guidelines for the operation and maintenance of the pipeline are as follows, that is-

(a) a licensee shall-

(i) not begin to operate a pipeline unless he has obtained the approval of the Department;

(ii) establish a written emergency plan for implementing in the event of systems failure, accidents or other emergencies;

(b) an emergency plan established under sub-paragraph *(a)* (ii) of this paragraph

shall include procedures for prompt and expedient remedial action for-

(i) the safety of the personnel of the operating company and of the public;
(ii) the protection of property and the environment;

(iii) the control of accidental discharge from the pipeline; and

(iv) the adequate training of personnel for the handling of emergencies;

(c) the maximum steady state operating pressure and static condition shall not exceed-

(i) the internal design pressure; or

(ii) the pressure ratings of the components,

whichever is less, and the pressure surges or the momentary pressure variations shall not exceed ten per cent;

(d) pipeline markers at crossings shall indicate the location of the pipeline and the name of the operating company;

(e) all pressure relief devices shall be-

(i) activated after installation to ensure that they function properl

(ii) inspected and re-certified once in 26 months, and the report of the inspection and re-certification shall be sent to the Department;

(f) the right of way shall be maintained to provide a clear visibility and give reasonable access to the maintenance crew;

(g) clear access shall be maintained to valves locations, and ditches shall be protected against washout of the pipeline;

(h) the right of way shall be regularly patrolled for prompt detection of any line-break, encroachment or any other situation that may endanger the safety of the pipeline;

(i) any line-break, encroachment or dangerous situation detected under sub-paragraph *(h)* of this paragraph shall be promptly reported to the Department;

(j) all underwater crossings shall be inspected not less than once in five years to ensure that-

(i) there is sufficient cover for the pipeline; and

(ii) the safety of the pipeline at the crossing is not endangered in any way;

(k) any repair to the pipeline shall be carried out in accordance with-

(i) good pipeline practice; an

(ii) the safety provisions contained in the standards API RP 1107 and API RP 1111 or their recognised equivalent standards;

(l) the repaired section of the pipeline shall be pressure-tested at the same expected operating conditions relating to a new pipeline;

(m) the riser installation or an offshore pipeline connected to a platform shall be visually inspected every year for physical damage or corrosion in and above the splash zone;

(n) the record of an inspection under sub-paragraph (m) of this paragraph shall be kept on location for verification, whenever the need arises.

Cathodic protection and corrosion control

10. Design of cathodic protection

The design for the cathodic protection from external and internal corrosion of a ferrous pipeline and its components shall be in accordance with the specifications and procedures prescribed in the NACE RP 0169-89 or equivalent standards.

11. Maintenance of the cathodic protection system

(1) The cathodic protection system shall-

(a) be maintained in a serviceable condition; and

(b) be electrically tested at least once in two years.

(2) Where a test under paragraph (1) *(b)* of this regulation reveals a weakness in the cathodic protection system, appropriate measures shall be taken and a report of the test and the measures taken shall be promptly sent to the Department.

(3) All sources of impressed current such as rectifiers and other associated devices in the cathodic protection system, shall be inspected and tested every four months to ensure their proper functioning.

12. Cathodic protection system

(1) The cathodic protection system shall be provided by a galvanic anode or an impressed current anode system which shall-

(a) be installed in such a way that it mitigates corrosion; and

(b) contain a method of determining the degree of cathodic protection achieved on the pipeline.

(2) The criteria for selecting the appropriate protection system shall be as listed in paragraph 7.5 of section 7 of the NACE Standard RP 169-83.

(3) A cathodic protection system shall be-

(a) installed not later than one year after the laying of the pipeline and in such a way that the pipe coatings at the point of installation are kept intact;

(b) electrically isolated at all inter-connections to other pipeline systems or structures except where the two structures are mutually protected by the same system;

(c) protected against damage by atmospheric electrical discharges, underground cables and power-lines.

(4) Except for underwater pipelines, sufficient test leads shall be installed at test stations of buried pipelines for the periodic checks of the effectiveness of the cathodic protection system which shall be carried out by electrical measurements.

(5) A minimum distance of three metres shall be maintained between the electric transmission tower footings, ground cables and earthings, power-lines and the pipeline being protected.

(6) For the purposes of paragraph (4) of this regulations, **"test stations"** includes all pipe casing installations, insulating joints, crossing and main manifold junctions.

13. External corrosion control

The guidelines for the application of coating to the pipeline and its cathodic protection for the control of external corrosion of a buried or submerged pipeline are as follows, that is-

(a) the coating shall-

(i) be applied in such a way that it will mitigate corrosion and effectively resist under-film migration;

(ii) be ductile and strong enough to resist cracking and damage during

handling and under soil stress;

(iii) be compatible with any supplemental cathodic protection;

(iv) if it is on insulating type material, have low moisture absorption;

(v) be applied in such a way that no irregularities protrude through it and no holiday gaps exist anywhere on the pipeline;

(b) the points of connection of any attachment to the pipeline shall be sealed with the coating.

14. Internal corrosion control

(1) This guidelines for the corrosion control of a pipeline are as follows, that is-

(a) no corrosive material shall be transported in a pipeline unless appropriate measures have been taken to mitigate the corrosive effect of the material on the internal coating of the pipeline;

(b) internal corrosion shall be prevented by-

(i) frequent pigging, inhibiting or scraping; or

(ii) the application of internal coating on the pipeline before it is laid.

(2) Whichever method is used under paragraph (1) *(b)* of this regulation, appropriate precaution shall be taken, for example-

(a) in the case of inhibition of the pipeline, sufficient coupon holders shall be used; and

(b) in the case of application of internal coating, the established industry standards

of internal coating material shall be complied with.

15. Monitoring of internal corrosion

(1) Internal corrosion in a pipeline shall be monitored by running an intelligent pig or other internal survey instrument through the pipeline at least once in five years.

(2) A report of a monitoring survey carried out under paragraph (l) of this regulation shall be sent to the Department.

PART III

Gas transmission and distribution pipelines

16. Guidelines for design, etc.

The guidelines for the design, fabrication, installation, inspection, testing, operation and maintenance of a gas transmission and distribution pipeline required to operate with metal temperature of between 450 of and minus 20 of shall be as follows, that is-

(a) the standard of design shall be in accordance with the specifications of ANSV/ASME B31.8-1986 titled "Gas Transmission and Distribution Pipe Systems" or its later editions;

(b) all structural materials, valves, fittings, bolting and tubing to be used shall generally conform with the specification in Appendix B of the reference standard ASMEB31.8;

(c) the gas pipeline shall be generally seamless or of the ERW (Electric Resistance Welded) and DSA W (Double Submerged Arc Welded) types;

(d) the use of thermoplastic and thermosetting pipe materials may be acceptable if they conform with the ASTM specifications 02513 and 02517 respectively and are inhibited against material degradation effects by ultra-violet rays if used in locations where the pipeline is exposed to sunlight;

(e) the weldability of the ferrous pipe materials shall be tested in accordance with the requirements of API standard 1104;

(f) adequate provisions shall be made for-

(i) the flexibility of the pipeline while under pressure in the form of anchorage and guide points; and

(ii) temperature-induced stresses by allowing for expansion joint couplings.

17. Construction

The guidelines for the construction of a new gas pipeline or for the replacement of an existing gas pipeline shall be as follows, that is-

(a) the design and construction of a pipeline and its corresponding corrosion control installation shall be in accordance with the Standards and codes specified in ANSI/ASME B 13.8, and in the National Association of Corrosion

Engineers Standard RP 0169-83, generally referred to as NACE Standard RP 0169-83;

(b) a long distance gas transmission pipeline shall be made of steel and its design and construction shall be governed by the population density indices specified in ANSI/ASME B31.8 and the corresponding design factor;

(c) where a type of construction is specified for a pipeline in the proximity of main roads and railroads and their mode of crossings, the pipeline shall be constructed to those specifications;

(d) the minimum depth of burial of the pipeline shall be specified in regulation 5 (*h*) of these Regulations but where-

(i) the minimum depth cannot be achieved; or

(ii) the pipeline would be exposed to excessive external loads, the pipeline, at those points, shall be encased, bridged or specially reinforced to withstand any anticipated external loads;

(e) there shall be a minimum clearance of 0.5 metre between the pipeline and any other underground structure not connected with it;

(f) a buried pipeline shall be protected against corrosion and if a pipeline is to transport corrosive or toxic gas-

(i) the design parameter of the pipeline shall be such that the gas pressure in the pipeline at any time shall not result in a hoop stress greater than sixty per cent of the specified minimum yield strength of the pipeline material based on its nominal wall thickness; and

(ii) the block valves and check valves for the pipeline shall be so located as to prevent the escape of the corrosive or toxic gas into the atmosphere in the event of a pipeline failure;

(g) the inspection of the pipeline construction materials and its appurtenances, welding, ditching, stringing and the general installation shall be in accordance with the procedure outline set out in Chapter IV of ANSI/ASME B31.8;

(h) a pipeline laid-

(i) in a farmland, virgin area or sparsely populated area, shall be tested with water up to a minimum pressure of 125 per cent of its designed maximum operating pressure or with air up to 110 per cent of its maximum operating pressure;

(ii) in a densely populated area, shall be tested only with water up to a minimum pressure of 140 per cent of its designed maximum operating pressure,and the result of the test shall be sent to the Department;

(i) a pipeline, designed to withstand twenty per cent more of the specified minimum yield strength, shall be tested by using pressurised air or gas between 100 psi to twenty per cent of the minimum specified yield of the material, and a pipeline designed to operate at below 100 psi shall be leak-tested at the maximum system pressure.

18. Use of cast-iron material

Cast-iron materials shall not be used for a gas pipeline unless-

(a) specific application, supported with compelling reasons for using the cast-iron material, has been made to the Department;

(b) the Department has given special approval for the material to be used;

(c) the design is strictly in accordance with the specifications set out In paragraph 842 of the reference standard ANSI/ASME B31.8.

19. Use of plastic material

(1) Thermoplastic and thermosetting plastic material of the grades specified In ASTMD 2513 and ASTMD 1217 may be used for laying service lines only.

(2) The guidelines for the use of plastic materials are as follows, that is-

(a) where the value of the plastic design factor is not less than 0.32 for any case, the design pressure for the plastic gas pipeline shall be in accordance with the formula given in paragraph 842.31 of ANSI/ASME B31.80;

(b) the plastic materials shall be used in any service where the maximum and minimum operating temperatures are higher than IOO°F or lower than minus 20 of respectively;

(c) the plastic materials used shall be inhibited against the effect of ultra-violet rays which renders such materials brittle when exposed to sunlight;

(d) the plastic pipes or tubing shall not be threaded at joints but shall be jointed by the solvent cement method, adhesive method, heat-fusion or by means of compression coupling or flanging, whichever conforms with the manufacturer's specifications;

(e) extreme caution shall be taken in laying plastic pipelines to avoid damage to the material, consequently;

(f) a buried plastic pipeline of-

(i) 1/2 inch nominal diameter and above, shall have a minimum wall thickness 0.1 inch; and

(ii) below-inch nominal diameter, shall have a minimum wall thickness of not less than 0.06 inch;

(g) a plastic pipeline shall-

(i) be buried in undisturbed or well compacted soil and no mitre bend shall be permitted at any portion of the pipeline;

(ii) be tested at a pressure of not less than 150 per cent of its maximum operating pressure or 50 psig, whichever is greater;

(iii) not be subjected on any occasion to a pressure of more than 300 per cent of its maximum operating pressure.

20. Operation and maintenance

(1) The operation and maintenance of-

(a) the pipeline, shall be as specified in regulation 9 of these Regulations; and

(b) the associated corrosion system, shall be in accordance with the provisions of NACE Standard RP 1069.83.

(2) A pipeline that is not put into use-

(a) after six months of its construction, shall be filled with inert gas or nitrogen;

(b) until after one year of its construction, shall be pressure-tested and certified by the Department before it is put into use.

(3) The gas pipeline system shall be well purged with water, air or inert gas before any repair is undertaken and the environment of the repair site shall be monitored constantly with a gas detecting device to ensure adequate safety.

PART IV

Procedure for upgrading pipeline or changing substance transmitted by pipeline

21. Application for upgrading pipeline, etc.

(1) A licensee who desires to upgrade the maximum operating pressure of his pipeline shall make an application to the Department stating the following, that is-

(a) the reason for his desire to upgrade the pressure;

(b) the leak history of the pipeline to be upgraded;

(c) the modification required to be made to the pipeline system to render it qualified for upgrading in accordance with the specifications contained in paragraph 845 of ANSI/ASME 3.18;

(d) the test that the licensee intends to carry out on the pipeline system in accordance with regulation 16 of these Regulations in which the upgraded maximum operating pressure shall now be the new parameter to use for the tests;

(e) such other information as the Department may deem necessary to enable it to take a decision on the application.

(2) The Department may grant approval for the upgrading of the pipeline and its operation at the upgraded operating pressure if the Department is satisfied with the information supplied to it under paragraph (1) of this regulation.

22. Change of substance transmitted by the pipeline

(1) Where a licensee desires to change the nature of the fluid transmitted by the pipeline, that is-

(a) from liquid petroleum to gas; or

(b) from sweet gas to corrosive gas,

he shall make an application to the Department.

(2) A licensee who makes an application under paragraph (1) of this regulation shall state-

(a) he reason for desiring the change;

(b) the leak history of the pipeline concerned;

(c) the modification required to the pipeline system to render it capable of performing the new service;

(d) such other information as the Department may deem necessary to enable it to undertake a realistic assessment of the application for the purpose of approval.

(3) The Department may grant approval for the change of substance transmitted by

the pipeline if the Department is satisfied with the information supplied to it under paragraph (2) of this regulation.

PART V

Discontinuation, abandonment and resumption of operation of pipeline system

23. Discontinuation

(1) A licensee who desires to discontinue the operation of the pipeline system or its ancillary facilities shall apply to the Department giving at least three months' notice of his intention to do so.

(2) An application made under paragraph (1) of this regulation shall be accompanied with-

(a) the reasons for the discontinuation of the pipeline system or its ancillary facilities;

(b) two copies of the plan of the entire pipeline or part thereof in which the operation is to be discontinued shown in green colour;

(c) the method proposed to be used for the discontinuation of operations.

(3) The Department may, if satisfied with an application made under this regulation, grant a discontinuation approval upon such conditions as it may determine.

(4) On the grant of an approval made under paragraph (3) of this regulation and subjected to any condition attached to the approval, the pipeline shall be-

(a) disconnected from all other facilities connected to it, including other pipelines, meter stations, ancillary facilities and appurtenances;

(b) purged of petroleum liquid or gas by using water or inert material and capped at both ends with moisture resistant materials.

24. Abandonment and removal of pipeline

(1) Where a pipeline is to be completely abandoned, the provisions set out in regulation 23 of these Regulations shall apply.

(2) The right of way of an abandoned pipeline shall continue to be maintained and clearly identified for as long as the pipeline remains in place.

(3) Where the abandoned pipeline-

(a) is to be removed, the licensee shall send to the Department the proposed work programme for the removal for approval;

(b) has been removed under sub-paragraph *(a)* of this paragraph, the licensee shall restore to perfect condition-

(i) the right of way of the pipeline; and

(ii) any disturbed land area in the vicinity of the pipeline.

25. Resumption of operation of abandoned or discontinued pipeline

(1) A licensee who desires to resume operations in an abandoned or a discontinued pipeline shall apply to the Department for approval.

(2) An application made under paragraph (1) of this regulation shall be accompanied

with-

(a) the reasons for the resumption of operations; and

(b) the proposed method to be used in reactivating the pipeline.

(3) The Department may, if satisfied with an application made under this regulation, approve the reactivation of the pipeline under such conditions as it may determine.

(4) A pipeline reactivated under this regulation shall be tested as a new pipeline under the proposed operating conditions of the pipeline.

PART VI

Miscellaneous

26. Offences

(1) A person who contravenes a provision of these Regulation is guilty of an offence and liable on conviction to a fine of up to ₦ 500, 000 or imprisonment for a term of six months or to both such fine and imprisonment.

(2) Where an offence under paragraph (1) of this regulation which is committed by a body corporate is proved to have been committed with the consent or connivance of, or to be attributable to any neglect on the part of, any director, manager, secretary or other similar officer, servant or agent of the body corporate (or any person purporting to act in such capacity), he as well as the body corporate shall be deemed to be guilty of the offence and may be proceeded against and punished in the same manner as an individual under paragraph (1) of this regulation.

27. Interpretation

In these Regulations, unless the context otherwise requires-

"Department" means the Department of Petroleum Resources in the Ministry;
"DSAW" means Double Submerged Arc Welded;

"ERW" means Electric Resistance Welded;

"Minister" means the Minister charged with responsibility for matters relating to petroleum resources and "Ministry" shall be construed accordingly.

28. Citation

These Regulations may be cited as the Oil and Gas Pipeline Regulations.