GAS EXPLORATION AND DEVELOPMENT – PERMITING PROCEDURES & REQUIREMENTS

S/N	PERMIT	REQUIREMENTS
1.	Gas Field Development Plan (GFDP)	The proposed Gas Field Development Programme (GFDP) must be submitted at least thirty working days before the commencement of any part of it and shall be in accordance with Regulations 37 & 42 of the Petroleum (Drilling and Production) Regulations of 1969 and its amendments.
		The FDP shall contain but not limited to the following: (1) A minimum of 3 wells must have been drilled and a field study carried out detailing the static and dynamic reservoir model. (2) Concept study and reasons for choice of proposed development plan (3) Seismic and Geologic Prognosis (4) Field reserves and ultimate recovery. (5) Structural Map of all gas bearing sands on a scale of 1:25,000 (6) Reservoir Geologic Modelling (7) Reservoir Engineering Simulation Studies (8) Well location optimisation/depletion plan (9) Well bore utility. (10) The production profile and the anticipated drive mechanism. (11) Gas Utilization Plan in line with Federal Government policy of zero flare (12) Cost estimates of the development (13) Surface facilities. (14) HSE strategy/Case. (15) Field Abandonment Plan (16) Processing fee of \$\frac{\text{H}}{2}\$0,000 only, payable to Fed. Gov't of Nig. – DPR Fees Account.
		Satisfactory development programmes would then be evaluated and approved. However where strong objections exist, the company would be informed. Individual well location proposals still require to be approved on their merits. Also, approvals to drill do not necessarily imply that the target completion zones have been approved. Completions are separately considered for approval.
2.	Permit to drill gas well	This permit is valid for six (6) months and must be revalidated if work does not commence. The application shall conform with Section 32 Petroleum (Drilling & Production) Regulation 1969 & Amendments and shall contain among others the followings: 1. Well name and well engineering 2. Surface and sub-surface coordinates 3. Contractor, Rig name and validity. 4. Location (OPL/OML) identification. 5. Spud date 6. Casing, cementing, mud and logging programmes 7. Cost estimates 8. Structural maps on a scale of 1:25,000 9. Geological prognosis 10. Pore pressure prediction study. 11. Proposed depth or TD. 12. Seismic sections/ maps in cases of exploration and appraisal wells. 13. Fee of \$\text{\

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3.	Permit for gas well initial completion	All applications seeking a permit for initial completion should conform with Section 33 of Petroleum (Drilling & Production) Regulation 1969 & Amendments and shall routinely contain among others the following:
	completion	Amendments and shan routhlery contain among others the following.
		1. The well must have been drilled as approved by DPR.
		2. Well name and number
		3. Name of Hoist and owner
		4. Proposed completion schematics, well clean-up & completion type.
		5. Final well drilling report
		5. Proposed completion intervals
		6. Cost estimates for the completion work
		7. Statutory Fees of N 5,000
4.	Permit for gas	Applications in respect of well work-over and or repairs shall conform
	well work-	with Sections 32 & 35 of the Petroleum (Drilling & Production)
	over and re-	Regulation 1969 & Amendments and shall contain the following details:
	entry.	
		1. Name and number of well
		2. Name of Hoist and owner
		3. Reason for re-entry or work-over4. Detailed or sketched outline of job proposed
		5. Well history and well logs
		6. Drainage pattern of the relevant sands
		7. Current completion schematics
		8. Proposed completion schematics
		9. Remaining reserves of the sand completed in the well.
		10. Cost estimates of the work-over
	D	11. Statutory Fees of ¥5,000
5.	Permit for re- completions	The procedure is the same as for work-over or re-entry
6.	Permit for	Applications in respect of abandonment shall conform to provisions of
	abandonment	Part VIII-G, B- 2.1 of the Environmental Guidelines And Standards for the
		Petroleum Industry in Nigeria (EGASPIN). The application shall include
		the following among others:
		1. What Personnel, equipment and facilities, both onshore and offshore
		that will be removed when the project is abandoned.
		2. How and when they will be removed, the area will be reclaimed, stabilized or otherwise secured.
		3. Details of the release, loss, storage or ultimate disposal of any gaseous,
		liquid, or solid contaminant stored or otherwise contained in the areas.
		Well abandonment shall involve the following:
		1. Isolate well from surface.
		2. Plug and abandon down-hole according to permit criteria.
		3. Place surface cement plug below cellar, to allow removal of surface
		components, the process of removal should avoid any significant adverse effect on the environment.
		4. Isolate production interval to prevent communication between
		aquifers of different nature.
		5. Close pit appropriately.

7. The following related drilling operations shall also be conducted with prior approval: 1. Well plug back & abandonment 2. Well side track 3. Well deepening 4. Well change of target 5. Well re-entry after temporary suspension of activities 6. Casing recovery from a well. 7. Zone switch. The permit for gas flaring waiver application should contain the 8. **TEMPORARY GAS FLARING** following: PERMIT/ 1. Name of field and facility where flaring is expected. WAIVER 2. The reason and justification for the temporary gas flaring exercise. 3. Actions/processes already put in place to reduce the flare volumes before seeking the permit/waiver. 4. The duration over which gas will be flared and total volume of gas expected to be flared.

flare permit/waiver.

5. Any other information/supporting facts to justify the application for