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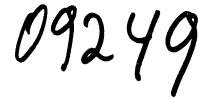
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# United Nations Industrial Development Organization

Expert Group Meeting on UNIDO Model Forms of Contract for Fertilizer Plants

Vienna, Austria, 26-30 November 1979

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FIRST DRAFT OF THE
UNIDO MODEL FORM OF TURN-KEY LUMP SUM CONTRACT
FOR THE CONSTRUCTION OF A FERTILIZER PLANT \*

by the UNIDO Secretariat

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#### INTRODUCTION

- 1. The Second Consultation Meeting on the Fertilizer Industry in Innabruck, Austria, 6-10 Navember 1973, requested UNIDO to prepare a UNIDO model form of Turn-Key Lumb Sum Contract for the Construction of a Fertilizer Plant for consideration by the Third Consultation in 1980.
- Onsultation and a few suppliers and participants of fertilizer plants.
- 3. With the benefit of these comments, the first draft of the UNIDO Model Form Turn-Key Lump Sum Contract has been prepared for the consideration of the Expert Group Meeting.
- 4. A final draft of the Technical Annexures for this contract specific to an ammonia urea plant in being prepared and will be issued as an addendum to this document (ID/WG.NO6/2.Add.1).

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## AGREEMENT

This Agreement is made this (Day, Date and Year)
and entered into between (Legal Name of PURCHASER)
having its registered office at (Place)
and hereinafter referred to as PURCHASER which expression shall,
unless repugnant to the context or contrary to the meaning
thereof, include its successors and permitted assigns of the one
part, and (Legal Name of the CONTRACTOR)
having its registered office at (Place)
and hereinafter referred to as CONTRACTOR, which expression
shall, unless repugnant to the context or contrary to the
meaning thereof, include its successors and permitted assigns
of the other part.
WITHESSETH
WHEREAS THE PURCHASER wishes to install at (place) (Plant Site
facilities for the production of (quantity) metric tons
of Ammonia per day and of (quantity) metric tons per day
of Urea.
WHEREAS THE PURCHASER desires to obtain the services of the
CONTRACTOR for the supply of Plant and facilities on a turn-key
basis including supply of licences, know-how basic design and
engineering, supply of complete plant and equipment, design and
construction of all civil work, complete erection of plant and
equipment and commissioning and stabilization of the total Plant
facilities as mentioned nereinafter and
and some committee of the second second and
WHEREAS THE CONTRACTOR is willing to undertake such work and
services as hereinafter agreed with the PURCHASER and as set ou
in this Contract
IN CONSIDERATION of the premises and mutual covenants herein

contrined, it is hereby agreed by the parties hereto as follows:

#### DEFINITIONS

- 1.1 Unless the context otherwise requires the following expressions shall have the following meanings assigned to them in this Article.
- 1.2 "The Contract" means this Contract (together with the Ammerures and Specifications) entered into between the PURCHASER and the CONTRACTOR for the execution of the works howsoever made, together with all of the documents to which reference has been made in the Contract documents, including such amendments (properly made from time to time by mutual agreement between the parties) to the documents constituting this Contract.
- 1.3 The "PURCHASER" means the party named as such in this Contract or his successors or permitted assigns.
- 1.4 The "CONTRACT")R" means the party named as such in this Contract or his successors or permitted assigns.
- 1.5 "Absolute Guarantees" shall mean the performance guarantees of Ammonia and Urea Plants relating to capacity of the Plant(s) and quality of the products, as set forth in Article 19 and Ammerure XVI.
- 1.6 "Act of Bankruptcy" has the meaning assigned to it by the
  Bankruptcy Acts in the applicable jurisdictions under governing
  laws.
- 1.7 "Approval" shall have the meaning ascribed in Article 44.3.
- 1.8 "Battery Limits" shall be defined to mean and include the overall facilities embodying the Plant as detailed in Annexure III, being all of the facilities required for the production of Ammonia and Urea including the power plant, other utilities and off-sites.
- 1.9 "Commercial Production" shall mean the continuous production of pecification grade ammonia and urea at the rate and for the period specified in Article 15.11.

- "Completion of the Works" shall mean the time when all the Works to be performed by the CONTRACTOR under the Contract have been completed in accordance with the Contract, and the Acceptance Certificate has been issued.
- 1.11 "Confidential Information" shall mean the Confidential Information defined as such in Article 30.1.
- 1.12 "CONTRACTOR's Equipment" means any equipment, sheds, materials, tools, stores or things brought on Site by or on behalf of the CONTRACTOR for the execution of the Contract, but not for permanent incorporation in the Plant.
- 1.13 The "Contract Price" means the total amount referred to in Article 11.1, subject however, to any valid adjustments made through the application of relevant contractual provisions provided for therein or as specifically elsewhere provided for in the Contract.
- 1.14 "Critical Items" shall mean all the equipment specifically designated as such in Annexure VIII.
- 1.15 "Days" shall be calendar days.
- 1.16 The "Engineer" means subject to Article , the person(s) or firm(s) appointed from time to time and designated by the PURCHASER as its representative with specified authority to review all work on the PURCHASER's behalf and to give such instructions and/or grant such approvals as may be necessary for the purposes of this Contract.
- 1.17 "Final Acceptance" shall be deemed to mean the date on which the Work(s) are finally accepted in accordance with Article 20 and specifically Article 20.9 and a final Acceptance certificate is issued.
- 1.18 "FOB", "CIF" and "C and F" shall have the meanings assigned to them in "INCOTERNS 1953", published by the International Chamber of Commerce.
- 1.19 "Guarantee Tests" shall mean the test operation of each individual plant and the Plant as a whole to be undertaken for the purpose of demonstrating the Performance Guarantees, as specified in Article 19.

- 1.20 "Holding Company" and "Subsidiary" have the meanings assigned to them by the prevailing statutes in the applicable jurisdictions under governing laws.
- 1.21 "Initial Operation" shall mean providing the first feed of the feedstock to the Plant concerned.
- "Mechanical Completion" shall mean the time when the physical construction of the Plant(s) has been completed, all mechanical tests as specified under Annexure XX have been satisfactorily completed (in accordance with the detailed procedures as shall be agreed between the parties), and the Mechanical Completion Certificates of each of the Plants and inclusive of facilities within the Plants, and all sections of the Off-Sites and Utilities have been issued.
- "Mechanical Completion Certificate" means the document that will be issued pertaining to the Mechanical Completion of the Plant.
- "Modification(s)" or "Modify" shall in all cases be deemed to 1.24 cover all work and/or services within the scope of the Contract required to be undertaken by the COFTRACTOR (which require implementation by a change order but do not involve any increase in price) incidental to and/or involving, corrective engineering, replacement and/or repair of equipment and parts related thereto, and/or elimination of design and/or mechanical and/or process defects whether or not the causes requiring the modification became patently or latently manifest, and whether or not the said defects or malfunction or problem arises in relation to a process, mechanical and/or design relationship, and/or relates to insufficiency and/or inadequacy in workmanship and/or materials and/or specifications, and includes corrective work related to civil engineering, construction and site preparation, all within the scope of the Work(s).
- 1.25 "Penaltiable Guarantees" shal' mean the performance guarantees of the Plant(s) relating to consumption of raw materials and utilities as set forth in Article 19.
- 1.26 "Performance Guarantees" shall mean the Absolute Guarantees and the Penaltiable Guarantees.

- "Plant" means the ammonia plant, the urea plant, the offsites, utilities and the administrative, maintenance,
  laboratory and other facilities as defined in this SubArticle, in the Ammerures and the Specifications, to be
  supplied by the CONTRACTOR under the terms of this Contract,
  to be constructed at the Site, and in respect of which the
  CONTRACTOR's Services are provided.
  - 1.27.1 "Ammonia Plant" shall mean the ammonia plant as described in Annexure VIII.
    - 1.27.1.1 "Ammonia Process" shall mean the know-how, basic engineering and the licence provided by (Name of Licensor) for the construction, operation and maintenance of the Ammonia Plant, under the Contract.
  - 1.27.2 "Urea Plant" shall mean the urea plant described in Ammexure VIII.
    - 1.27.2.1 "Urea Process" shall mean the know-how, basic engineering and the licence provided by (Name of Licensor) for the construction, operation and maintenance of the Urea Plant, under the Contract.
- 1.28 "Products" shall mean the summonia and the carbon dioxide produced in the Ammonia Plant and the urea produced in the Urea Plant, of such quality as defined in the Ammexures and Specifications.
- "Provisional Acceptance" shall be deemed to mean the date when the individual plants have been provisionally accepted and confirmed by the issue of a Certificate of Provisional acceptance in accordance with Articles 15 and 20, and demonstration of the capability of the utilities and off-sites (together with the sufficiency of carbon dioxide) to meet the guarantees specified in Article 19.
- 1.30 "Ready for Operation" shall mean that the Plant(s) concerned have completed the Mechanical Completion Tests and are ready for Initial Operation.

- in Article 27 and shall in all cases be deemed to cover work and/or services within the scope of the Contract which do not require implementation by change order and do not involve any increase in price.
- 1.32 "Site" means the land within which the Works are to be constructed as specified in Annexure I.
- "Specification" means the technical criteria, definitions and parameters governing all of the Plant, equipment, Work(s) and capacities of the Plant(s) as set out in the Contract, Annexures and Specifications as amended from time to time in accordance with the Contract.
- 1.34 "Sub-CONTRACTOR" means any person or firm to whom any part of the CONTRACTOR Services or the execution of any part of the Works is subcontracted by the CONTRACTOR, subject to any governing provisions of this Contract.
- operations of pre-commissioning and commissioning shall have been completed and the Plant(s) commence(s) the production of specification grade Product(s).
- 1.36 "Technical Documentation" shall mean the technical documents described in Annexure XV to be supplied by the CONTRACTOR under the Contract and shall include all other technical documentation required to be supplied by the CONTRACTOR.
- 1.37 "Ton(s)" refers to metric ton.
- 1.38 "Work(s)" means the whole of the work(s), materials, plant, and equipment, matters and things to be done, furnished, performed, accomplished and provided by the CONTRACTOR (inclusive of his services under this Contract) but without restricting the generality of the foregoing, includes, according to the context all the relevant particulars specified elsewhere in this Contract.
- 1.39 "Utilities" and "Off-Sites of Plant" shall mean the facilities demarcated and indicated in the general Annexures and the plot plan attached to Annexure VIII.

- 1.40 "The CONTRACTOR's Services" means the services to be provided and the work to be done by the CONTRACTOR in the execution of the Works, as set out in the Contract.
- 1.41 "Equipment shall mean all of the equipment, machinery, materials, and first charge of chemicals and catalysts required to be incorporated permanently into the Plant(:) (with the exclusion of materials for civil works) in order for the plant to be built in accordance with the Contract.
- 1.42 "Materials" means machinery, other items of equipment and other things needed or intended to form part of the Plant.

# OBJECT OF THE CONTRACT (INCLUDING PROGRAMME AND COST)

- 2.1 The object of the Contract is to establish a modern, reliable efficient and integrated Plant, suitable to the location for the production of ammonia and (prilled incoated) urea. together with the required utilities, off-sites and other facilities, all of which together are defined as the Work(s). The scope of the Contract covers a turn-key supply, which includes the grant of licence and know-how, to provide basic and detailed engineering to supply all the plant and equipment, to design and construct all civil works, to erect the plant and equipment, to commission and startup the Plant and to demonstrate the ability of the Plant to continuously produce ammonia and urea with the specifications contained in the Contract, at a capacity of (1000) tons per day of ammonia and (1725) tons per day of urea with a stream factor of 330 days per calendar year, to be located at ( name of Site ) in (name of country).
- The location of the Plant shall be at (<u>Name of Tow.1</u>) in (<u>Country</u>).
- 2.3 The capacity of the Plant shall be(1000) tons per day of Ammonia, and (1000) tons per day of Urea, designed to operate at a stream factor of (330) days per calendar year.
- 2.4 The time schedule required to complete the Complex on time shall be as follows and the CONTRACTOR and PURCHASER shall take all the necessary steps to adhere to it:
  - 2.4.1 Basic Engineering and Know-How documents shall be made available to the PURCHASER from second(2) to eighth(8) month.

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2.4.2 Construction of equipment foundations and Plant
Buildings shall start in the Tenth (10) month, and
all major Plant Buildings shall be completed (except for
finishing) in the twenty fourth (24) month. The buildings
shall however be ready for machinery erection in
sufficient time for erection.

- 2.4.3 FOB Delivery of equipment (with the exception of the critical items) shall commence no later than in the fourteenth (14) month and shall end (35%) by value) no later than in the twenty fourth (24) month.
- 2.4 4 Pelivery FOB of critical items of equipment shall not exceed twenty six (26) months.
- 2.4.5 Erection of the Flant shall start no later than the fifteenth (15) month.
- 2.4.6 The Plant shall be mechanically complete by the thirty second (32) month, and shall be started-up not later than 2 months thereafter.
- 2.4.7 The Plant shall be weemed to be in commercial production on or before the end of the thirty sixth (36) month.
- 2.5 The target date for different elements of the construction and completion of the Plant are indicated in the bar chart attached to Annexure XV. It is, however, agreed that within two (2) months after the Effective Date of the Contract (Article 13), the CONTRACTOR shall prepare a Critical Path Network, which shall list significant activities connected with the completion of the Project.
- The Critical Path Network shall be computerized by the CONTRACTOR and at the first design meeting contemplated under Article 6.5, the methodology shall be laid down to obtain the necessary inputs required to maintain the print-out and deviations on a monthly basis. The Critical Path Network itself shall be changed and modified as soon as slippage of 10% occurs. Computerized printouts indicating all activities and the float on a monthly basis shall be made available to the PURCHASER by the CONTRACTOR.
- 2.7 The CONTRACTOR and the PURCHASER agree that the current battery limits cost of the project as of the date of the award of the Contract shall be determined as follows:
  - 2.7.1 (i) Know-how and Basic Engineering
    - (ii) Plant, materials, Machinery FOB/EX-Works including detailed engineering, inspection and procurement

	(iii)	Freight, Insurance, Clearance, Transport	
		to Site	
	(iv)	Civil Engineering (including foundations)	
	(v)	Erection (including Erection Equipment and	
		Site Supervision)	
	(vi)	Training	
	(vii)	Start-Up and Commissioning	
	(viii)	Spare parts	, <u>, , , , , , , , , , , , , , , , , , </u>
		Total Contract price	
	(ix)	Other Costs of the PURCHASER	
		including preliminary costs,	
		supervisory expenses, overheads	
		during construction, transport costs,	
		etc. (including contigencies)	
		Total Project Cost	
_		and the state of t	

2.7.2 The costs specified under Article ?./.1 (i to vii inclusive) shall be firm. The cost specified under 2.7.1 (ix) shall be deemed to be an estimate and shall not be construed as being firm.

#### SCOPE OF WORK

- 3.1 In pursuance of the objectives contained in Article 2, the scope of the work required for the establishment of the Plant, is as follows:
  - 3.1.1 Establishment of the design basis of the Plant.
  - 3.1.2 Supply of know-how and basic engineering, including but not limited to:
    - Process flow diagrams.
    - Material and energy balances.
    - Equipment data and specifications.
    - Piping and instrument diagrams and specifications.
    - Plant layout.

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- Electric steam and other distribution systems.
- Effluent and emission specifications.
- Operational manuals.
- Maintenance manuals.
- 3.1.3 The detailed engineering for the Plant.
- 3.1.4 Establishment of the list of plant and equipment and identification of time critical and process critical items.
- 3.1.5 Pre-qualifying Vendors for the supply of plant and equipment.
- 3.1.6 Procurement of all plant and equipment and materials for the Plant, and for workshops, other maintenance shops, laboratory facilities, storages, and other facilities at site, including Administrative office and First Aid facilities, and procurement of spare parts, in accordance with but not limited to the itemized lists contained in Annexuros VIII, IX, X and XI.
- 3.1.7 Inspection of plant and equipment during fabrication, on completion, and after packing, and providing certificates of inspection.

- 3.1.8 Providing test certificates for plant and equipment wherever laid down under the laws of the country of fabrication and/or the laws of (PURCHASER's country).
- 3.1.9 (a) Facking of the Plant in seasorthy/roadworthy packing, marking of the packages, and transport of the plant and equipment from fabricators' works to the point of despatch F.O.B./F.O.R. as the case may be.
  - (b) Transport of the equipment from point of despatch F.O.B./ F.O.P. to site, including loading and unloading at harbours and customs clearance, of any.
- 3.1.10 Taking of all necessary insurance coverages.
- 3.1.11 Purchasing and acquiring the land for the Plant.
- 3.1.12 Clearing, levelling and the development of the land.
- 3.1.13 Testing the soil characteristics of the Site, and in particular testing the points at which heavy loads are to be expected.
- 3.1.14 Construction of roads within battery limits.
- 3.1.15 Construction of railway sidings within the battery limits and connection to the national rail network. (Optionsl)
- 3.1.16 Arranging for all telephone and other similar facilities for communications within the Site and from Site to other places.
- 3.1.17 Comstruction of civil engineering works within the Plant battery limits including:
  - (a) design of the Works,
  - (b) construction of the Works.
- 3.1.18 Construction of a housing colony for erection and start-up personnel.
- 3.1.19 Construction of a housing colony for permanent staff and workers for the operation of the Plant.
- 3.1.20 Receipt and inspection of equipment at Site and making claims for insurance or for short supply, if required.

- 3.1.21 Storage of equipment at Site prior to erection.
- 3.1.22 Providing all erection equipment, tools and tackle, and procuring all erection materials.
- 3.1.23 Erecting all plant and equipment.
- 3.1.24 Providing training for managers, plant Engineers, plant Operators, maintenance and administrative personnel.
- 3.1.25 Testing all erected plant and equipment individually, by sections and as a complete Plant, and carrying out all pre-commissioning precedures.
- 3.1.26 Supplying feedstock, chemicals and all other material inputs, including outside purchased utilities, necessary for the start-up of the Plant.
- 3.1.27 Commissioning and start-up of the Plant, until specification grade products are obtained.
- 3.1.28 Operation of the Plant from start-up until completion of the guarantee tests for the Plant.
- 3.1.29 Conducting and completing the Guarantee Tests.
- 3.1.30 Management assistance for operation of the Plant for months after completion of . (Optional)
- For each of the functions described in the scope of work above, the obligations of the CONTRACTOR and PURCHASER (as more particularly expressed in Articles 4 and 5 and elsewhere in the Contract) and the responsibilities for co-operation, co-ordination, tests, guarantees, commissioning and conditions of Acceptance as laid down elsewhere in the Contract shall be as follows:
  - 3.2.1 The Purchaser shall be responsible for the work to be undertaken under Article 3.1.11 and Article 3.1.19.
  - 3.2.2 Unless otherwise agreed the SONTMACTOR shall be responsible for the design basis as stated in Article 3.1.1 above, and the CONTRACTOR also agrees and acknowledges that he shall accept final responsibility for the accuracy, suitability and adequacy of the information supplied by the FURCHACER, and shall ensure that the operational characteristics of the court are secure and granteeable.

- 3.2.3 The CONTRACTOR and the PURCHASER shall be responsible for taking out the insurances referred to in Article 3.1.10, in accordance with Article 26.
- 3.2.4 The PURCHASER will be responsible for providing the start-up feedstocks and other materials as contemplated under Article 3.1.26, subject to the CONTRACTOR giving adequate advance notification of the dates when they shall be required together with complete specifications of materials which may or may not be specified in the Contract, as provided in article 5.8, and satisfaction of all other requirements.
- 3.2.5 All other work whether specifically mentioned in Article 3.1, or otherwise, required for the establishment of a turn-key plant within the contractual terms, the specified plot plan and battery limits shall be undertaken by the CONTRACTOR, and shall include, but shall not be limited to the obligations of the CONTRACTOR specified in Article 4.
- 3.2.6 The Management Assistance contemplated under Article
  3.1.30 shall be embodied in a separate agreement to
  be entered into by PURCHASER and CONTRACTOR. The
  CONTRACTOR shall execute such an Agreement at the option
  of the PURCHASER on terms to be mutually agreed before
- In the event that any activity or work of the nature necessary for the successful implementation of this Contract is not specifically mentioned in the scope of work above or in the specifications, drawings, or any of the Annexures of this Contract, but becomes necessary to ensure the successful operation of the Plant according to the specifications laid down in the Contract and the intent thereof the activity or work shall also become part of this Contract as if the same had been originally included in the scope of work. The CONTRACTOR shall be fully responsible for all such work, and all costs and expenses incidental thereto shall be to the CONTRACTOR's account.

### OBLIGATIONS OF THE CONTRACTOR

- 4.1 The overall obligations of the CONTRACTOR pursuant to this Contract and for specific items in the scope of the work are described more particularly in this Article, Annexure VI as well as in other relevant parts of this Contract. The CONTRACTOR shall accept total responsibility for all work except those that are within the scope of the PURCHASER's responsibilities. The CONTRACTOR shall also be liable for all work which may be reasonably inferred from the scope of his responsibilities.
- The CONTRACTOR shall, commencing within (7) days of the Effective Date of the Contract, proceed with utmost diligence and care in carrying out all of the services specified as his obligations in Articles 3, 4 and 6 and elsewhere in the Contract and provide such documentation indicated in Annexure XV in order to meet the time schedule laid down in that Annexure and indicated in the bar chart attached to that Annexure.
- 4.3 The CONTRACTOR shall execute the work in accordance with good engineering practice to the reasonable satisfaction of the PURCHASER. The execution of the work shall be subject to such variations, changes and additions that may be required to be incorporated in accordance with the provisions of Article 28.
- 4.4 The CONTRACTOR acknowledges that he has fully satisfied himself as to the nature and location and suitability of the Site for the Plant, the applicable laws, agreements and regulations, the general and local conditions applicable to the CONTRACTOR's work, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labour, water, electrical power, approach roads and uncertainties of weather or similar physical conditions at Site, the conformation and conditions of the ground and the subsurface, the character of the equipment and facilities needed preliminary to, and during the progress of

the WORK and all other matters which can in any way affect the CONTRACTOR's work services, orligations, or the costs thereof to the CONTRACTOR under this Contract. The CONTRACTOR further acknowledges that subject to the provisions of Article 4.4.2 he has satisfied himself at to and assumes all risks relating to the quantity and quality of all surface and subsurface materials, including ground water to be encountered. The CONTRACTOR has reviewed all exploratory work done by or for the PURCHASER and information presented by the drawings and technical specifications and other pertinent documentation. Any failure of the CONTRACTOR to acquaint himself with all the necessary data and information will not relieve him from his ultimate responsibilities under the Contract, and in any event shall not be cause for any claims for increases in the payments pursuant to the Contract.

- 4.4.1 The design bases for the works are contained in Annexures II and IV. However this shall be reviewed for accuracy by the CONTRACTOR and the CONTRACTOR shall take full responsibility for ensuring that all design criteria used for the design or operation of the works are adequate and sufficient.
- 4.4.2 If the soil tests conducted under Article 4.17 indicate that the load bearing capacity is less than as indicated in Annexure IV, the PURCHASER and CONTRACTOR shall mutually agree on the resultant change and implications in the design of the plant foundations.
- 4.5 The CONTRACTOR shall provide or obtain (as the case may be) the know-how for various processes from the Process Licensors as follows:

Ammonia Plant

( name of Licensor(s))

Urea Plant

( name of Licensor(s))

(Specify any other e.g. water treatment) and shall design the Plant in conformity with the basic engineering criteria of the Process Licensors.

Documentation relative to all know-how and basic engineering provided by him or obtained from the Licensors shall be prowided to the PURCHAGER by the CONTRACTOR. The CONTRACTOR also hereby agrees that such documents referred to in this Article 4.5 shall cover and be based upon the latest commercially proven know-how available to the Process Licensors at the time of making such documents available (such documentation to cover the state-of-the-art of the know-how at the time of the signing of the Contract, or if mutually agreed to, at a later date) and that the detailed engineering will be undertaken by the CONTRACTOR according to the latest design standards available and/or known to the CONTRACTOR at the time of design. The CONTRACTOR further specifically agrees to provide documentary evidence in proof of the acceptance by the Process Licensor of the conditions governing the supply of know-how and basic engineering referred to herein, and furthermore shall ensure that the Process Licensor is in full agreement with the requirements of Articles 29 and 36 of this Contract in connection therewith.

- The CONTRACTOR shall undertake the detailed engineering of the Work(s) and shall perform the general and detailed engineering of the Plant and the process design, layout, equipment design, piping and instrument design, and all other design work in order that:
  - 4.6.1 The Plant shall constitute, when assembled, a technological entity, capable of producing the final products of the quality and quantity in accordance with the criteria and Performance Guarantees set out in this Contract and complying with the economic and technical performance figures contained in this Contract.
  - 4.6.2 The design work undertaken shall obligate the CONTRACTOR to place at the disposal of the PURCHASER all data and documentation required by the latter to carry out his obligations in accordance with Article 3, and Article 5, so that the Plant can meet the time schedule laid down in the Contract.
- The CONTRACTOR shall carry out the Engineering of the Plant(s) in accordance with the Standards and Codes laid down in Article 43 and Annexure II. Where specialized design criteria are teing used, the PURCHASER shall be advised of such specialized design codes. Notwithstanding the use of the Odes and Standards

indicated in Article 43 if the CONTRACTOR is aware up to the date of signing the Contract of superior engineering codes or design methods, or where experience from previous contracts has resulted in proven improvements, the CONTRACTOR shall use such improved methods or codes in the design of the Plant and where required, shall make these appropriate data in design methods available to the PURCHASER. The CONTRACTOR shall also take into account all safety rules/regulations normal to industry-practice, and project safety regulatory provisions required in (PURCHASER's country), as stated in Annexure II.

- Vendors. Provided, however, that wherever specified in Annexures VIII and/or Annexure XII the equipment so specified therein, shall be obtained from the selected Vendors. The CONTRACTOR agrees and acknowledges that notwithstanding anything to the contrary expressed the CONTRACTOR shall assume complete responsibility for all the terms of guarantee provisions and such other criteria established by this Contract, inclusive of the warrantability and fitness of the equipment, plant and materials for the intended use, and the provisions of Article 25 shall apply mutatis mutandis.
- The CONTRACTOR shall be responsible for the supply of the 4.9 complete plant and equipment in accordance with Article 10 and as expressed elsewhere in this Contract. The list of the Plant and Equipment as well as other Materials in Annexures VIII, IX, X and XI, shall represent supply from the CONTRACTOR, which together with Annexure XIII, (with exclusions therein), to be provided by the PURCHASER, shall represent the complete Plant. The CONTRACTOR shall establish a more complete list of equipment and materials to be procured under this Contract, within four (4) months from the Effective Date of the Contract for approval by the PURCHASER. Any additional item(s) required but not specified in Annexures VIII, IX, X, XI and XIII snall be supplied by the CONTRACTOR. Notwithstanding anything to the contrary expressed in the Contract, the CONTRACTOR shall suncly a complete Turn-Key Plant for the production of (1000) tons per day ammonia and (1725) tons per day urea, together

with all the specified off-sites and utilities with the other facilities within the battery limits specified in Annexure II, excluding those items which are the PURCHASER's responsibility as specified in Article 9 and other exclusions as may be expressed in the Contract.

- 4.10 The CONTRACTOR shall ensure that all supply, construction and erection is undertaken so as to enable the Plant to meet the objectives stated in Article 2, and the time schedule contained in Annexure XV, and the CONTRACTOR shall be fully responsible for meeting the contractual guarantees, and tests contained in Article 19, and for delivering a complete operable plant in accordance with the Contract.
- 4.11 The CONTRACTOR shall undertake, in association with the PURCHASER, procurement of spare parts, in accordance with the provisions of Articles 17.10, Article 40 and Annexure XXVI of this Contract.
- 4.12 The CONTRACTOR shall inspect all equipment in accordance with Article 18 and arrange for all test certificates and shall arrange all packing export permits and transportation FOB to point of despatch.
- 4.13 The CONTRACTOP shall be responsible for the transportation of equipment from the port of despatch FOB to the receipt CIF entry port in the PURCHASER's country and onward despatch to the Site. The CONTRACTOR shall be responsible for clearance of goods at the port of entry, but the PURCHASER will provide all necessary import permits or authorizations required for this purpose and shall be responsible for demurrage and charges arising out of his failure to provide such permits. The CONTRACTOR shall be subject to the provisions of Article 18.15 and 18.16. The PURCHASER shall be responsible for the payment of customs with a port of entry.
- 4.14 The limitations as to sine and weight of packages at the entry just and to Site are contained in the Annexures to this Contract, and the CONTRACTOR shall festign and produce the Plant accordingly. Notwithstanding the itetacent's same limitation contained in the Annexure Iloui, to do down ACTOR shall be fully rescondable.

for the proper movement of plant, equipment and material to the Site, and its installation at Site.

- 4.15 The CONTRACTOR shall be responsible for arranging insurance during transportation as required by Article 26.
- 4.16 The CONTRACTOR shall be responsible for all levelling, clearing or other develogment of the land.
- 4.17 While design soil conditions are contained in Annexure IV of the Contract, the CONTRACTOR will be responsible for carrying out soil tests and the CONTRACTOR will ensure that soil tests are carried out at points where heavy loads are to be expected, and will also review all load tests. If the results of the soil tests indicate a bearing capacity different to that contained in Annexure IV, the CONTRACTOR and the PURCHASER will review this in accordance with Article 4.4.2.
- 4.18 The CONTRACTOR shall be responsible for the design and construction of all road (rail) and other communications within the battery limits of the Plant, as well as for connecting the road to the main highway. The CONTRACTOR shall be responsible for rail communications up to the agreed "take-over" point near the Plant Site, which take-over point shall be established by the railway authorities in (PURCHASER's country).1/
- 4.19 The CONTRACTOR shall be responsible for the design of all civil engineering works. The CONTRACTOR shall, however, supply the building line drawings, machinery and piping lay-out, and road and rail lay-outs for approval by the PURCHASER, which approval will not be unreasonably withheld.
- 4.20 The CONTRACTOR shall be responsible for the construction of all civil engineering works including the housing colony for the erection staff. The PURCHASER shall be responsible for the permanent housing colony. The PURCHASER shall have the right of first refusal to purchase the housing built by the CONTRACTOR for his erection staff.

<sup>1/</sup> Rail sidings are often undertaken by national railway authorities only.

- The CONTRACTOR shall inspect all equipment at Site and make arrangements for speedy replacement of any shortages in receipt, or for any damaged equipment. The CONTRACTOR shall be responsible for storage at Site.
- The CONTRACTOR shall provide all erection equipment and materials for the erection and installation of the Plant.

  The CONTRACTOR shall be permitted to remove erection equipment from site after start-up of the Plant (unless otherwise agreed) and the PURCHASER shall be obliged to apply for the necessary permits for import and re-export of the erection equipment from (country) and shall undertake all necessary steps to obtain these permits as early as practicable
- 4.23 The Plant shall be erected by the CONTRACTOR as specified in Article 10.7 and in Annexure XXIX.
- The CONTRACTOR shall provide an adequate number of personnel for the construction, erection and mechanical testing commissioning, start-up and initial operation of the Plant, so as to meet the specified time schedules. The CONTRACTOR shall train the PURCHASER's personnel to assist in the commissioning, start-up, operation and maintenance of the Plant in accordance with the requirements of Article 47. The CONTRACTOR shall provide the necessary supervisory personnel and shall ensure that all such personnel reach the Site of work in time so as to meet the requirements of the time schedule contained in Article XV.
- The CONTRACTOR shall complete the mechanical completion of the Plant within thirty two (32) months from the Effective Date of the Contract, and shall comply with the requirements of Article 15.
- 4.26 The CONTRACTOR's personnel at Site will carry out or cause to be carried out all mechanical testing of the Plant and the CONTRACTOR's personnel and the PURCHASER's personnel shall assist in the start-up and operation of the Plant until completion of the Guarantee Tests, under the complete responsibility and direction.

- While the PURCHASER will provide all feedstocks, outside utilities, chemicals and other materials required for the operation of the Plant in accordance with Article 5.8; the CONTRACTOR shall supply a first charge of all catalysts, and the chemicals agreed as the CONTRACTOR's scope of supply in Annexures IX and XI. The maximum quantity per hour and conditions of outside utilities (power, water, etc.) will be intimated by the CONTRACTOR to the PURCHASER within nine (9) months of the Effective Date of the Contract. The requirement of all chemicals and other material inputs required for the start-up of the Plant and regularly thereafter, until take—over shall be intimated by the CONTRACTOR to the PURCHASER at least nine (9) months before the Mechanical Completion of the Plant.
- 4.28 The CONTRACTOR shall satisfactorily demonstrate to the PURCHASER the carrying out of the performance of the guarantee tests in accordance with the provisions laid down in the Contract.
- 4.29 Subject to Articles 15 and 19 the CONTRACTOR shall commence the initial Guarantee Tests of the Plant within fifteen (15) days after the start-up of the Plant, but in any event not later than ninety (90) days following after Mechanical Completion of the Plant, provided that the PURCHASER has carried out his obligation to supply feedstock, outside utilities, chemicals and other agreed materials in accordance with his obligation under Article 5. The CONTRACTOR shall be allowed to extend this period and repeat Guarantee Tests in accordance with Article 19.10.1 of the Contract.
- In furtherance of Article 4.24 the CONTRACTOR shall provide training to the PURCHASER's personnel in accordance with Article 47. The CONTRACTOR shall try to ensure that the number and level of training (to be arranged by the CONTRACTOR within or outside the country of the PURCHASER) of the PURCHASER's personnel is adequate for smooth operation and maintenance of the Plant in peak condition.

4.31 The ONTRACTOR, (subject to the provisions of Articles 17,20,21 and 27 in this Contract and as required by Article 15), shall be responsible for any necessary correction or modification of the Plant within the scope of the Contract requirements (free of any additional costs to the PURCHASER) in the event that for any reason attributable to the CONTRACTOR, the Plant is found within 12 months of the Provisional Acceptance of the Plant to be incapable of continued production at the rated capacity of account of design defects, latent and/or patent faults, and/or other inadequancies in any one/or other of process(es)/design/equipment supply/civil engineering/eraction and the works or portions or parts thereof which were not annarent or recognizable at the time when the CONTRACTOR demonstrated the Guarantee Tests. The responsibilities of the CONTRACTOR specified in this Article and in other Articles referred to shall apply mutatis mutandis.

- Should the PURCHASER so desire, the CONTRACTOR shall enter into a separate agreement with the PURCHASER to manage the Plant, or to assist the PURCHASER to manage the Plant, as the PURCHASER may desire, for a period of twelve (12) months after Provisional Acceptance, under conditions to be mutually agreed within three (3) months after commercial production has commenced but not later than following completion of the Performance Guarantee requirements provided by Article 19.
- Without prejudice to the Provisions of this Contract, in lieu of the said Agreement in Article 4.32 the CONTRACTOR shall agree to grant an option to the PURCHASER for the execution of a separate Agreement providing for Technical Advisory Services to be provided by the CONTRACTOR to the PURCHASER upon mutually acceptable terms. Such an Agreement shall become effective immediately following Provisional Acceptance of the Plant and shall have a duration of not less than \_\_\_\_\_(\_\_) years. The PURCHASER may exercise the said option (at his sole discretion) no later than the expiry of one month following commencement of commercial production. For the purposes of this Contract the rights and obligations envisaged in such an Agreement for Technical Advisory Services shall

be considered to be wholly separate and distinct from the liabilities and the responsibilities contained in this Contract. The terms of such Agreement shall include (but shall not be restricted to) any one and/or other of the following matters:

- 4.33.1 Provision of senior advisory personnel to conduct half-yearly review of plant and efficiency of its operations.
- 4.33.2 Recommendations as to improvement of plant operations.
- 4.33.3 Provision of answers to technical queries related to plant operations.
- 4.34 Throughout the execution of the work, the CONTRACTOR shall ensure that it, its employees, agents and invitees and its sub-contractors, their employees, agents and invitees while upon the Site comply with all applicable safety laws, rules and regulations. The conduct and safety of all persons employed by the CONTRACTOR and its sub-contractors on PURCHASER's premises for reasons relating to this Contract, shall be the sole responsibility of the CONTRACTOR. The CONTRACTOR shall at all times maintain good order among its employees and shall not employ on the work any unfit undesirable person or anyone not skilled in the work assigned to him.
- 4.35 The CONTRACTOR shall provide the PURCHASER with a reasonable amount of office space and facilities and secretarial and typing services and telephone and telex services for the representatives of the PURCHASER assigned to the CONTRACTOR's offices.
- The CONTRACTOR shall be responsible for taking out and keeping in force the various Insurance policies which are his responsibility under Article 26 (and as specified therein), and shall in any event carry such corporate Insurance policies consistent with its activities as a Contractor.
- 4.37 The CONTRACTOR shall provide such assurances as the PURCHASER may reasonably require concerning the essential legal validity

and enforceability of this Contract insofar as the CONTRACTOR is concerned, including (without limitation) evidence that the CONTRACTOR is a properly organized legal entity duly entitled to perform this Contract and that the CONTRACTOR has properly executed this Contract in accordance with all legal requirements, of governing charter and by-laws, and of its governing Board of Directors, as the case may be.

4.38 Within six (6) months of the Mechanical Completion of the Plant (as specified in Article 15 of this Contract) the CONTRACTOR shall prepare a set of "as-built" drawings or their equivalent for the Plant, under its supervision.

## OBLIGATIONS OF THE PURCHASER

- The scope of work to be undertaken by the PURCHASER within the overall scope of work shall be as given below and as described in Amnexures VII and XIV or as elsewhere expressed in the Contract. The PURCHASER will carry out his obligations so as to enable the CONTRACTOR to meet the time schedule contained in Annexure XV.
- 5.2 The PURCHASER shall be responsible for the acquisition and obtaining physical possession of the land.
- The PURCHASER shall secure and make available to the CONTRACTOR within one month from the Contract the land indicated on the lay-out and plot plan, the Site for construction of the Works, free of all encumbrances, including the necessary right of way. The PURCHASER shall also make available adequate space for storage depots at or near the Site.
- The PURCHASER shall obtain and make available to the CONTRACTOR (and/or facilitate the arrangements for) all necessary permits/approvals and/or licences from local authorities and/or Government (of PURCHASER's country) as may be necessary for the execution of the Contract inclusive of import licences, visas for CONTRACTOR's personnel, entry permits for erection equipment and any other CONTRACTOR's equipment which has to be exported. The applicable procedure and division of responsibilities shall be as detailed in the co-ordination procedure envisaged in Article 6.7(1).
- 5.5 The PURCHASER shall be responsible for payment of Custom's Duties, or to reimburse the CONTRACTOR for such duties as may be assumed, in accordance with Article 4.13.
- Whenever any approval(s) are required from the PURCHASER under the provisions of this Contract, such approvals or reasons for withholding such approvals shall be conveyed to the CONTRACTOR within ten (10) days of receipt unless if otherwise provided in this Contract. If no reply is received from the PURCHASER within the period specified, such items submitted for approval shall be deemed to be approved subject however to the right of the PURCHASER pursuant to Article 45.

- 5.7 The PURCHASER shall provide free of charge all the raw materials, fuel, consumable items and make-up items necessary for the testing, commissioning, operation and maintenance of the Plant unless otherwise specifically mentioned in the specification or elsewhere in the Contract as to be supplied by the CONTRACTOR.
- the FURCHASER shall provide all feedstocks, outside utilities, chemicals and other materials required for the operation of the Plant (Article J.1.26) except the first charge of catalysts and chemicals to be supplied by the CONTRACTOR within his scope of supply. The feedstocks shall be in accordance with the specifications contained in this Contract or as otherwise agreed. The maximum quantity per hour and conditions of outside utilities (power, water, etc.) will be intimated by the CONTRACTOR to the PURCHASER within six (6) months of the Effective Date of the Contract. The requirement of all chemicals and other material inputs required for the start-up of the Plant and regularly thereafter, shall be intimated by the CONTRACTOR to the PURCHASER at least nine (9) months before the Mechanical Completion of the Flant.
- The PURCHASER shall provide free of charge operation and maintenance personnel for the CONTRACTOR throughout the period from the beginning of the mechanical testing of equipment till the date of acceptance of the Plant in numbers and of competence corresponding to the manning requirements which are to be developed by the CONTRACTOR in the form of a Manpower and Qualification Chart and approved by the PURCHASER.
- 5.10 The PURCHASER shall provide the CONTRACTOR and his personnel deputed to Site after take-over with such facilities as are in Annexure XXVII.
- 5.11 The PURCHASER shall be responsible for making all payments to the COMPRACTOR in accordance with the provisions of this Contract.
- 5.12 The PURCELSER will provide and maintain the insurance policies which may be his specific responsibility as contained in Article 26.
- 5.13 The PURCHASER will provide the CONTRACTOR with office space, secretarial facilities and typing services for the CONTRACTOR's personnel assigne: to the PURCHASER's office at (town).

# CO-OPERATION AND CO-ORDINATION BETWEEN CONTRACTOR AND PURCHASER

- The parties to this Contract hereby agree to undertake all reasonable co-operation to implement the works as stipulated in the Contract. The parties to the Contract through their designated representatives will meet periodically to take stock of the progress of work, and suggest ways and means to improve the operations and to expedite the work and resolve outstanding issues between the parties. Minutes of meetings shall be recorded and circulated for confirmation and necessary action.
- The PURCHASER and the COMTRACTOR each shall appoint a Project
  Manager to co-ordinate and monitor the work under this Contract
  with permission to act in accordance with specific terms of
  authority.
- 6.3 The PURCHASER shall appoint or designate an Engineer (or Engineers for different parts of the work) to represent it for the purposes of technical approvals as contemplated under the Contract. If the PURCHASER so desires, the Project Manager appointed by him under Article 6.2 may also be designated as the Engineer. 1/
- 6.4 All notices, instructions and decisions on the meetings shall be given in writing. Minutes of meetings between the CONTRACTOR and the PURCHASER or their authorised representatives held at Site, or in the office of the PURCHASER or the CONTRACTOR, after confirmation, shall have the same effect as notices in writing.
- within thirty (30) days from the Effective Date of the Contract, a meeting shall be held in (<u>PURCHASER's country</u>) between the CONTRACTOR and the PURCHASER and/or the Engineer to discuss all matters of common interest, including but not restricted to, the finalization of co-ordination procedure, the detailed time schedule and a critical examination of the design basis.

If the PURCHASER intends to appoint a Consulting Company to act as the Engineers under this Contract on his behalf, (however under the jurisdiction of the PURCHASER's Project Manager), the name of the Consulting Company should be mentioned in this paragraph.

- 6.6 The co-ordination procedure, (which shall be prepared in accordance with accepted international practices) shall become part of the Contract by reference, following agreement and respective approval by the CONTRACTOR and the PURCHASER.
- 6.7 The co-ordination procedure shall include but will not be limited to:
  - (a) Procedure for giving instructions, decisions and approvals.
  - (b) Assignment of responsibilities to the Project Engineers and Engineers of both the CONTRACTOR and the PURCHASER.
  - (c) Procedure for submission of drawings, equipment, specifications and other documents as may be required for approval.
  - (d) Procedure for according approval on behalf of the PURCHASER.
  - (e) Procedure for accounting the invoicing for the payments receivable by the CONTRACTOR.
  - (f) Procedure for approving and effecting payment to the CONTRACTOR.
  - (g) Address lists and telephone numbers of the Project Managers and/or Engineers of the CONTRACTOR and the PURCH TER responsible for any work under this Contract.
  - (h) Procedure for drawings and documents distribution for the CONTRACTOR and the PURCHASER.
  - (i) Procedure for the approval of technical specifications where not specified in the Contract.
  - (j) Procedure for the furnishing of Vendors lists or sources of procurement of equipment as may be necessary.
  - (k) Limitation of authority relative to Contract amendments and/or modifications.
  - (1) Division of responsibilities for the provision of permits and approvals (as more particularly referred to in Article 5.4) with clear delineation of the specific responsibilities for obtaining necessary permits, approvals on the part of the PURCHASER and CONTRACTOR respectively.
- 6.8 Within four (4) months from the Effective Date of the Contract, a further meeting would be held at (<u>PURCHASER's country</u>) between the CONTRACTOR and the PURCHASER to discuss the progress of work completed up to that time. This meeting would also review and approve of:

- (a) The detailed plant lay-out and the line drawings of the buildings.
- (b) The final list of equipment, including sizes, materials of construction, and Vendors where not specified in the Contract.
- (o) The Critical Path Network, which shall be prepared by the CONTRACTOR.
- (d) Any problems arising from the detailed soil investigations.
- (e) Establishment of the procedure and details for training of the PURCHASER's personnel.
- (e) Procedure for training of the PURCHASER's personne...
- (f) The co-ordination procedure referred to above in Article 6.6 shall be reviewed and revised as required in accordance with the agreed minutes of the meeting referred to above, and shall thereafter be finalized.
- (g) Procedures for customs clearance and payment of import duties and taxes, etc.
- (h) Procedure for clearance by the PURCHASER of the CONTRACTOR's personnel coming to Site.
- (i) Method for computation of over-time, if applicable.
- (j) Facilities to be provided to the CONTRACTOR's personnel at the Site by the PURCHASER.
- As soon as work at the Site commences, review meetings shall be held at the Site at the beginning of every month to review the progress at Site, to estimate the work done for purposes of maintaining the CPN (Article 2) and to discuss and settle outstanding issues. Costs in connection with any review meetings will be borne by each party for its own personnel.
- 6.10 For this purpose, the PURCHASER and the CONTRACTOR will both maintain, at their own cost, offices at Site.
- 6.11 Throughout the period of the Contract, the PURCHASER shall have the right to inspect the CONTRACTOR's work and the CONTRACTOR shall provide all documentation to enable the PURCHASER or his designated representatives to report monthly on the progress of work, and the deviations, if any, in accordance with the provisions of Articles 15 to 21 (inclusive).

- The COMTRACTOR shall submit drawings, equipment specifications, and other documents, where required, for approval or distribution to the PURCHASER under this Contract. The PURCHASER shall respond with such approval or disapproval as required (with reasons to be indicated if certain of the requirements under the Contract do not appear to be met with technically and/or commercially) or suggest modifications within a period of thirty (30) days, after the date of submission, after which period such of these documents shall be deemed to be approved.
- In the event that the PURCHASER requires changes, additions and modifications, these shall be reviewed by the CONTRACTOR within thirty (30) days of receipt and the provisions of Articles 16, 27 and 28 shall apply. If the CONTRACTOR does not request a review within thirty (30) days, it shall be assumed that the modifications proposed by the PURCHASER are accepted for implementation without qualification.
- 6.14 In the event of a request for a review by the CONTRACTOR, the same terms as those applicable to Article 6.13 shall apply, and if urgent resolution of a matter is required the said thirty (30) day period referred to in Article 6.13 shall be reduced as agreed between the parties.
- 6.15 Failure to reach agreement(s) at the review meeting(s) referred to in Articles 6.5 and 6.8 shall not in any way modify, alter, change or affect the contractual obligations of the CONTRACTOR as stated expressly or impliedly in this Contract or as agreed between the parties.
- 6.16 Throughout the period of this Contract, the PURCHASER will have the right to inspect the CONTRACTOR's work as also referred in Article 6.11 and Article 18.
- 6.17 The PURCHASER, if he so desires, shall have the right to assign up to a maximum of four (4) engineers to the design offices of the CONTRACTOR at ( town ) to be present during the detailed design of the Flaut, and the procurement of the equipment. The CONTRACTOR shall make available all documentation calculations etc. on the detailed design of the Plant and the

Progurement to the Engineers of the PURCHASER. All costs in connection with the travel and stay of the Engineers shall be borne by the PURCHISER.

## ASSIGNMENT OF CONTRACT

- 7.1 This Contract shall inure to the benefit of and be binding upon the parties hereto and their and each of their executors, administrators, curators, successors and assigns, however subject to the provisions of Article 7.2.
- 7.2 This Contract may not be assigned by the CONTRACTOR without the written consent of the PURCHASER.
- 7.3 The PURCHASER shall have the right to assign the Contract provided that such assignment does not increase the CONTRACTOR's liabilities over what they would have been if such assignment or transfer had not been made, and provided that the obligations of the PURCHASER are binding upon the assignee, as specified in Article 7.1, with assured guarantees for payment(s) under the Contract.
- 7.4 The CONTRACTOR shall not sub-contract the whole or any part of the work and/or services relating to the design, procurement, startup, operations or test running of the plant and equipment (as defined in the Contract) with respect to the Works, without the written consent of the PURCHASER. Furthermore, the CONTRACTOR shall also strictly adhere to the requirements of Article 10.1.7 (and as elsewhere expressed in the Contract) and as specified in Annexures VIII and XII in connection with the supply of critical items by selected manufacturers and machinery from specified manufacturers.
- 7.5 The CONTRACTOR may sub-contract any other work or services under the Contract, provided the PURCHASER is advised of all such sub-contracts. Where sub-contracts are to be awarded to firms or individuals in ( <u>PURCHASER's country</u>), the PURCHASER shall have the right to pre-qualify all firms or persons bidding for such sub-contracts.
- 7.6 The COMPRACTOR shall ensure that every sub-contracting by the COMPRACTOR shall comply with all terms and conditions of this Contract, mutatis mutandis.

### SUPERVISION OF THE WORK

- 8.1 The CONTRACTOR shall provide all of the remained supervisory services pursuant to the Contract. An adequate number of suitably qualified and experienced personnel shall be available for the supervision of all work at Site. Such supervision shall include, but shall not be limited to, the following:
  - (a) Supervision of transportation equipment,
  - (b) Supervision of construction and erection emipment.
  - (c) Supervision of the civil works.
  - (d) Supervision of erection.
  - (e) Supervision of stores and warehouse management.
  - (f) Supervision of all test:
  - (g) Supervision of pre-commissioning and startup operation.
  - (h) Supervision of the entire Works until Provisional Acceptance.
- 8.2 The CONTRACTOR (as represented by a duly authorized party on its behalf) shall be constantly on Site during working hours, until all of the Acceptance Certificates for the entire Works on Site have been issued and such party shall devote its entire time to the superintendence of this work. Such authorised party shall have full authority to act for and bind the CONTRACTOR and shall receive, on behalf of the CONTRACTOR, directions and instructions from the PURCHASER's Engineer. The authorised party shall be sufficiently fluent in the language governing the Contract and/or in languages as agreed upon with the PURCHASER so as to be able to receive directions and instructions and to correspond with the PURCHASER and the Engineer in that language.
- 8.3 The CONTRACTOR shall, upon a remest of the PURCHASER or his Engineer, remove his authorised representative or any workman, if in the opinion of the Engineer or the PURCHASER, such representative or workmen are incompetent or have been conducting themselves improperly, and the CONTRACTOR shall promptly replace such representative or workmen in equal number. The Engineer shall advise the CONTRACTOR of his reasons for requesting such replacement(s) however, any decision made by the Engineer shall be final.

- 8.4 The PURCHASER shall appoint representatives (which shall include the Engineer) who shall be on duty at the Works wherever and whenever necessary, and in any event during all normal working hours. The PURCHASER's appointee shall be competent and duly qualified to discharge the project responsibilities entrusted to him and he shall be wested with appropriate authority to act on the PURCHASER's behalf.

  Copies of contractual instructions issued by either party to the Contract upon the other shall be kept at all times at the Site by the COMPRACTOR.
- 8.5 Subject to specific authority for delegation of powers issued by the PURCHASER, the Engineer may formally delegate to such persons specified by him, limited powers, discretions and authority as necessary, and the COMTRACTOR shall recognize such persons on written notice from the Engineer of their appointment and as regards their powers, discretions and authority so delegated. The COMTRACTOR acknowledges that no member of the Engineer's subordinate staff or delegate and no persons other than the Engineer shall have the authority to approve or bind the PURCHASER or the Engineer as regards any approvals, passing of work or materials, authority to order any action or work involving delay or extra payment.
- 8.6 The CONTRACTOR shall, (without derogating from the contractual schedule), comply with such directions, issued by the Engineer from time to time in respect of the form and manner in which work is to be commended, conducted and/or completed, and the CONTRACTOR shall permit the Engineer to have access to the Works at all times during the temure of the Contract and shall provide the Engineer with full information and data concerning the progress and execution of the work. The Engineer shall be rendered all necessary assistance to facilitate the performance of his duties, to ensure that the work is being executed in accordance with this Contract.
- 8.7 The CONTRACTOR shall not be prevented from making application directly to the PURCHASER for appeal and/or clarifications arising out of instructions or directions given by the Engineer.

8.8 For the purposes of this Article the expression "Supervision" shall be deemed to include direction and responsibility for the activities or matters or work or procedures being the subject of supervision.

## ACCESS TO WORK

- 9.1 The CONTRACTOR and the PURCHASER and any person(s) authorized by either of them shall at all times have access to the Works, to all workshops and places where work is being done or undertaken, prepared or where materials, manufactured articles or machinery are being obtained for the Works. The CONTRACTOR shall afford every facility for access to any place where work is being undertaken under this Contract and shall give every assistance in obtaining the right for such access in connection with the execution of the work under this Contract.
- 9.2 The PURCHASER shall afford every facility and assistance in, or for obtaining, the right of access to such information, Site, workshops or persons within (<u>PURCHASER®s country</u>) as is required in connection with this Contract.
- 9.3 The CONTRACTOR and his authorised personnel shall have free access to the Site of the Works, storage yards, fabrication sheds, utilities and laboratories set up or intended for use for setting up the Works under the Contract. In the areas of the Site where the CONTRACTOR is working, he shall have exclusive access, except for the supervising staff of the PURCHASER and/or the Engineer. The PURCHASER shall provide necessary assistance in obtaining permission from his Government for visits/stay and travel of the CONTRACTOR or his authorised personnel.
- 9.4 The CONTRACTOR shall be entitled to visit the Works in operation for a period of three (3) years after Provisional Acceptance to examine it as to its operating results, to take measurements required for establishing exact operating data and demonstrate the Plant to his potential customers. The CONTRACTOR shall give four (4) weeks notice to the PURCHASER for such visits, permission for which shall not be withheld by PURCHASER. However, the PURCHASER may exclude the nationals of certain countries from visiting the Plant and/or the Site.

- 9.5 The COMTRACTOR shall be responsible, under applicable laws, rules and regulations, for damage done to highways, roads, bridges and other public utilities, by himself, his agents, his sub-contractors and their staff in the execution of work under the Contract, and shall at his own cost repair and/or rectify such damage.
- 9.6 Where in the opinion of the Engineer:
  - 9.6.1 It is necessary that third parties (whether additional contractors or otherwise) provided that such parties are not direct competitors of the CONTRACTOR be sent to check the Work of the CONTRACTOR, the CONTRACTOR shall to the satisfaction of the Engineer, allow them access to the work and/or the site thereof and shall co-operate with them in the carrying out of their duties and obligations. The foregoing shall not prejudice the rights of the CONTRACTOR relative to the terms of Article 30, and the third parties shall not disrupt the activities or obligations of the CONTRACTOR.
  - 9.6.2 If the sending on to the work and/or the site thereof of a third party under Subarticle 9.6.1 does not arise from any non-fulfilment of the CONTRACTOR's obligations and, in addition, could not have been reasonably foreseen or anticipated by the CONTRACTOR when entering into this Contract, and, if proven to the reasonable satisfaction of the PURCHASER, the CONTRACTOR has incurred expense in complying with Subarticle 9.6.1 in respect of such third party, the PURCHASER (if the CONTRACTOR has given written notice of the CONTRACTOR's claim before the expiration of thirty days from the sending on to the work and/or site thereof of the third party or third parties involved) shall pay to the CONTRACTOR the cost of any services provided by the CONTRACTOR.

## DELIVERY AND EXECUTION OF THE WORK(S)

# 10.1 Supply of Goods

- 10.1.1 All goods to be supplied under this Contract shall be "brand new" and in accordance with the provisions of this Contract, and all such goods shall have been inspected and tested before despatch.
- 10.1.2 The Plant and Equipment to be supplied under this Contract are itemised in Annexure VIII, and indicated on the flow sheet and general diagrams attached to the Annexure.
- 10.1.3 The technical specifications for the equipment and the materials of construction are contained in Annexure VIII and the CONTRACTOR shall supply such of the equipment and materials in strict conformance to the technical specifications and materials of contraction specified. Any change in the materials of construction shall be subject to approval by PURCHASER which permission shall not be unreasonably withheld.
- 10.1.4 The CONTRACTOR acknowledges that the list contained in Annexure VIII is not exhaustive and within 4 months after effective date, the CONTRACTOR shall provide a revised list to the PURCHASER for his review, and approval particularly where the list or technical specifications and/or materials of construction have been altered. This list shall also indicate the auxiliary plant such as pipes, valves, instruments, electrical cables etc. which are to form part of the plant and equipment.

- specifications are not specified, the materials shall be such as are proven to be resistant to those chemicals with which they come into contact, and the technical specifications shall be such as to ensure meeting the guarantees for the Plant.
- 10.1.6 Notwithstanding any approval(s) of the PURCHASER to any of the technical specifications and for materials of construction, the plant and equipment shall be of such quality and criteria so as to be able to meet the contractual obligations of the CONTRACTOR, particularly as to those relating to guarantees and warranties.
- 10.1.7 The FURCHASER and CONTRACTOR agree that certain items of equipment shall be obtained by the CONTRACTOR from selected vendors only. The list of these critical items and the selected vendors from whom they shall be procured are provided in Annexures VIII and XII. The CONTRACTOR shall procure the equipment from such vendors only unless otherwise agreed in writing between the CONTRACTOR and FURCHASER.
- 10.1.8 The CONTRACTOR shall include the cost of one charge of each catalyst required and one spare charge, within the Contract price. The type and specifications of catalysts to be supplied are given in Annexure IX.
- 10.1.9 The CONTRACTOR shall provide the type and quantities of chemicals identified as within the scope of his supply in Ammerire XI.
- 10.1.10 The CONTRACTOR shall supply all other materials required for the operation of the plant including, in particular, a first charge of refrigerant for all equipment requiring such charge.

- 10.1.11 The CONTRACTOR shall inspect the items of equipment referred to in Article 10.1.1 and 10.1.2 before despatch and on receipt at site and if PURCHASER so desires, inspection reports for such items of equipment so it be made available to the PURCHASER.
- 10.1.12 The PURCHASER or his agent shall have the right to inspect equipment, materials and goods during fabrication or before despatch in accordance with Article 18.

# 10.2 Marking, Packing and Despatch of Goods

- 10.2.1 All goods shall be marked and the invoices prepared in accordance with the instructions of the FURCHASER, as specified in Ammerica XXIV and/or as provided to the CONTRACTOR not later than the review meeting contemplated under Article 6.8.
- On despatch of all goods, two copies of the invoices will be sent to the PURHCASER, or his Site representative by airmail so that the PURCHASER may promptly obtain any permits required. For goods requiring extended customs clearance procedure, (significant details of which shall be reasonably given by the PURCHASER prior to the review meeting contemplated under Article 6.8) the CONTRACTOR shall advise the PURCHASER sufficiently in advance, in order to obtain clearance.
- The CONTRACTOR acknowledges that certain goods, including materials for civil engineering shall not be imported into the FURCHASER's country. The CONTRACTOR shall purchase such goods locally and shall not be entitled to any claim(s) for increased costs in making such purchases. The CONTRACTOR shall ensure that the requirement for the purchase of local materials or goods dues not adversely affect any of the criteria expressed in the

specifications or warranties or guarantees under this Contract, and the Contractor shall be obliged to advise the PURCHASER in advance (of any such purchase being made) in any such eventuality.

Permits required for local purchase(s) shall be obtained by the PURHCASER. In the event that import restrictions are introduced after the Effective Date of the Contract, which substantially raise the price of imported materials, the PURCHASER and CONTRACTOR shall meet to decide on the net result and effect of such restrictions, including any impact on the time schedule or cost(s), if any.

- 10.2.4 The CONTRACTOR shall supply particulars of the manufacturer from whom the CONTRACTOR has purchased any plant, equipment, materials or spare parts, and shall supply a "Certificate of Origin" if required by the FURCHASER.
- All goods shall be adequately and properly packed 10.2.5 before despatch to satisfactorily cope with the mode of transportation utilized (particularly to ensure the avoidance of damage and deterioration) and for subsequent storage at Site. All packing cases will be properly marked in accordance with Annexure XXV. All goods despatched, by sea or over land shall be adequately protected by protective coatings. Cargo shall not be despatched on deck except where size limitations so require, and in such event further preclutions for packing and latching shall be taken. The deck cargo shall be completely protected, and fully painted with adequate types of protective paint. All closed packings shall contain a packing list(s) inside.

- 10.2.6 The CONTRACTOR shall be responsible for all despatches of equipment, materials and goods to the Site, and shall use the safest and most expeditious means of transport available to comply with the time schedule for Mechanical Completion of the Plant. The CONTRACTOR shall despatch, at his own expense goods by air freight, if this is necessitated by the time schedule.
- The CONTRACTOR acknowledges its familiarity with facilities at the harbours (both in the manufacturer's and FURCHASER's country) and between the harbour and site. The CONTRACTOR shall be responsible for the packing and delivery of the equipment (packed in proper dimensions as to size) in such manner that the equipment arrives at site for erection, within the Contractual time schedules. The CONTRACTOR shall be responsible for obtaining any road or rail permits required for the purposes, but the FURCHASER shall assist the CONTRACTOR in obtaining such permits.
- 10.2.8 For purposes of storage at Site, all packages shall be marked in an appropriate manner for storage outdoors, under a roof, in locked warehouses or in rentad premises, etc. as agreed upon at the meeting contempleted under Article 6.8.

## 10.3 Supply of Documents

- 10.3.1 The documents and manuals to be supplied by the CONTRACTOR within the deadlind dates are indicated in Annexures V, XV and XXI.
- 10.3.2 All documents shall be forwarded to the PURCHASER by air freight with a minimum of five (5) copies, including one reproducible copy. Immediately upon despatch, a telegram/telex shall be sent to the

PURCHASER confirming the despatch, indicating the air way bill number, the flight number or other express means of transportation. The documents shall as far as pratically possible be sent by a direct flight to ( \_\_name of airport in PURCHASER's country ).

# 10.4 Storage of Goods at Site

- 10.4.1 The CONTRACTOR shall be obliged to arrange for and have ready adequate warehouse facilities at the Site to receive packages. In the event that permanent facilities are not ready or available, the CONTRACTOR shall provide sufficiently adequate temporary facilities at his cost in good time at the Site, to the satisfaction of the PURCHASER.

  Notwithstanding the requirement for the marking of packages, under Article 10.2.8 above, and the instructions contained in Annexure XXV, the instructions of the Engineer as regards storage shall be adhered to in the event that additional storage protection is required.
- The CONTRACTOR shall expeditiously check all goods and supplies for shortage or damage (no matter howsoever caused) and shall obtain immedite replacements, and the CONTRACTOR shall advise the Engineer of appropriate details.
- in transit, such shall be replaced. Where the damage determined to be minor, (and subject to the approval of the PURCHASER or his representative), repairs shall be undertaken at Site and the costs incurred shall be to the account of the CONTRACTOR as specified in Article 27.8. In the event of any dispute as to the extent of damage sustained, the goods shall be replaced and the CONTRACTOR shall abide by the decision of the PURCHASER.

# 10.5 <u>Design and Construction of Roads, Railway Sidings and</u> Other Facilities

- 10.5.1 The roads shall be constructed by the CONTRACTOR in accordance with the dimensions laid down in the final lay—out plan, which shall generally comform with the Plot Plan attached to this Contract and shall be approved by the FURCHASER.
- 10.5.2 All roads shall be constructed in accordance with the specified materials, and the designs shown in Annexire XXVIII, except where otherwise agreed by both parties. The lay-out of the railway lines shall be generally in conformity with the Plot Plan attached and shall be approved by the PURCHASER as regards the final lay-out.
- 10.5.3 All railway sidings shall be of \_\_\_\_guage, and shall meet the requirements of the national rail network of (\_\_PURCHASER's country\_\_). The materials used shall be in accordance with the requirements and the specifications on the national rail network as specified in Annexure XXVIII.
- The railway sidings shall be as indicated in the Plot Plan and designed to transport % of the production of the Plant, i.e. tons of urea per day, and to transport tons per day of raw materials, and adequate provisions shall be made accordingly, (in consultation with the railway authorities in ( PURCHASER's country ).
- 10.5.5 The CONTRACTOR shall provide and install a line telephone exchange in the Works. The maximum number of lines shall be ( \_\_\_\_\_) and locations of telephone

<sup>\* (</sup>Alternative Article can be provided for countries where all design is done by the railway authorities).

points shall be as agreed between both parties at the meeting contemplated under Article 6.8.

(\_\_\_\_\_\_) lines shall be left for connections by the PURCHASER to the housing colony. The telephone exchange shall be compatible with and connected to outside lines. The connection to the outside lines shall be arranged by the PURCHASER, but all costs in this connection shall be borne by the CONTRACTOR.

## 10.6 Civil Engineering Works

- Immediately upon completion of the soil bearing tests, and acknowledgement of the load-bearing capacity and approval of the building lay-out plan and the line drawings, the CONTRACTOR shall immediately undertake the design and construction of all civil engineering works within the battery limits (inclusive of process, utility and offsites, all underground buildings, sewerages, drainage, water treatment plants, etc.). The civil engineering works are further described and their execution specified in Annexures IV and XXVIII, and such works shall be constructed in a timely manner for the erection of machinery and in order to meet the agreed time schedule.
- The CONTRACTOR shall furnish all materials, perform all labour and fulfil all requirements related thereto to the extent that said labour and materials may be necessary for, or incidental to, the execution and completion of the Works, and the testing of the quality of the same in whole or in part (unless otherwise provided) under the terms of the Contract.

All work and material supplied under the Contract shall be of the best and most suitable workmanship and quality, strictly in accordance with the provisions of Article 17, Annexires IV and XXVIII, and the decision of the Engineer as to the quality and suitability of materials and/or work shall be binding. The FURCHASER shall have the right to decide whether materials of local (indigenous) origin shall be used when available provided that they are in conformity with the specifications contained in Annexures IV, VIII and XXVII. however, that in the event that the use of local materials result in higher ex-plant costs (even though imported materials are freely available), the CONTRACTOR shall so advise the FURCHASER together with an estimate of the increased costs. The PURCHASER at his discretion may decide to use the higher-cost local materials, in which event an adjustment of price shall be made as necessary. Similar considerations shall apply to the availability of local labour and cost factors.

10.6.3 The CONTRACTOR shall be responsible for the true and proper setting out of the Works, as approved by the FURCHASER, and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the Works, faults and/or error(s) manifest themselves with regard to details of the position(s), levels, dimensions or alignment of any part or the Works, the CONTRACTOR shall of this own accord and expense rectify such faults and/or errors to the satisfaction of the Engineer. The review or approval of any setting out or of any line or level by the Engineer shall not in any way relieve the CONTRACTOR of his responsibility for the correctness and adequacy thereof. The CONTRACTOR shall carefully protect and preserve all benchmarks, site rails, pegs and other things utilized in setting out the Works.

- the undertaking of the Works throughout shall be carried out in such a manner as not to interfere with the traffic on any roads or footpaths leading to the Site and/or in the vicinity thereof, and wherever required by the Engineer, the CONTRACTOR shall promptly remove any material or staging used by him or any of his sub-contractors which cause interference with the use of the roads, footpaths or open spaces on the Site and/or areas adjacent thereto.
- 10.6.5 No temporary building shall be erected by the CONTRACTOR without the approval of the Engineer, which approval shall not be unreasonably withheld. During the performance of his obligations under the Contract, the CONTRACTOR shall maintain and repair all buildings occupied by him to the satisfaction of the Engineer.
- on the completion of the Works, the CONTRACTOR shall, (except as otherwise specified or instructed by the Engineer) clear away and remove from the Site all constructional plant, CONTRACTOR's equipment, erection tools and equipment, surplus materials, rubbish and temporary works of every kind and leave the whole of the Works clean and in a tidy condition to the satisfaction of the Engineer.
- the CONTRACTOR shall make adequate arrangements during the phases of Construction for the availability of drinking water, construction water and other utilities, provisions for the safety of workmen, for security of the Works, for the prevention of damage to property (and repairs as necessary) and for constructing civil engineering works in such a manner that access to all parts of the Site is available to the FURCHASER's representative(s).

The CONTRACTOR shall be responsible for the repatriation of labour from the place(s) of recruitment, and shall bear all costs and expenses incidental thereto and shall maintain such persons in a suitable manner during such time as they are employed or utilized (through sub-contracting) by the CONTRACTOR. If at the appropriate time(s) such persons are not repatriated within a reasonable period or if they are not maintained by the CONTRACTOR as required, the PURCHASER may maintain and repatriate such persons and such costs incurred shall be to the account of the CONTRACTOR.

## 10.7 Erection

- 10.7.1 The CONTRACTOR shall be responsible for the erection of all the plant and equipment within the battery limits (inclusive of those specified in Annexure III). Without limiting the generality of the foregoing, these shall include, but shall not be limited to:
  - (a) Erection of all equipment in place.
  - (b) Erection of all steel structures, walkways, gangways, stairs, platforms, etc.
  - (c) Assembly and welding of all piping, fittings, etc. both above and below the ground.
  - (d) Assembly and erection of instrumentation, panel control boards and all interconnecting wiring, piping and equipment.
  - (e) Installation of all electrical equipment, and connection of all cables, starters and all other equipment.
  - (f) Installing of all utility equipment, and connecting such equipment.

- (g) Insulation of all equipment where required (including supply of insulation).
- (h) Painting of all equipment (including supply of paint).
- (i) Installation of all workshop, laboratory and office equipment, including air conditioning equipment and telephone facilities.
- (j) Installation and erection of all waste treatment and sewerage facilities.
- (k) Installation of all safety and warning devices.
- (1) All or any other erection work that may be required to complete the Plant, other than the exclusions contained in Annexure XIII.
- 10.7.1.1 The erection of the plant and equipment shall conform with the details specified in Annexure XXIX.
- 10.7.2 The CONTRACTOR shall supply all materials needed for the erection and installation of the Works, all tools, tackles, cranes and other erection equipment required, and shall provide all instruments required for the proper erection and testing of the Works.
- 10.7.3 Before commencement of erection work in any building or plant area, the Engineer shall certify that the civil engineering works have proceeded to the stage wherefrom erection can be commenced. The CONTRACTOR shall commence erection work only after such certificate is entered in the erection journal referred to below.
- 10.7.4 In the course of the erection work, journal or journals shall be kept for each unit of the Plant

separately, which shall progressively show the erection programme, the work actually completed on a weekly basis, and as at the end of each calendar month. The Site representative of the CONTRACTOR and the PURCHASER shall sign the journal every month.

and the CONTRACTOR shall mutually agree on a procedure for testing/checking that any part(s) or the whole of the Plant or the Works have been properly erected, constructed, tested and/or completed, before at least two (2) months prior to the mechanical completion of the part to be tested, or the complete mechanical testing of the Plant or completion of the Works, as the case may be. The test procedures leading to mechanical completion of the Works shall thereafter follow as stated in Article 15.

## 10.8 Startup and Commissioning

- 10.8.1 The CONTRACTOR shall inform the PURCHASER that the Plant(s) are proposed to be started-up at least three (3) months prior to the estimated time for the mechanical completion of the Plant(s).
- The PURCHASER shall accordingly arrange to supply the necessary feedstock, materials, etc. as obligated by the Contract, and shall also supply all labour and personnel for the operation of the Plant.
- 10.8.3 The Plant shall thereafter be started-up and operated under the direct charge and supervision of the CONTRACTOR until Guarantee Tests are satisfactorily completed.

# 10.9 Guarantee Tests and Acceptance

10.9.1 The procedure(s) for running, demonstrating and proving the Guarantee Tests and the procedure for the Acceptance of the Plant are contained in Articles 19 and 20 of the Contract, and in other relevant parts of the contractual documentation.

## CONTRACT PRICE AND TERMS OF PAYMENT

## I. CONTRACT PRICE

11.1 The PURCHASER shall pay to the CONTRACTOR, as consideration for the execution of the Contract, the performance of the CONTRACTOR's services and completion of the works, the TOTAL AMOUNT OF

(Insert Price and Currency)
hereinafter referred to as the CONTRACT PRICE. Insofar
as these presents constitute a Lump-Sum Turnkey Contract
the above-mentioned Contract Price shall be final and
conclusive as to the TOTAL AMOUNT payable under this
Contract, IT HEING EXPRESSLY AGREED that, for the purposes
of a more detailed price-citation, there is provided
hereinbelow a breakdown of the Contract Price (as
categorised in Articles 11.2 to 11.8 hereunder) to
the intent that such amounts broken down shall be valid
only to the extent that the total of the amounts in the
said categories do not exceed the Contract Price payable
as above-mentioned, subject to the provisions of
II TERMS OF PAYMENT.

11.1.1(i) Except as otherwise specified in this Contract, each and every amount cited in Articles '1.2 to 11.8 (inclusive) below, includes and covers all patent royalties, and all taxes, rates, charges and assessments of any kind whatsomer (whether Federal, State or Municipal, and whether or not in the nature of excise taxes/duties, customs tariffs, sales taxes, land taxes, license feef or otherwise) outside the FURCHASER's country pertinent to the equipment and material and CONTRACTOR's services provided with respect to the Works pursuant to this Contract, and/or to the performance of the work, and all other costs and charges whatsoever relevant to such equipment, material, services and/or to such performance of the work by the CONTRACTOR.

- (ii) Subject to national laws in the FURCHASER's country, the amounts to be paid to the XMTRACTYR under the Contract shall be set and free of any Income Taxes or other taxes, duties, or imposts or levies in PURCHASER's country ).
- The Contract Price mentioned in Arcicle 11.1 11.1.2 ecove shall be modified only if the FURCHASER acknowledges that additional services and/or additional equipment outside the scope of this Contract and/or improvements to the specifications, pursuant to Article 28, justify an increase or decrease in the Contract Price, or as otherwise formally agreed in writing between the PURCHASER and CONTRACTOR as regards work, services, equipment, materials or responsibilities hereinbefore not included within the scope of the Contract, and the aforementioned Contract Price may in the proper case be increased or decreased to a Total Adjusted Contract Price. The CONTRACTOR acknowledges that costs arising out of changes in material and equipment due to modifications and/or rectifications required shall not be treated as changes and extras within the provisions of Article 28.
- 11.1.3 The Contract Price mentioned in Article 11.1 above shall (for the purposes of convenience) be divided into the categorized amounts stated in each of Articles 11.2 to 11.8 below respectively to facilitate the identification of payments required to be made when due at progressive stages.

11.2	For the granting of the licences, know-how and supply basic engineering for the Plant referred to in Article:		
	For the Ammonia Plant	(Amount)	(Currency)
	For the Urea Plant	(Amount)	(Currency)
	For Utilities	(Amount)	(Ourrency)
11.3	For the supply of Plant, equipment, materials ex-Sit-		
	(inclusive of the engineering and related services) referred		
	to in Article:		
		(Amount)	(Ou <del>rra</del> ncy)
11.4	For the detailed civil engineering design work, and completion		
	of all civil Works, including road, (rail) and telephone		
	connections and related service	es, referred to	n Artiola
		(Amount)	(Currency)
11.5	For complete erection of Plant and equipment including the		
	supply of erection materials and hire of erection equipment		
	and related services:		
		(Amorant)	(Currency)
11.6	For pra-commissioning and comm	issiomind operati	ons leading to
	the start-up of the Plant, as	provided in Anner	rure XX: and
	for the services to be perform	ed by the COMTRAC	TOR in contaction
	therewith:		
		(Amount)	(Ourrency)
11.7	For providing training facilities for the PURCHASER'S		
	personnel as provided in Annexure XVIII:		
		(Amount)	(Currency)
11.8	For the supply of two (2) years requirement of spare parts,		
	and services related thereto:		
		(Amount)	(Currency)

- 11.9(a) All the prices contained in Articles 11.2 to 11.8 above are fixed and firm for the duration of the Contract and any extension(s) thereof and shall not be escalated in any manner.
  - (b) The amounts stated in the Article shall be payable on the dates due in the Contract in the currencies mentioned.

## II. TERMS OF PAYMENT

The schedule of payments and the amounts stated to be payable by the FURCHASER to the CONTRACTOR herein, shall in all cases be subject to adjustments due to the causes referenced in Article 11.24 below, which are exemplified in the provisions of the Contract herein.

- 11.10 The payment due to the CONTRACTOR under Article 11.2 above shall be made as follows:
  - (a) (2%) (amount) as an advance payment.
  - (b) (50%) (arount) on receipt by the FURCHASER of a copy of the know-how and basic engineering documents as listed in Articles 3.1.2 and 4.5.
  - (c) (25%) (amount) on completion of the Guarantee Tests of the Plant and issuance of the Provisional Acceptance Certificate by the FURCHASER.
- 11.11 Payments due under Article 11.3 shall be made as follows:
  - (a) 10% as an advance payment.
  - (b) 10% at the end of the sixth month from the Effective Date, provided that the meetings contemplated under Articles 6.5 and 6.8 have been held and all related matters completed in all respects.
  - (c) 60% shall be paid pro rata on shipments of the Plant and equipment.
  - (d) 10% shall be paid on completion of the Guarantee Test of the Plant and issuance of the Provisional Acceptance Certificate by the PURCHASER.

- (e) 10% shall be paid on the issuance of a final Acceptance Certificate by the PURCHASER.
- 11.12 Payments under Article 11.4 shall be paid as follows:
  - (a) 10% as an advance payment.
  - (b) 10% on completion of the design work for the main buildings and structures of the Plant.
  - (c) 65% shall be paid as progressive payments in monthly instalments against actual progress of work on site as reported and approved by the Engineer.
  - (d) 15% on completion of the Guarantee Tests of the Plant and issuance of the Provisional Acceptance Certificate by the PURCHASER.
- 11.13 The payment due under Article 11.5 shall be paid as follows:
  - (a) 10% as an advance payment.
  - (b) 15% on the arrival of COMTRACTOR's erection equipment at the Site.
  - (c) 50% as progressive payments in monthly instalments against actual progress of erection work on site as reported in the CONTRACTOR's monthly progress report and certified by the Engineer.
  - (d) 10% on mechanical completion of the Plant and issue of a Mechanical Completion Certificate.
  - (e) 10% on completion of the Guarantee Tests of the Plant and issuance of the Provisional Acceptance Certificate by the PURCHASER.
  - (f) 5% on issuance of the Final Acceptance Certificate.
- 11.14 The payment under Article 11.6 will be paid as follows:
  - (e) 40% on the first input of feedstock to the Plant.
  - (b) 45% on commercial production of specification grade urea as defined in Article 15.
  - (c) 15% on completion of the Guarantee Test of the Plant and issuance of the Provisional Acceptance Certificate by the PURCHASER.

- 11.15 The amount(s) due under Article 11.5 shall be payable as follows:
  - (a) 19% upon agreement of the program of training,
  - (b) 6% during training as specified in Annexure XVIII,
  - (c) 2% on completion of the overseas training of the PURCHAMER opersonnel, in accordance with Annexure XVIII.
- 11.16 The payments under Article 11.8 shall be paid as follows:
  - (a) 10% on approval by the PURCHASER of the list of spare parts.
  - (b) 65% pro rata on shipments of the spare parts.
  - (c) 25% on the successful completion of the Guarantee Testo of the Plant and issuance of a Provisional Accountant of Certificate by the PURCHASER after deducting the value of the spare parts consumed by the Plant before the Guarantee Tests have been completed.
- 11.17 The provisions of Article 23 (Liquidated Damages) shall apply mutatis mutandis in relation to any delays suffered in the fulfilment of the Contract pursuant to the requirements of Article 11 and time overruns.
- 11.18 All the advance payments due from the PURCHASER to the CONTRACTOR pursuant to Articles 11.10 to 11.13 inclusive shall be made in accordance with Article 12.2 upon the satisfactory fulfilment by the CONTRACTOR of its obligations as stated in the provisions of Articles 12.1 and 12.2.
- 11.19 For the purpose of making the remaining payments under Articles 11.10 to 11.14 and 11.16, the FURCHASER shall establish in favour of the CONTRACTOR at a specified Bank in ( the CONTRACTOR's country or as agreed otherwise ) an irrevocable transferable and divisible Letter of Credit providing for payments in accordance with the stage and schedule laid down in Articles 11.10 to 14 inclusive and

Article 11.16, in conjunction with the documents-supply specified hereinafter. The payments under the Letters of Credit referred to in Article 11.19 shall be made only upon the fulfilment of the procedure mentioned hereunder, subject to the application of Article 11.17 (Liquidated Damages) and/or any final provisions under the Contract as the case may be:

- (a) For payments under Article 11.10(b), a Certificate from the PURCHASER shall be presented stating the documents required to be provided under Article
  3.1.2 and 4.5 have been received.
- (b) For payments under Article 11.11(b), an invoice from the COMTRACTOR dated at the end of the sixth month of the Effective Date of the Contract shall be presented accompanied by a Certificate from the FURCHASER that the meetings contemplated under Articles 6.5 and 6.8 of the Contract have been held and that all matters related thereto have been completed and satisfied in all respects.
- (c) For payments under Articles 11.11(c), 60 % of the value of each shipment, against invoices, to the PURCHASER supported by the following documents:
  - (i) Clean on-Board Bill of Lading (except for equipment forwarded as deck cargo in which event a bill of lading shall be sufficient).
  - (ii) Packing list.
  - (iii) Certificate of Origin (where required).
  - (iv) Certificate of the CONTRACTOR that all required tests and inspections under the Contract have been successfully performed.
  - (v) (Other documents as specified).
- (d) For payments under Article 11.12(b) a Certificate from the FURCHASER shall be presented confirming that copies of civil engineering designs have been received by the FURCHASER.

- monthly invoice from the CONTRACTOR indicating the percentage of civil work completed, duly certified by the FURCHASER or his representative, that the percentage of work stated in the monthly invoices submitted by the CONTRACTOR have been completed, and that the value related to such percentage progress has not been previously compensated and that the amount indicated in the invoice represents the amount due under the Contract.
- (f) For payment under Article 11.13(b) a certificate from the PURCHASER confirming that erection equipment has arrived at Site.
- (g) For payments under Article 11.13(c): Against an invoice from the CONTRACTOR indicating that percentage of progress in the erection of equipment as indicated in the monthly progress report of the CONTRACTOR and that the value related to such progress has not been previously compensated, duly certified by the PURCHASER or his representative.
- (h) For payment under Article 11.13(d), against the Certificate of Mechanical Completion of the Plant issued by the PURCHASER, which Certificate shall be issued when the requirements of Article 15 have been satisfied.
- (i) For payment under Article 11.14(a), a Certificate shall be issued by the PURCHASER confirming that the first input of feedstock has been introduced into the Plant and for payments under Article 11.14(b) a Certificate from the PURCHASER shall be issued confirming that the Plant has been started up and that continuous commercial grade urea is being obtained at the rate specified in Article 15.11.

- (j) For payments under Article 11.15 a Certificate from the PURCHASER shall be presented stating that the overseas training programme as envisaged in Annexure XVIII had been completed.
- (k) For payment against Article (1.15(a) a Certificate from the PURHCASER confirming that a satisfactory list of spare parts with necessary details has been received and approved.
- (1) For payment due under Article 11.16(b) being to percent of the value pro rata or shipment of the space percent proper invoices shall be presented to the PURChable supported by the documents of the same nature mentioned in Article 11.11(c) above.
- (m) Certificate(s) to be issued to the TORCHASER unit the provisions of Article 11.19 small not be unreasonably withheld.
- The final payments due under Articles \*1.00 to 1.74 Art.

  Article 11.16 shall be made against Certificate(s) of Fital Acceptance issued by the PURCHASER. The CONTRACTOR may request that the payments be released upon satisfactory.

  Mechanical Completion of the Works, in unconducted with Article 20, in consideration of an unconditional case.

  Guarantee issued in the PURCHASER's favour for an equivalent amount to be provided by the CONTRACTOR in the form who manner specified by Article 10.00
  - 11.20.1 The Certificate referred to in Article 11.2 shall be withheld by the PURHCASER only for cause.
- At the discretion of the FURCHASER a Letter of Credit may be opened in consideration of progression of activities pursuant to Article 11.15 which if opened shall be confirmed by the FURCHASER at the Bank specified by the CONTRACTOR.

  In such an eventuality the CONTRACTOR shall provide a Bank

Guarantee in accordance with Article 12.2 which guarantee shall be released upon satisfactory completion of training.

All charges incurred in connection with the cost of confirmation shall be paid by the CONTRACTOR.

- without prejudice to the PURCHASER's rights, in the event that, for reasons not attributable to the CONTRACTOR, the Plant has been mechanically completed but not started up within the required eighteen (18) months after the mechanical completion of the Plant, the CONTRACTOR shall be entitled to the payments due under Articles 11.10(c), 11.11(d), 11.12(d) and 11.14(c) (in like manner as if the Plant had been mechanically completed and had completed the guarantee tests) within thirty (30) days (but subject to the provisions of Article 11.23) after presenting:
  - (i) An invoice in triplicate signed by an Authorised Officer of the CONTRACTOR.
  - (ii) An affidavit executed by the CONTRACTOR stating that for reasons not attributable to the CONTRACTOR the mechanical completion of the Plant has not been accomplished, or the Plant has not been started—up as the case may be.
  - (iii) Proof as to the issue of an open unconditional Bank Guarantee in the form specified in Annexure XXIII for the proper amount (as specified in Article 11.23 below).
- Should the CONTRACTOR wish to invoke his rights for payment of the amount under Article 11.22 he shall promptly inform the PURCHASER by telegram, and by letter, of his claim.

  Should the PURCHASER dispute such claim, the CONTRACTOR shall nevertheless be entitled to receive the payments stated to be due under Article 11.22 against presentation of the said documents specified in Article 11.22(i) to (iii) inclusive, together with a Bank Guarantee ( for amount(s) equivalent to payments under the relevant Articles referred

to in Article 11.22) in the form given in Annexure XXIII. The Bank Guarantee shall be valid for twelve (12) months, but if the PURCHASER or the CONTRACTOR should refer any dispute arising therefrom to Arbitration them, in such eventuality such Bank Juarantee shall continue to remain valid until a period of at least three (3) months after the Award of the Arbitrator.

- 11.24 The FURCHASER and the CONTRACTOR agree that one payments due under this Article shall be subject to claims, deductions or debts arising out of default, breach and/or reduced work and services than that contemplated by the original terms of the Contract hereis.
- Any payments due under the Contract (which are not secure:
  by Letters of Credit), shall be made to the CONTRACTO
  within eight (8) weeks of receipt by the PURCHADE of
  involces duly certified by the PURCHATEP's Cite recresetative, subject nevertheless, is legitimate deductions as
  the PURCHAGER shall be entitled to make under the provisions
  of the Contract
- which the CONTRACTOR of almost in presently due (including any question or dispute related to the amount of any deduction that may have been made by the FURCHABLE order any provisions of the Contract), the CONTRACTOR shall be entitled to receive the uncontested portion of the amount, however, such payment of the uncontested portion of the amount shall not prejudice the rights of the FURCHASER to recover such amount in any manner that he may deem fit; Such uncontested portions of amounts shall be receivable by the CONTRACTOR within eight (8) weeks following ascertainment of the amount.
- Subject to national laws in the FURCHASER's country, the amounts to be paid to the CONTRACTOR under the Contract shall be net and free of any Income Taxes or other taxes, duties, or imposts or levies in ( FURCHASER's country ).

  Any tax rebate or credit that may be available to the

CONTRACTOR in the CONTRACTOR's country in respect of the taxes paid by the FURCHASER due to the existence of a double taxation agreement shall be passed on to the FURCHASER within twenty (20) days of the receipt of such rebate, or credit.

Any and all Bank Guarantees to be provided by the CONTRACTOR pursuant to the Contract shall be encashable by the PURCHASER in (indicate currency). Such guarantees shall be valid for the period required under the Contract and the CONTRACTOR shall take any and all actions including renewals at the appropriate times to keep the said guarantees current and valid for the said periods.

#### PERFORMANCE BOND AND BANK GUARANTEES

- Upon the execution of the Contract, the CONTRACTOR shall provide to the PURCHASER, a Performance Bond guaranteed by an approved Bank and/or Bonding Institution in (PURCHASER's country) in the form given in Annexure XXII for the amount of (Amount) in favour of the PURCHASER.

  The Performance Bond shall be valid for the period required under the Contract and such extensions thereof, and the CONTRACTOR shall take any and all actions including remewals at the appropriate time to keep the said Bond current and valid for the said period. This Performance Bond shall be released upon Final Acceptance of the Plant.
- In consideration of the advance payment remitted by the PURCHASER (as provided for herein) the CONTRACTOR shall provide an adequate Bank Guarantee or in lieu an Advance Payment Bond shall be for an amount equivalent to the sum total of the advance payment required to be made by the PURCHASER pursuant to Articles 11.10 to 11.13 (inclusive). The advance payments due from the PURCHASER shall be remitted directly to (Name of Bank) for the CONTRACTOR's account. The amount of the Bank Guarantee or Advance Payment Bond shall be released within \_\_\_\_\_ (\_\_\_) months after the Effective Date of the Contract.
- Upon Mechanical Completion of the Plant, and provided the CONTRACTOR elects to exercise his option under Article 11.20, the CONTRACTOR shall deliver a Bank Guarantee for an amount equal to (Amount) at least equivalent to the amount of retention monies requested to be released by the PURCHASER under Article 11.20 from the (Name of Bank) and confirmed by a BANK in (COUNTRY OF PURCHASER) in the form given in

Annexure XXIII. This Bank Guarantee shall remain valid and in force up to the date of the Final Acceptance of the Plant, or any extension(3) thereof.

The Bank Guarantee envisaged in Article 11.23 shall be in like form as that specified in Article 12.2 above and such Bank Guarantee shall remain valid for the period(s) mentioned in Article 11.23.

#### ARTICLE 13

#### EFFECTIVE DATE OF CONTRACT

13.1	The Contract shall become valid upon the formal execution
	(signing) by the duly authorised officers of the PURCHASER
	and CONTRACTOR properly witnessed and sealed and in accor-
	dance with the applicable law. The Effective Date of the
	Contract shall be the date on which the PURCHASER's
	definitive advice to proceed is received by the CONTRACTOR,
	which shall occur when the last of the following requirements
	has been fulfilled:

- 13.1.1 Approval of the Contract by the Government of

  (\_\_\_\_\_\_) where the plant is to be
  located, such approval to be obtained by the

  PURCHASER if required.
- 13.1.2 Approval of the Government of (\_\_\_\_\_)
  where the CONTRACTOR resides and has his
  principal place of business, if required,
  such approval to be obtained by the CONTRACTOR.
- 13.1.3 The Provision by the CONTRACTOR of the Performance Bond as provided under Article 12.1 under the terms of the Contract, to be effected in any event prior to the remittance of the advance payment by the PURCHASER referred to in Article 12.2 and Article 13.1.4.
- 13.1.4 The remittance of the advance payment by the PURCHASER as provided under Article 12.2 under the terms of the Contract, secured by the Bank Guarantee as provided by the CONTRACTOR in accordance with Article 12.2.

- 13.2 If the PURCHASER does not open the Letter of Credit specified in Article 11.19 or does not make equivalent arrangements within six (6) months, the CONTRACTOR may elect (at his own discretion) to suspend its activities and obligations under the Contract until such time as Article 11.19 is complied with.
- The expression "Effective Date" whenever used in this Contract or in the Annexures or in the Specifications (or in any other document deemed to form a part of this Contract) shall be interpreted to mean "Effective Date of Contract".

#### ARTICLE\_14

#### TIME OF ESSENCE

- 14.1 Time shall be deemed to be of the essence of the Contract.
- 14.2 The CONTRACTOR acknowledges and agrees that it is capable of completing its contractual obligations within the time schedules set forth in this Contract, and that it possesses the necessary skills and means to discharge its responsibilities in a proper, efficient and expeditious manner.
- The CONTRACTOR and PURCHASER agree that the timely completion of the Works herein (by virtue of this Turnkey Contract) is an integral part of the responsibilities assumed by the parties to this Contract, and accordingly, the CONTRACTOR and PURCHASER agree to adhere structly to the contractual requirements of time and promise to fulfil their contractual obligations speedily, competently and reliably.
- 14.4 The CONTRACTOR acknowledges and agrees that the supply of the plant, equipment, materials and spare parts (together with the services related therete) is crucial to the schedules for completion of the Works, and the CONTRACTOR hereby obligates itself and ensures that its scope of supply and services provided under this lonter t are in conformity with the requirements of the contractua time-schedule(s) (expressedly or impliedly), and, shall furthermore, in anticipation of any delay or shortfall in the scope of its supply and/or cervices undertake stops forthwith to remedy the delay and/or (in consultation with the PURCHASER) utilize alternate resources immediately available without compromising any of the contractual criteria as to quality and/or quantity with respect to such goods and services.

#### ARTICLE 15

#### COMPLETION OF WORK(S) AND TAKE-OVER

- 15.1 The CONTRACTOR shall execute the work diligently and shall adhere strictly to the requirements for expeditious completion of the Works, notwithstanding the contractual time-schedules provided herein.
- The Work(s) and/or sections and/or parts thereof shall be considered to have been completed when the requirements of Articles 15.4 to 15.8 have been satisfied, but subject to the provisions of Articles 15.10 and 15.17 herein. However, notwithstanding the foregoing, the Work(s) or sections and/or any parts thereof shall not be deemed to have been completed if subsequent events necessitate requirement(s) for rectification and/or modifications to the Work(s), sections and/or parts thereof, whether occurring before or after Provisional Acceptance.
- As soon as any parts of the Works or Plant or any part thereof, is in the opinion of the CONTRACTOR substantially complete and ready for inspection the CONTRACTOR shall so notify the FURCHASER by means of a Construction Completion Report.

  This report shall indicate which parts or the Works or the Plant the CONTRACTOR proposes to demonstrate, have been completed in accordance with the specifications and have passed such tests as may have been specified in the Contract. The CONTRACTOR shall prepare and submit a programme of tests to prove the ...dividual equipment and/or sections of a Plant.
- Upon Mechanical Completion of any Plant and testing of each plant in accordance with Article 15.8 and Annexure XX, as soon as possible thereafter, the relevant Plant shall be brought into operation.
- 15.5 Upon satisfactory completion of such tests on individual equipment, and/or section of a Plant, the CONTRACTOR and the PURCHASER shall sign the Construction Completion Report

stating that the Plant or part thereof has been demonstrated and is substantially complete and that any procedures needed prior to the plant being put into operation may safely be carried out. (Such Construction Completion Report may include a note of any minor items which can be completed after Start-Up). The signing of the Construction Completion Report by the PURCHASER shall not be deemed to constitute an acknowledgement or confirmation or agreement as to the suitability or fitness of the equipment and/or section or a Plant for the purposes intended.

- 15.6 If the PURCHASER is not satisfied that the Plant or part thereof referred to in Article 15.3 is substantially complete he may endorse the Construction Completion Report accordingly, and particularize as to the reasons why such Works or Plant or part thereof is not in accordance with the Contract. The CONTRACTOR shall thereafter complete the Works or Plant or part thereof as shall be repeated. The failure by the CONTRACTOR is allowed the complete the works or Plant or parts thereof shall described the complete the works or Plant or parts thereof shall entitle the PURCHASES to withhold immediately all or parts of the payments then due to the CONTRACTOR.
- When all the stems of equipment is a flant or six of the sections of the Off-Sites and Utilities are ready and have been completed pursuant to this Contract (viz. erection installed and tested), the CONTRACTOR and PURCHASED and review the procedures for the pre-agreed tests for the demonstration of the Mechanical Completion of the Plant to be undertaken in accordance with Annexure XX (or otherwise) and the detailed procedures therewith.
- The pre-commissioning of the Plants and each section of the Utilities and Off-Sites shall consist of the carrying out of such operations and making of such tests as are detailed in Annexure XX to establish the correct mechanical

functioning of the Plants. When all such operations and tests have been fully and satisfactorily completed and the Mechanical Completion of the Works has been achieved. the CONTRACTOR shall prepare a Mechanical Completion Report which shall be signed by both parties following a joint examination of the Plant(s) or those sections of Utilities and Off-Sites concerned, and upon such signature of such Report by both parties, the Mechanical Completion of the Plants or sections or Utilities and Off-Sites concerned shall be deemed to be achieved. The considerations ap plying to the signing of the Mechanical Completion Report ow the FURCHASER shall be similar and in like manner to the signing of the Construction Completion Report by the . Unchaser pursuant to Article 10.5 and the FURCHASER shall and te deemed to have made any acknowledgement, or conformation or agreement thereby.

- The operations and tests referred to in 15.7 and 16.8 above shall be carried out in a competent manner by the CONTRACTOR's personnel under his direction and responsibility and in the presence of the PURCHASER's personnel.
- defect(s) or malfunction(s) become apparent in the Plant and/or equipment supplied, or in any part of the Works, the CONTRACTOR shall immediately take steps to replace the defective equipment and/or rectify the defective part of the Works in the minimum of time, as required by Articles 17.4 (if applicable), 21 and 27 and subject to Article 25.
- Thereafter the Plant shall be started-up and when all sections of the Plants are in a satisfactory operating state, and specification grade Ammonia and Urea are in a continuous and uninterrupted production for (\_\_\_\_) days at (\_\_\_\_\_% capacity in accordance with the terms of the Contract, then, the Plant shall be deemed to be in Commercial Production.

- The CONTRACTOR shall, in any event demonstrate that the Plant(s) is capable of achieving all the Guarantee Tests and requirements specified in Article 19 and as elsewhere expressed in the Contract as more particularly mentioned in Article 19.8 and 19.10 to prove contractual compliance.
- The Plant shall be deemed to have been Provisionally Accepted when the CONTRACTOR shall have satisfactorily demonstrated that the Plant is capable of meeting its Performance Guarantees as specified in Article 19 and the PURCHASER has given a Provisional Acceptance Certificate thereof subject however to the exercise of the rights of the PURCHASER (if necessary) pursuant to Articles 17, 18, 20 and 21.
- The CONTRACTOR shall assume the responsibility of starting up the Plant, and demonstrating that the Plant is capable of meeting the Guarantees specified in the Contract, together with the other obligations to be fulfilled under the Contract.
- The CONTRACTOR's work at Site shall be deemed to have been completed only when the CONTRACTOR shall have received the Provisional Acceptance Certificate from the PURCHASER pursuant to Article 20 herein as mualified by the provisions of Article 15.13.
- The Provisional Acceptance of the Plant or the Take-Over of any specified part or section of the Plant(s) by the PURCHASER shall not in any way release the CONTRACTOR from his obligations (expressedly or impliedly) under the terms of this Contract, and shall not be construed as evidence that any portions of the Work(s), part(s), section(s), and/or material(s) thereof are complete.

- 15.17 If for reasons attributable to the CONTRACTOR (whether directly or indirectly), the CONTRACTOR is unable to demonstrate any or all of the Guarantee Tests and/or Performance Requirements referred to in Article 15.12 above pursuant to Articles 19 and 20 (or for any one or other of the reasons referred to in Article 15.18 below), the provisions of Articles 23.3, 23.4 and 23.5 shall apply.
- The CONTRACTOR shall be responsible in any event for undertaking modification(s) of the Plant(s) and/or of any of the sections and/or parts thereof, in relation to any part of the Work(s) supplied by him or for which he is responsible under this Contract, and, without restricting the generality of the foregoing, in any one and/or other of the following circumstances, namely:
  - 15.18.1 If Guarantees and/or Performance Guarantee Tests and/or any of the tests or pre-commissioning tests required are not capable of being commenced, undertaken, met or completed for reasons attributable to the CONTRACTOR's work and/or services, referred to in the Contract and in Article 15.17.
  - 15.18.2 If the Plant(s) and/or parts or sections thereof, and/or Process(es) are found to be incapable or insufficient due to the reasons, inter alia, referred to in Article 4.33.
  - 15.18.3 If the quality of Workmanship and Materials fail to comply with the requirements of the Contract as specified in Article 17.
  - 15.18.4 If the requirements as to Warranties are found to have been breached or are not in accordance with the Contract pursuant to Article 21.
  - 15.18.5 If any of the civil engineering and/or site work required to be undertaken by the CONTRACTOR under the Contract is incomplete or inadequate.
  - 15.18.6 If any rectification(s) undertaken pursuant to Article 27 are found to be inadequate or insufficient.

15.18.7 If any work pursuant to the requirements of the CONTRACTOR is incomplete, insufficient or inadequate.

Any and all modification(s) required to be undertaken under the terms of the Contract shall be governed by the provisions of Article 16, and such modification work shall be a complished in a diligent and bona fide manner to the reasonable satisfaction of the PURCHASER. The conditions governing extension(s) of time required to complete such work and the terms of such extension(s) shall be determined in accordance with the provisions of Article 16, subject however to the provisions of Articles 17,21,22,25 and 27. The modification(s) undertaken shall not be deemed to be complete until all the contractual stipulations governing such work and services are satisfied, and the cause(s) giving rise to the necessity for such modification(s) are eliminated. The XONTRACTOR shall not require the PURCHASER to provide a formal waiver of rights and/or remedies prior to agreeing upon modification work required pursuant to appropriate provisions of the Contract.

- Unless otherwise agreed or in the event that the rectifications and modifications have not been sarisfactorily completed and in any event without prejudice to the rights of the PURCHASER under the Contract, the PURCHASER shall take-over the Plant upon the issue of the Certificate of Provisional Acceptance. Upon Take-Over, the PURCHASER shall be responsible for the management, operation and maintenance of the Work(s), and shall take out and carry such insurances as may be deemed necessary.
- The PURCHASER shall issue a Final Acceptance Certificate when all the provisions of the Contract have been fulfilled, and as expressly required by the conditions of Article 20, subject to the completion of any and all work more particularly referred to in this Article and Articles 16 and/or 27, and as elsewhere required under the terms of the Contract.

#### ARTICLE 16

#### EXTENSION OF TIME AND MODIFICATIONS TO THE WORKS

- 16.1 (a) If by reasons of the happening of any one and/or other or the following occurrences which are de facto beyond the CONTRACTOR's or PURCHASER's control namely:
  - (i) Vandalism or malicious damage; or
  - (ii) With respect to additional work, improvements in design, which had been previously mutually agreed within the terms of Article 28 or otherwise,

which affect or delay specific work required to be undertaken pursuant to this Contract, the CONTRACTOR shall within ten (10) days of such occurrence specified above, make written request to the PURCHASER for an extension of time for completion of work or any portion of it to the extent that the factors affecting delay prevailed in the circumstances. Should the PURCHASER consider such claim(s) justified, he shall grant such extension in time which shall reasonably compensate the loss of time of the CONTRACTOR. The PURCHASER's grant of such extension pursuant to Article 16.1(a) shall be without prejudice and the CONTRACTOR shall be fully liable for the completion of all of the specific work and activities affected by the above-mentioned delay or occurrences in like manner as prior to the happening of the occurences referred to. The CONTRACTOR shall also extend the period of validity of the Bank Guarantee(s) and Performance Bond commensurate with the period of extension granted by the PURCHASER.

(b) Payments and/or entitlement to costs pursuant to this Article 16.1(a)/1) only including amounts justifiably due pursuant to the provisions of Article 34 and 35 shall be established on a quantum meruit basis, provided that the breach of Contract was not causative of the Suspension

of Work, and provided that the CONTRACTOR otherwise adheres to the terms of the Contract. In the event of occurrence of the happenings referred to in Article 16.1(a) the conditions of any extension granted shall (if applicable) be included as an amendment to the existing documents governing the activities or work affected or delayed by the occurrences referred to above.

- be construed to refer to any day or period being utilized legitimately for completion of the work under the Contract, if on any such day or period the causes accepted by the PURCHASER as being beyond the control of the CONTRACTOR referred to in Article 16.1(a)(i) above delayed completion of the work.
- 16.2 In the event that the CONTRACTOR is unable to prove and demonstrate any of the Guarantee Tests as required by Articles 15.12 and 19, and if any one and/or other of the factors or reasons referred to in Article 15.18 (or matters related therete), affect, impair or prevent the proper operations of the Plantis', their capacity. performance, production and/or their capability under the terms of the Suntract, and/or any condition(s) in the Works (which the responsibility of the CONTRACTOR; adversely affects one said operations, whether due to any discrepancies or mistakes in design, process, engineering, instructions, specifications, inspections, procurement, fabrication and supply, civil regimeering, erection, and errors and/cr omissions (as the case may be , which require modification(s), corrections, rectifications and/or equipment replacement pursuant inter alia to Articles 15.17, 17, 19.11 and/or 27, so as to correct and remove the defects related thereto, with or without replacement of any equipment, parts, and/or materials, the PURCHASER may at his discretion require the CONTRACTOR to undertake such modifications, rectifications, corrections or equipment replacement and the CONTRACTOR shall submit a detailed report to the PURCHASER specifying the extent,

nature, degree and effect of the discrepancies and/or mistakes etc. above-referred to in relation to the Work(s). The PURCHASER shall assess the full impact of such report, and following consultations with the CONTRACTOR and with any other person, firm or corporation he may deem expedient (with or without the presence of the CONTRACTOR) he shall provide the CONTRACTOR with an allotted time upon specified conditions.notwithstanding the payment in any event of the additional Liquidated Damages for delay pursuant to Article 2. For the undertaking of such modifications, rectification(s), replacement(s), corrective engineering pursuant to the aforementioned Articles and (if applicable) the making good of faulty workmanship and defective materials pursuant to Article 17.4. The extension and time allowed to the CCNTRACTOR hereby shall not in any way absolve him of any liabilities for the period of delay and/or the application of Articles 23 and 25 as the case may be, and/or the effect of any one and/or other of Articles 18 and/or 21. The CONTRACTOR shall complete the work in conformity with the requirements of the Contract and shall (at the discretion of the PURCHASER) be granted such further extensions as may be necessary, without prejudice to any of the PURCHASER's rights as aforementioned. The CONTRACTOR shall extend the period(s) of validity of the Bank Guarantee(s) and Performance Bond(s) commensurate with the period of extension(s) granted by the PURCHASER.

Subject to the PURCHASER's right to hire assistance from any other CONTRACTOR (at his sole discretion), the CONTRACTOR's obligation to modify the Plant and rectify the defects and to take corrective steps including the replacement of equipment and/or materials shall be continuous and unabated, for the successive periods authorized by the PURCHASER in writing referred to in Article 16.2 above and the CONTRACTOR shall continue in his endeavors at his own cost to modify and/or rectify the defects, replace equipment and take such corrective measures to fulfil his obligations under the terms of the Contract. Notwithstanding, the exercise by the PURCHASER of his rights to hire external assistance, and/or other remedies pursuant to this

contract, the obligations of the CONTRACTOR herein shall not end until all of the proper and necessary changes are made, the work completed, the plant corrected and the Performance Guarantees and tests of the Plants are successfully demonstrated.

- The CONTRACTOR's obligations to execute the modifications, corrections, rectifications and replacement of equipment pursuant to Articles 16.2 and 16.3 shall not be restricted.
- 16.5 For the purposes of this Article, the extension(s) referred to in Article 16.1 shall not be deemed to have the same meaning as the extension(s) referred to in Article 16.2, and the extensions granted in each case shall be accorded the meaning and intent in the context thereof.
- 16.6 If in the PURCHASER's opinion it is in the public interest, the PURCHASER may either:
  - (a) on his own initiative; or
  - (b) on the application of the CONTRACTOR made before the day fixed for completion of the work or before any new date for completion fixed under this Subarticle;

extend the time for completion of the work; PROVIDED ALWAYS

- that the PURCHASER shall consult with the CONTRACTOR to determine what additional time and extra costs, if any, may be authorized to the CONTRACTOR;
- that any extension of time granted as aforesaid to the CONTRACTOR shall be without prejudice to any rights or remedies of the PURCHASER whatsoever under this Contract, should the CONTRACTOR fail to accomplish work within the extended time so granted and accepted;
- (iii) that in any event no extension of time, whether on the PURCHASER's initiative or on the application of the CONTRACTOR, shall be deemed to have been granted unless the PURCHASER specifically so states by written notice to the CONTRACTOR.

#### ARTICLE 17

#### GUARANTEE OF WORKMANSHIP AND MATERIALS

- 17.1 The CONTRACTOR small be responsible for the quality of all materials and workmanship of the complete Work(s), and unless as otherwise specifically provided, all plant, equipment, materials, apparatus, articles, instruments and all other goods required to be supplied by the CONTRACTOR under this Contract small be new and of the most mustable grade for the purposes intended, and to the Contract opecifications, standards and regulations retailed in Almerica II, IV. IXII and XETII, and the CONTRACTOR shall in any event subenever spoir attel take into indount the comestic standards and regulations of the PURCHASER's scantry. Unless otherwise already contained in the COMTRACTOR's proposal, the COMTRACTOR shall furnish to the FURCHASER upon his request any further details relating to identifying data and information respecting the performance, capacity nature and rating of the machinery, and mechanical and other equipment which the CONTRACTOR contemplates incorporating in the Works. Machinery, equipment, material and articles installed or used (without prior approval if such is required) shall be at the risk of subsequent rejection. All work, labour and services under this Contract shall be performed in a skillful and workmanlike manner.
- The CONTRACTOR agrees and acknowledges that the PURHCASER has not entered into any contractual relationship, directly or indirectly, with the CONTRACTOR's sub-contractors, suppliers, vendors, agents, manufacturers and/or fabricators (unless otherwise specified), and accordingly, the CONTRACTOR hereby agrees to assume full responsibility for the guarantee of workmanship and materials as provided in this Article (together with the inherent warranties as expressed in Article 21) with respect to the scope of the CONTRACTOR's supply under the Contract.

- 17.3 The CONTRACTOR shall be fully responsible for ensuring that all of the materials used in the manufacture of equipment and machinery and other contractually required items are correct and that they completely conform to the specifications stated in the Contract. The CONTRACTOR shall ensure that his suppliers' certificates for the materials satisfy the minimum requirements (physical and chemical) specified by the CONTRACTOR, conform to the requirements stated in the Annexures to the Contract, and the CONTRACTOR shall have undertaken random testing of materials and shall have satisfied himself as to their adequacy, sufficiency and propriety thereof. The provisions of Articles 16, 23, 25 and/or 27 shall apply mutatis mutandis with respect to any breach by the CONTRACTUR of his obligations pursuant to this Article with respect to the standard of care required to be exercised by him, and as to the contractual guarantees herein pertaining to the quality of workmanship and maternals of the complete Work(s).
- If the materials or workmanship fail to comply with the 17.4 requirements of the Contract, or if the tests or plant operations prove or indicate the existence of any fault or defect in any part(s) and/or section(s) or the Work(s), the CONTRACTOR shall forthwith (at his own cost) re-execute or make good the defective materials and/or faulty workmanship or alter same to ensure compliance with the Contract, and thereafter (at the discretion of the PURCHASER) new tests and inspections shall, if required, be carried out. If the CONTRACTOR defaults or delays in diligently commencing, continuing and completing the making good of the defective materials and/or faulty workmanship as required by the terms of this Contract, then the PURCHASER shall do so, or cause same to be done by any other firs or corporation (of the FURCHASER's choice) in any manner and by any means the PURCHASER considers

expedient or advisable in the circumstances and the CONTRACTOR shall be liable for all costs, charges and expenses incurred by the PURCHASER in connection therewith, and such monies shall be considered as a debt due to the PURCHASER from the CONTRACTOR. The provisions of this Article 17.4 shall be deemed to be complementary to Articles 15, 16, 20, and 27.

- The CONTRACTOR shall be responsible for all civil engineering Works to be constructed at Site. The CONTRACTOR shall maintain an adequate amount of staff at site for such work and all related activities thereto (such as the taking of samples etc. where required for testing). Any samples and/or the results of tests etc. shall be available for inspection by the PURCHASER if required.
- Notwithstanding the obligations and contractual liabilities of the CONTRACTOR as contained in this Article and as elsewhere expressed in this Contract, the PURCHASER shall have the right to appoint Inspectors for reviewing Civil Engineering Works (including roads, rail connections) at site, and to assure themselves that the work is being conducted with suitable materials and in the approved manner, as specified in Annexure XXVII, or as otherwise agreed. The PURCHASER's representatives shall have the right to take away any samples of civil engineering materials for analysis. The CONTRACTOR shall fully co-operate with the PURCHASER in the exercise of such rights and these activities by the PURCHASER and the CONTRACTOR shall not be absolved from any of the liabilities as mentioned in this Article.
- The COMPRACTOR shall continuously direct and supervise all erection work at site. This shall include the supervision and review of all pressure welds (whether in pipes or otherwise) by X-ray or radiation photographs, to ensure complete stability and any photographs taken shall be made available to the FURCHASER's Inspectors.
- 17.8 At least two (2) months before erection commences at site the COMTRACTOR shall submit to the PURCHASER a programme of tests to be undertaken during erection on different

sections of the plant and upon agreement by the PURCHASER and such tests shall be conducted accordingly, and records of such tests kept in a journal which shall be signed by the representatives of the PURCHASER and CONTRACTOR.

- The PURCHASER or his representatives shall at all times have the right to inspect and spot check all work being undertaken at the site and to take away samples of materials being used for analysis to check their suitability with the Contractual requirements.
- 17.10 In consideration of the acquisition of spare parts by the CONTRACTOR on behalf of the FURCHASER pursuant to Article 40, the CONTRACTOR shall use its best efforts (for the benefit of the PURCHASER) to obtain from vendors and/or suppliers of the spare parts as the case may be, guarantees that all materials entering into and incidental to the mamufacture of the spare parts etc., are free from defects and faulty workmanship. The vendors or suppliers shall agree to repair or replace F.O.B. plant site, at their own expense, any defective material, supplies, or equipment (comprised in the spare parts) provided such defects are discovered within thirtysix (36) months after the date of shipment or twelve months after commencement of use, whichever comes first, and the vendor or supplier, as the case may be, is given written notification as soon as defects are discovered.

#### ARTICLE 18

#### INSPECTION, TESTING AND CERTIFICATION

- The CONTRACTOR shall assume full responsibility for the inspection, testing and certification of all equipment, materials, spare parts and other items during manufacture and prior to despatch, prior to and during inspection and upon arrival at the Plant site for incorporation into the Works. Notwithstanding the appointment of a duly authorized representative by the PURCHASER (if any) to witness the activities referred to, the CONTRACTOR shall be liable for the proper, adequate and sufficient conduct of the functions envisaged in this Article, pursuant to Articles 17 and 21.
- fabricators during manufacture and before despate:

  (in accordance with agreed procedures) the necessary
  inspection and certification testing to assure
  conformance with the relevant codes and standard provided in the specification.
  - the CONTRACTOR shall take every necessary measure to ensure that the fabricators and/or their employees strictly follow fabrication instructions and codes specified by the CONTRACTOR and/or Process incensor and that the quality of workmanship is maintained at acceptable levels to enable the production of equipment and other items in accordance with the minimum qualitative standards expressed in the Contract.
  - (c) The COMTRACTOR shall require its suppliers to provide the necessary test certificates in proper form together with all other documents required by the Inspecting Anthorities in the country of manufacture or as may be required by the FURCHASER in consideration of the regulations in force in ( country ) and/or as provided for in the specifications.

- 18.3 (a) When the equipment, machinery or material is ready for final inspection, the CONTRACTOR shall issue such confirmation to the PURCHASER's inspectors prior to their inspection.
  - (b) The CONTRACTOR shall issue proper Certificates of Inspection in respect of all items of Plant and Equipment respectively, before despatch, and shall send copies of such Certificates to the FURCHASER, and Certificates of tests carried out in connection with the issue of such Certificates of Inspection,
- The CONTRACTOR shall expedite and control the delivery by making his best efforts in order that the Equipment Supplier(s) maintain the delivery of equipment in order to meet the time schedule laid down for the Contract,
- 18.5 The PURCHASER may appoint representatives or a sub-contractor to act as his representative for imspection of equipment during mamufacture or prior to despatch. When any equipment is ready for inspection, the CONTRACTOR shall give at least forty-five (45) days notice to the PURCHAMER's representative of the time, place and goods to be inspected. Should the FURCHASER's representative desire to be present tre CONTRACTOR shall be advised within thirty (  $\mathcal{L}$  ) days thereafter. Wherever required by the FURCHASER, the CONTRACTOR shall associate the PURCHASEE or his representative with such inspection, and shall undertake the necessary coordination for joint inspections. The presence of the FURCHASER's representatives shall not in any manner qualify the CONTRACTOR's obligation under this Contract. The presence of the FURCHASIR's representatives also shall not in any way imply contractual acceptance of goods or transfer or ownership.
  - 18.5.1 <u>Inspection and Tests at Pactory</u>. All work shall be subject to inspection and testing at COSTRACTOR's factory and shall conform to the requirements of the Contract.

- Inspection and Tests on Mechanical Completion. Pursuant to the provisions of Article 15, the CONTRACTOR shall, upon due notice to the PURCHASER of his readiness to undertake the tests to demonstrate and prove completion of the Works, proceed forthwith to commence the procedures in accordance with the requirements of Article 15, but subject to the provisions referred to therein.
- 18.6 All equipment, machinery, material and work performed in connection with this Contract shall be available for inspection by the FURCHASER (through his duly authorized representative, including his underwriters as the case may be). The CONTRACTOR, its sub-contractors, and/or suppliers shall provide safe and necessary access for the inspection envisaged by this Article. The FURCHASER shall be afforded full and free access to the shops, factories, site or places of business of the CONTRACTOR, the subcontractors and/or suppliers for such inspection to determine the condition and progress of work under the Contract. Neither the failure to make such inspection nor failure to discover defective workmanship, materials or equipment, nor approval of, or payment to the CONTRACTOR for such work, materials or equipment (pursuant to this Contract) shall prejudice the rights of the FURCHASER thereafter to require correction, replacement or reject the same as herein provided. If any services or workmanship supplied by the CONTRACTOR, the sub-contractors and/or suppliers are determined by the FURCHASER, either during the performance of the work, on

inspection, or during any applicable warranty period(s), to be defective and not complying with requirements of this Contract and arising out of the fault or negligence of the CONTRACTOR, the sub-contractors and/or suppliers, the FURCHASER shall notify the CONTRACTOR in writing that such work is being rejected. Thereupon the CONTRACTOR shall, at his own expense, promptly remove and replace or correct such defective work by making the same comply strictly with all requirements.

- 18.7 If the FURCHASER waives his right of inspecting or testing as herein provided, it shall in no way relieve the CONTRACTOR of full liability for the quality, proper operation and performance of the completed work, and/or sections or parts thereof, nor shall it prejudice or affect the rights of the FURCHASER set forth under the Contract.
- Should the PURCHASER's representative establish during inspection any deficiency in the inspected items, the CONTRACTOR shall take immediate steps to eliminate them. The CONTRACTOR shall maintain records of deficiencies noted and corrected. In case of a difference of opinion, the CONTRACTOR may proceed to act on his own responsibility as regards the despetch of such goods and equipment, but not subject however, to the provisions of Articles 17,21,21, 25 and/or 27 as the case may be.
- The CONTRACTOR shall at the PURCHASER's cost and after notice from the PURCHASER review the quality of the items being supplied by the PURCHASER as listed in Annexure VIII and elsewhere in the present Contract, as soon as they shall have been manufactured (but prior to beginning of the eraction of each item) and shall fully satisfy himself as to whether the specifications of the technical documents supplied by the CONTRACTOR have been met, and if not, the CONTRACTOR shall advise the PURCHASER of such non-compliance concerning the use of wrong materials of construction specified by the CONTRACTOR for manufacture of these goods. The CONTRACTOR

shall convey such findings to the PURCHASER immediately in writing and of his requirements, necessary modifications, if any, and the PURCHASER shall undertake such modifications or repairs immediately. Should modification or repair of any of the goods have occurred, the CONTRACTOR shall repeat the inspection after the modifications or repairs have been completed, at the PURCHASER's cost and the CONTRACTOR shall fully satisfy himself as to the sufficiency and adequacy of such modifications.

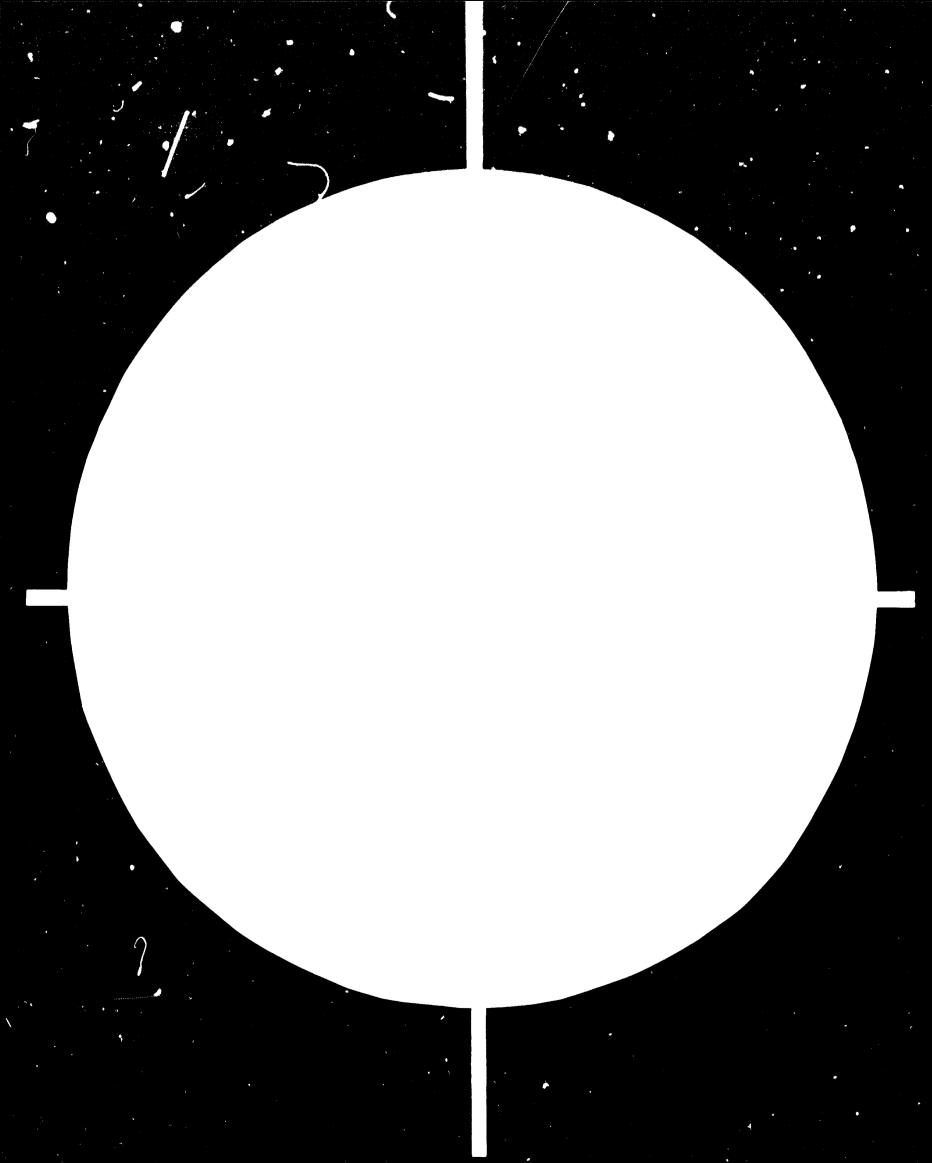
- 18.10 Where the CONTRACTOR or any of his sub-contractors are undertaking any performance tests of any equipment to be supplied under this Contract, or any tests required under statutory law, the CONTRACTOR shall give at least forty-five (45) days notice of such tests to the PURCHASER, or his representatives if such have been designated, and if desired the said representatives shall be present at such tests.
- 18.11 The PURCHASER shall have the right to inspect all buildings and Civil Works during and after Construction, (except for minor items such as painting etc. which may be inspected subsequently) and shall certify that such works are complete, in accordance with Annexure XXVIII, and Article 15.
- 18.12 The FURCHASER shall have the right to inspect all the erection of plant and machinery, and all piping, instrumentation, electrical installation and wiring, insulation, painting and all other work connected with erection as detailed in Annexure IXIX.
- During all inspection, the PURCHASER or his representatives
  may have recourse to such tests as they may consider necessary
  in order to establish whether the materials, objects, supplies
  or methods of construction and erection are of the requisite
  quantity and quality. The FURCHASER or his representatives
  may require the replacement or repair, as the case may be,

of items which do not conform with the Contract, even after they have incorporated into the Works, and the provisions of Article 17, 21, 25 and/or 27 shall apply mutatis mutandis.

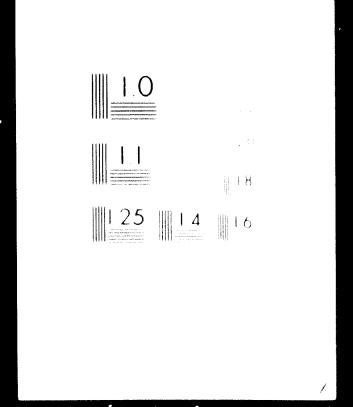
- 18.14 The COMTRACTOR shall place at the disposal of the PURCHASER, free of charge, such instruments, and in particular equipment for the radioactive check of welds, along with specialized operating staff, if requested by the PURCHASER, to enable the PURCHASER to carry out his inspection of the CONTRACTOR's work or supplies, efficiently.
- The COMPRACTOR shall ensure that the despatch and delivery of Flant and equipment are expeditiously implemented eas efficiently co-ordinated as required by Article 4.10 in complete accordance with the terms, conditions and procedures for delivery in this Contract and/or also as may be contained in any Purchase Orders issued to Vendors.
- 18.16 The CONTRACTOR shall take all necessary measures to ensure that all export licenses (if necessary) and shipping documentation are arranged and issued in a timely manner.
- The inspection by the PURCHASER and/or repair or replacement of equipment or construction works at the request of the PURCHASER shall not excuse the CONTRACTOR from the liabilities, warranties or guarantees as expressed in this Contract.

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#### ARTICLE '9

#### GUARANTEES AND PERFORMANCE GUARANTEE TESTS

- of the Plant and the governing provisions of the Contract as to the proper fulfilment of the contractual obligations as to the Performance Tests and the guarantee requirements, and the requirements for modifications and rectifications to the Plants and Works.
- 19.2 The plant supplied by the CONTRACTOR shall be capable of meeting the full requirements of normal operation, capacity, quality of Products, consumption of raw materials and utilities, all of which are hereby guaranteed by the CONTRACTOR, which shall be proven and demonstrated by test runs as specified in this Article and in the Annexures and Specifications (provided that the Plant is operated in accordance with the CONTRACTOR's technical directions and instructions), and that such test runs are conducted in accordance with the conditions set forth herein. The COMTRACTOR shall comply with the specified requirements of the Contract to ensure that the Plant(s) and Works are proved to be capable by virtue of the Guarantees and Tests to be completed. For the purposes of the Guarantee Tests, the urea storage and bagging shall be excluded from the definition of the Plant.
  - 19.2.1 The production capacity of ammonia and urea from the Plants shall be (1000) tons per day ammonia and (1725) tons per day urea.
  - 19.2.2 The quality of the ammonia from the Ammonia Plant and of the urea from the Urea Plant shall be in accordance with Annexure XVI.
  - 19.2.3 The quality and quantity of carbon dioxide shall be adequate and suitable for the puaranteed capacity of the Urea Plant and quality of Urea Product.

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- \*9.3.4 The Plants shall be capable of sustained, steady and continuous operation.
- 19.2.5 The Utilities and Off-Sites shall be adequate for the sustained and continuous operation of the Plant.
- 19.2.6 The consumption of utilities and raw materials in each of the Ammonia and Urea Plants are in accordance with guarantees given below.
- 19.2.7 The effluents from the Plant are in accordance with Annexire XVII.
- 19.3 For purposes of this Article, the guarantees outlined in Article 19.2 shall be divided into Absolute Guarantees and Penaltiable Guarantees, as follows:

#### 19.3.1 Absolute Guarantees shall be:

- (a) The capacity of the Ammonia Plant
- (b) The capacity of the Urea Plant
- (c) The quality of ammonia and urrea
- (d) The quality of effluents and emissions
- (e) The adequacy of the Utilities and Off-sites and sufficiency of carbon dioxide to meet the capacity of the Ammonia and Urea Plants when operating together.
- (f) The capacity of the Steam and Power generating facilities.
- 19.3.2 The Penaltiable Guarantees shall be deemed to be in respect of the consumption of maw materials and utilities for each of the Ammonia and Urea Plants, and Auel for the Power Station.
- 19.3. The sustained steady operation of the Plant shall be demonstrated over a continuous period of, at least thirty (30) days as given in the test

procedure below. Notwithstanding the completion of such tests, the CONTRACTOR warrants that the Plant supplied under the Contract shall have been designed for steady continuous operation at a stream factor of three hundred thirty (140 days per year.

- Absolute (uarantees shall be defined as those Suarantees which must be met to satisfy the conditions expressed more particularly in this Article and as well as elsewhere referred to and the CONTRACTOR agrees and acknowledges that the completion of such Absolute Guarantees shall be essential to the completion of the Works and the fulfilment of the CONTRACTOR's obligations under the Contract in consideration of the Prices and Terms of Payment herein contained.
- Penaltiable Guarantees shall be defined as those guarantees 19. which if not met may be compounded by the payment of liquidated damages as specified in Article 20, without prejudice to the entitlement of the PURCHASER under the terms of the Contract for the completed Plant and Works provide; nowever, that if the consumption of raw materials exceeds ty ( \* or that the overall maranteed consumption c) .\* is exceeded by 10%, then the CONTRACTOR shall without further delay modify the Plant as required by, and in a cordance with Articles 15.10 and 10.10, respectively of the Contract, and shall thereafter demonstrate by additional guarantee tests, that the consumption of raw maternals and utilities are within the above limits. The provisions of Articles 17,18, 20 and 21 relating to the obligations of the CONTRACTOR under this Contract shall apply mutatis mutandis.
- 19.6 Absolute Guarantees for individual Plants shall be as given hereunder:

#### 19.6.1 Ammonia Plan'

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#### 19.6.2 Urea Plant

of the Urea Plant shall be (1,725)
metric tons per stream day of specification grade area representing 100%
capacity of the Urea Plant, which
shall produce (17,250) metric tons
of specification grade area in ten (10)
consecutive days. (In the event that the

provisions of Article 19.6.7 are invoked by the CONTRACTOR and satisfied accordingly, then the absolute guarantees shall be 95% of these figures provided).

- 19.6.2.2 The quality of the urea shall conform to the criteria expressed in Annexire XVI.
- 19.6.) Notwithstanding the provisions of Articles 19.5.1.1 and 19.4.2.1 above the Absolute Guarantee for the Ammonia and Urea Plants shall be deemed to have been met if such Plant(s) produces 95% of the capacity of ammonia and urea respectively, provided that the CONTRACTOR conforms with the requirements of Article 19.5.
- 19.6.4 In the event that the CONTRACTOR does not conform with the requirement of Article 19.5, the CONTRACTOR shall be obliged to modify the Works and/or the Plant pursuant to Article 15.18.

#### 19.6.5 Power Plant

The capacity of the power plant shall be (\_\_\_\_)KW when operating at a power factor of (\_\_\_\_\_). The steam and power plant shall also produce the quantities of steam given below for use outside the power station: (steam quantities and pressures to be stated).

19.7 Pentiable Guarantees for individual plants shall be as given hereunder:

#### 19.7.1 Ammonia Plant

19.7.1.1 The penaltiable guarantees for the Ammonia Plant shall be as given below:

		Units	Units per metric ton of ammonia
			(indicative only)
(a)	Consumptions		
	- Natural gas (1)	Millions of kcal	(8.80)
	- HP Steam	Metric tons	(1.00)
	- Electric Power (2)	Kwh	(32)
	- Cooling water (32°C)	<b>a</b> 3	(275)
	- Boiler Feed Water <sub>2</sub> (110°C, 120 Kg/cm²)	Metric tons	(4-75)
<b>(</b> b)	Output		
	- MP Steam	Metric tons	(c.6)
	- LP Steam	Metric tons	(0.1)
	- Purge gas	Millions of kcal	(0.50)
	- Boiler Feed Water Preheating	Hillions of koal	(0.25)
	- Condensates	Metric tons	(3.00)

#### 19.7.2 Urea Plant

### 19.7.2.1 The penaltiable guarantees for the Urea Plant shall be given below:

		Units	Units per metric ton of urea
(*)	Consumptions		(indicative only)*
	- Ammonia (as 100%)	Metric tons	(0.580)
	- HP Steam	Metric tons	(1.20)
	- Electric Power (1)	Kuch	(25)
	- Cooling Water (32°C)	<b>3</b>	(100)
(b)	Productions		
	_ LP Steem	Metric tons	(0.10)
	- Condensate	Netric tons	(0J <b>5</b> 0)

<sup>\*(</sup>where figures are indicative only for one particular design)

... 17 x 1

Notes: (') Electric power consumptions refer to process consumptions only, excluded being Plant(s) lighting, instrumentation, air conditioning, urea storage and bagging, etc.

#### 19.7. Power Plant and Steam Plant

The consumption of (specify fiel with LCV) for the production of ... Xwh of power an an associated amount of ... Tons/hv steam at pressure and ... Tons/hv steam at pressure shall be ...

#### 19.8 Performance Guarantee Test Procedures

#### 19.8.1 Ammonia Plant

Performance guarantees of the Ammonia Plant shall be demonstrated by means of the following Performance Guarantee Tests:

- 19.8.1.1 A minimum twenty (20) day sustained continuous test under normal operating conditions in order to demonstrate the capability for continuous steady operation and capacity at an average of 90% of capacity of the Ammonia Plant, together with the capability to produce specification grade ammonia and carbon dioxide, followed immediately by:
- 19.8.1.2 A ten (10) days uninterrupted continuous test (as specified in Article 19.1.7) under normal operating conditions, in which, the operation of the Ammonia Plant at 100% capacity and the consumption of raw materials and utilities will be demonstrated, while producing specification grade ammonia.

The tests for sapacity and quality small seapplicable for all ten (10) days of the test.

100% capacity of the Ammonia Plant small be (10,000 metric tons of 99.0% Product and shall be corrected for any increase in strength. For consumption of the raw materials and utilities the test period will be seven (7) days.

#### 19.0.2 Urea Plant

Performance guarantees on the Urea Plant small be proven by means of the following Performance Guarantee Tests:

- 19.8. A minimum twenty (20) days sustained continuous test under normal operating conditions in order to demonstrate the capability for continuous steady operation and capacity at an average rate of 90% of the Urea Plant together with the capability to produce urea of specification grade, to be followed immediately by:
- 19.8.2.2 A ten (10) day uninterrupted continuous test (as specified in Article 19.8.5) under normal operating conditions in which the operation of the Urea Plant at 100% capacity, and the consumption of raw materials and utilities shall be demonstrated while producing specification grade urea. The tests for capacity and quality will be applicable for all ten (10) days, and the test for consumption shall be for seven (7) days within the ten (10) day test period. 100% capacity of the Urea Plant shall be (17,250) metric tons erenting the proper crosses are cralled corrected for any increase in strength.

to. 1.1. During the operations of the Urea Plant under Article 19.2..., the Ammonia in the Ammonia attrace at the beginning and end of the test and II be uncommissed.

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The ten ('C day simultaneous Juaranteed Test(s) of the Ammonia and Brea Plant(s) shall run immediately after the successful completion of the relevant twenty (''') days test(s), concurrently with the operation of the power plant as stated telow.

#### 19.8.1 Power Plant

The Power Plant shall be operated at capacity (as soon as load permits) for the said period of seven (7) consecutive days to prove its guarantee of capacity for both power and steam, and its guarantee for consumption of fuel.

- 19.8.5 During the specified ten (10) day period under Article 19.8.2.2 (unless as otherwise agreed) the Ammonia and Urea Plants shall be run simultaneously at capacity for any seven days (within the 10 day period to prove that the power plant and utilities are adequate for the continuous and uninterrupted operation of the Ammonia and Urea Plants and utilities together.
- The procedures to be followed for the execution of the Guarantee Tests shall be agreed upon between the parties three () months before the commencement of the above tests.\* Instruments tolerances shall be warranted by the COMTRACTOR. The PURCHASER shall have the right to specify instruments with low margin of tolerance for measurement of the Plant capacity and consumptions.
- The Performance Guarantee Tests of the Plants shall be run under the direction and supervision of the CONTRACTOR's personnel but all measurements will be taken jointly by the PURCHASER and the CONTRACTOR and in the event of any dispute relating only to the correctness, sufficiency and/or adequacy

<sup>\*</sup> The procedures for such tests may be agreed between the parties prior to the Effective Date of Contract if necessary.

of the tests an /or in the manner in which the tests were conducted, the provisions of Article 45 small apply. The provisions of Article 45 small apply notwithstanding, with reference to the proving and demonstration of the application with only means of the said Tests, unly in connection with only modifications or rectifications required to enable the FURCHAGER to receive a completed Plant and Works in accordance with the COMMRACT.

- Urea Plant shall commence within ninety (90) days from the start-up of the Plant(so, provided that the FURCHASER fulfills his obligations for the supply of feedstock etc. under Article (.d. Subject to the provisions of Article (9.40.2) this ninety (90) day period shall be extended if the Plant(s) is unable to operate normally and in the event of failure of this test the CONTRACTOR shall be permitted not more than two (2) other tests to be run within six (6) months immediately thereafter subject however to the provisions of Article 16.17.
- 19.10.2 If, for reasons ascribable to mistake(s) an /or error(s) in process and/or detailed engineering or for any other reasons related to the work and services provided or performed by the CONTRACTOR, and/or mistake(s) and error(s) in the Contractual Specifications and instructions, the CONTRACTOR is not able to perform the test(s) within the period(s) stated in Article 19.10.1 above, the provisions of Article 19.11 shall apply.
- operated in accordance with its requirements at its own risk during the period permitted to the CONTRACTOR to perform the test(s) and the PURCHASER's personnel

shall work under the directions who technical instructions of the DATEANTR. The MERCHANT shall have the right to perate the blants as under when much operation did not interfere with the XINTRACT Ris work.

In the event that the CONTRACTOR does not complete on is .3. . . unable to complete any or all of the Performance Tex and Juarantees of the Planty for reasons directly w indirectly attributable to the 3 MTRACTY of within the nile ( ) control after Start 4 p of a n Planting the SURCHANTE scall in addition to the remote equader the Contract has the moght to stop and perments has to the 2 NTRACTOR of the DAMMANTER small be required . Anderwake the work specified in Articles P. . " as required by Article 122" without delay and the wallditraff the Bank Guarantee sha prestended. The foregoing notwiths and inc, the DONTPACTER of a if degerrary, sommence the large withination, prior to are exof the name () months per, a little start- "b of the Clair agreed that the period durant while the last( - cannot normally by the COMPRACTOR to the proumetance of the conor range of the FURCHASED branch in the community case of the first name (if month or subsequent arrented periods grows to pure and to Article 14.2. The COMTRACTOR scale dilipently and exped. troubly undertake the ne essant modifications and as rectifications to ensure that the clant() and all be capable of demonstrating the tests as remared by Article 10.10 m this Article, and on completion of all such necessary work (upon the terms herein), the CONTRACTOR small prove by the specified guarantee and performance tests (as required by this Article) the capability of the Plant(s) in accordance with the conditions of this Contract. The undertaking of such work by the CONTRACTOR shall no. prejudice the contractual rights of the PURCHASER referred to in Articles 15, 16 and 23.1 as elsewhere expressed in this Contract.

- 19.1. If the ten (10) days capacity Performance Test(10) is interrupted flue to reasons for which the CONTRACTOR is not responsible, the Plant(10) chall be started again as soon as
  possible and when the Plant(s) has reached formal operation
  conditions, the Test(10) chall continue immediately thereafter.
  The duration of the Test(10) shall be extended by the furation
  of such interruptions and the Test(10) chall then be deemed to
  have been performed continuously, provided however that the
  Plant has already in fact been operated for a minimum (10)
  ten-day period continuously and without interruption in the
  manner stated in Article 19.800.
- After the successful completion of any Performance Test, in accordance with the Contract (which the PURCHADE and CONTRACTOR accept as being a successful test. The CONTRACTOR accept as being a successful test. The CONTRACTOR and Submitted to the PURCHADE or indicated by the CONTRACTOR and submitted to the PURCHADE.
  - The first section of the model of the first section of the first section
  - The Performance Test was conducted shall be deemed to have taken place, on the date that the test was successfully completed.

The Acceptance of the Plant, under Articles 10.11 and 10.11 and the issue of Provisional Acceptance Pertificates obereof, shall be subject to Articles 1.1. I am in until all the object one CONTRICTOR under to a Contract shall be been met, and a Pinal Acceptance Certificate passed. The issue of these Provisional Acceptance Certificates shall paulyect nowever to the provisions of Article 1.13, until the CONTRACTOR to receive the payments on completion of the Performance Guarantees and Acceptance of the Plant in accordance with Article 11.

In the event the Performance and Juarantee tests cannot be made within the period stipulated in 17th de 40.44 above, the CONTRACTOR small be obligated to send personnel to site to start up the plant and to undertake tests on the plant provided nowever that the FURCHASER small pay additional fees and travel expenses for this service as may be agreed between PURCHASER and the CONTRACTOR.

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- 2.1 The conditions governing acceptance shall be as provided in this Article and in article " and as elsewhere expressed in this Contract.
- The issue of the Provisional Acceptance Certificate shall be made when all of the following have been satisfactorily inscharged together with full compliance by the CONTRACTOR of all other contractual terms:
  - A.2.1 When the CONTRACTOR has provided to the PURCHA ER all Sertificates of Inspection and Sertificates of Materials applying to each of the major equipment, and machinery.
  - 20.2.2 When the CONTRACTOR has prepared a statement indicating the start and end of the Mechanical Warranty period for each item of equipment and machinery and provided the same to the FURCHACER, after confirmation by the Engineer in writing of the accuracy of the dates contained therein.
  - 20.2.3 When the CONTRACTOR has provided all documents risted in Annexure XV to the FURCHASER, including as-built drawings.
  - when the CONTRACTOR has completed the Civil Construction of "ail the buildings and other Civil Engineering in the works and has obtained a "Civil" Construction Completion Report in respect of all Civil Works.
  - When the CONTRACTOR has completed the "Construction Completion Report" in respect of each equipment/ section/Plant(s) included in the Contract, in accordance with Article 15.3 of the Contract, and have successfully passed such tests and demonstrated their capability as may have been specified in the Contract. (The "Construction Completion Report" shall state that the CONTRACTOR proposes to demonstrate tests on the

equipment, section/Plant(s within seven to fourteen (7 to 14) days of the date therefrom as agreed with the PURCHASER. The PURCHASER after having duly satisfied itself as to the adequacy and completeness of the tests demonstrated by the CONTRACTOR shall have signed the Report accordingly).

- In the event that any of the test(s, results 20.2.5.1 have been unsatisfactory in reference to any equipment/section/Plant(s), the PURCHASER shall endorse the same on the "Construction completion Report". The CONTRACTOR shall rectify defects and undertake such corrective measures as are necessary in accordance with the requirements of Article 15.10 and shall demonstrate such of the tests as required to prove the performance of the equipment/section/Plant(s in question to the satisfaction of the FURCHASER, and, thereafth, shall obtain the FURCHADER's signatures approving the relevant "Construction Completion Report".
- 20.2.5.2 The Pre-commissioning Tests shall be demonstrated on the equipment after preparation of the "Construction Completion Report".
- when all such tests have been satisfactorily completed, and the Mechanical Completion has been successfully proved and the CONTRACTOR shall prepare the "Mechanical Completion Report" for signature by both parties to the Contract following joint examination of the Plant.

  The "Mechanical Completion Report" shall signify the acceptance of the mechanical completion stage of the works, and the readiness of the Plant for commissioning and the provisions of Article 15.8 shall apply.

- when the Performance Juarantee Tests laid lown in Article 19 in accordance with criteria and down in Articles 19.3 to 19.7 inclusive, the methodology laid down in Article 19.8 and procedures laid down in Article 19.8 and procedures laid down in Articles 19.9, 19.10, 19.11 to 19.15 and subclauses thereof shall have been successfully demonstrated, completed, and proved in accordance with the Contract, and the CONTRACTOR has prepared Performance Test Certificate(s) and submitted the same for signatures and acceptance by the PURCHASER.
  - 20.2.7.1 The approval of the Performance Test
    Certificate(s) by the PURCHAGER (if without reservations) shall be expressed in the Provisional Acceptance Certificate which shall be signed by PURCHASER signifying the acceptance of the Plant(s)/Works, and the completion of the obligations of the CONTRACTOR with respect to the Guarantee Tests stated in Article 19 shall be issued to have been fulfilled.
  - 20.2.7.2 If for any reason the Guarantee Test performance is not accepted by the FURCHASER, or is accepted subject to certain conditions for modification or rectification of defects and the CONTRACTOR has modified or rectified the lefects (Article 20.2.5) and lemonstrated Performance Juarantee Tests to the satisfaction of the PURCHASER, the Flant shall be deemed to have been accepted. During the period when the defective sections of the completed Flant; works can be operated to give commercial production, then the same may be taken over by the PURCHASER provided that this is done without interferring with the efforts of the CONTRACTOR for the rectification of defects or in the performance of its obligations under the Contract.

- The PURCHASER shall issue a Final Acceptance Certificate when all the conditions specified in this Article and all of the contractual requirements have been satisfactorily complied with. Subject to Article 15.18 the PURCHASER shall issue the Final Acceptance Certificate within 12 months of the Provisional Acceptance of the Plant, unless during the intervening jeriod referred to in Article 4.11 the plant has snown defects and/or requirements for modifications specified in Article 16.2.
- 20.4 The rovisions of Articles 4.33, 15, 17, 19 and 27 (as the case may be) shall apply to the provisions of this Article mutatis mutandis.

#### ARTIULE \_\_\_ \*

#### WARHANTII

- the 'NTPACTOR warrants that the Flant, equipment, materials, tools and supplies income rate: in the works pursuant to this Contract conform with the specifications, plans and all of the contractual criteria, and that the work in every particular is free from defects in design, engineering, processes, materials, workmanship and construction.
- The CONTRACTOR shall be responsible for the quality, furation, and effect of the warranties (and guarantees for the lant, equipment and the works and sections and, or parts thereof, and the fitness of the work for the particular purpose.

  The CONTRACTOR also warrants as to the correctness and completeness of the plans, all technical data and locuments supplied by him as well as to the technical criteria for the equipment fabricated in accordance with his plans and instructions under the present Contract.
- 21.3 The NONTRACTOR shall be responsible for the design and quality of the goods and equipment in accordance with this Article, and as to the workmanship and materials pursuant to Article 17. and for the satisfactory continuous operation of the Flant and equipment supplied, pursuant to Article 19, and shall provide specific information as to warranties as required by Article 20.2.2. The CONTRACTOR warrants the Plant and Works for twelve (12) months, commencing from the date of Provisional Acceptance as defined in Article 20. This peri d shall not exceed thirty (30) months from the Mechanical Completion of Plant and Equipment under this Contract, if for reasons only attributable to the PURCHASER the plants cannot be started up or brought into commercial production (within the said thirty (30) months period:, subject however to the governing provisions of Article 15.17 and 15.18.
- If within the period specified in Article 21.3 or the date of Final Acceptance by the PURCHASER whichever is the later, the work or any part thereof becomes defective or broken or

fails due to faulty or improper lesign, workmanship, material, manufacture, fabrication, shipment or delivery, or fails to meet the requirements of the Contract, then the CONTRACTOR upon notification in writing from the EURCHASER, shall forthwith make good every such defect, breakage or failure without cost (including without limitation, transportation cost, to the PURCHASER. If after such notification, the MNTRACTOR shall make default or delay in diligently commencing, continuing and completing the making good of such defect, breakage or failure in a manner satisfactory to the FURCHASER, the FURCHASER may proceed to to so independently and to place the work in good operating condition in accordance with the Contract, and the NONTRACTOR shall be hable for all costs, charges an' expenses incurred by the PURCHASER in connection therewith and shall forthwith pay the FIRCHALER an amount equal to such costs, charges and expenses upon receipt of invoices tertifies: correct by the PURCHALER.

Pursuant to Article 21.4, above, should the removal of the leffect require replacement in the equipment, the replacement shall be accomplished in minimal time, plus the shortest bossible erection time for the equipment in the "ONTRACTOR" country. Subject to price approval by the "ONTRACTOR" (which shall not to impreasonably withheld the PURCHASER shall have the right to repair minor detects at the CONTRACTOR's contract.

. 1.

If any part(s) of the work(s) are repaired or replaced, pursuant to this Article and, or Article 16 (subject however to the provisions of Articles 2° and 27,, the warranty period for repaired or replaced items shall begin anew for another twelve (12, months after bringing into satisfactory operation of the repaired and/or replaced part(s) of the Work(s), irrespective of any portion of the original warranty period relating to the same having expired. In relation to such other equipment which could not be operated due to the necessity of repair or replacement of the defective part(s) of the Work(s) referred to herein, the warranty period shall be extended by a time equivalent to their periods of non-operation.

- 21.7 The CONTRACTOR's warranty shall not be deemed to cover:
  - 21.7.1 Damage arising through disregard of the CONTRACTOR's written instructions upon take-over of the Flant by the PURCHASER.
  - 21.7.2 Normal wear and tear.
- - been constructed in accordance with accepted codes and standards, or standards hald down elsewhere in the Contract and particularie in Annexure XXVIII. The CONTRACTOR warrants that he is furly award of local codes and practices which may modify international codes, however, the CONTRACTOR shall sustain in his work the more rigid and superior criteria of such of the codes and in any event promises to undertake all construction accordingly.
- The CONTRACTOR warrants that the erection of all plant and equipment has been accomplished by him in accordance with standard erection codes or as specified in the annexure XXII (whichever is superior, and in the event of any erection lefect found within the period specified in Article 2). Or twelve (1.) months of take over (whichever is the later of the Flant by the PURCHASER, the CONTRACTOR shall eliminate the defect without any cost to the PURCHASER.
- In the event that any defects are found in the equipment, erection or civil structures within their warranty period, the PURCHASER will immediately inform the CONTRACTOR by telegram/telex. If the CONTRACTOR's personnel are not on Site, the PURCHASER shall have the right to institute remedial measures at the CONTRACTOR's cost immediately in accordance with the Contract.

<sup>\*</sup> The period of warranty for civil engineering work is often governed by national laws and the applicable criteria shall apply on a case by case basis.

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#### FENALTIE

- CONTRACTOR and or right in the SUPCHASER imposed, sonferred or contemplated by any of the other Articles of
  this Contract, it is expressly agreed that, if the
  CONTRACTOR has failed within a reasonable time after
  being required by the FURCHASER to make good any loss
  or damage for which the INTRACTOR is liable under this
  Contract, the FURCHASER may cause the loss or damage to be
  made good as he deems fit, and the CONTRACTOR shall thereupon
  be liable to the PURCHASER for such costs, expenses and
  charges thereof and shall on demand compensate the
  PURCHASER for such losses and damages sustained.
- If the work and/or any portion or portions thereof be lost, damaged or destroyed and monies are payable to the PURCHASER in respect of the loss, damage or destruction under the insurances maintained by the CONTRACTOR pursuant to Article 25 above or otherwise, the monies will be held by the PURCHASER for the purposes of this Contract, and
  - 22.2.1 the PURCHASER may elect to retain absolutely the said monies in such event, the monies belong absolutely to the PURCHASER. and
  - the CONTRACTOR shall be liable to the PURCHASER in an amount equal to the amount by which the insurance monies payable is less than the loss, damage, and for including costs associated with clearing and cleaning the site of the work, and

- . . 2. there obail be a final is see inting retween the CURCHASER and the CINITA TO The in people to C the contient of the work which who is to immured r destroyed and at respect of about montes have meen rotained abscipted, by the PURCHALTE and there shall be included in the financial accounting all amounts gaid or pavable by the PUNCHASEF under this Contract together with all amounts paid or payable by the CONTRACTOP under this Contract to the PURCHASER, and the FURCHASER will . We to the UNTRACTOR any amount which the financial a cunting shows to be juvible by the PTROBALETY to the UNTRACTOR under this Contract and Cimilarly the CONTRACTOR will pay to the PUBLIFACER any amount which the financial accounting shows to be payable by the CONTRACTOR to the PUBLIHADER under this Contract;
- 11.2.4 Upon payment as required by Article 10.4.7 above by the PURCHACER or the DATHACTOR, as the case may be, the PURCHACER and the DATHACTOR, as the case thanked from all rights and observations under this Contract in respect of the postion of the work which was lost, damaged or destroyed all in respect of which monies have been retained about the PURCHACER as though a nopostion of the work had been fully completed and exemited by the CONTRACTOR in accordance with this Contract.
- The PURCHASER may, if in the PURCHASER of ie pinion, it is in the public interest, waive the right of the PUPCHASER to the whole or any part of the monies due payable or claimable and/or recovered and or recoverable pursuant to the provisions of this Article.

## LIQUIDATED DAMAGES

23.1	The CON	TRACTOR shall be liable to the payment of Liquidated	
	Damages	for default of the several responsibilities under	
	provisi	ons of Articles 10, 19, 17, 19 and 21 and as detailed	
	elsewhere in the Contract, as follows:		
	23.1.1	Except where any delay is caused by any act or	
		omission on the part of the PURCHASER for the	
		delay in the delivery of the technical documents	
		stipulated in Annexure XV the agreed Liquidated lamages	
		shall be as follows: For each week in delay in the	
		submission of a required document an amount of	
		( amount ) subject to an overall maximum	
		liability of ( <u>amount</u> ) under this Article.	
	23.1.2	<del>-</del>	
	٤)٠١٠٤	For delay in Mechanical Completion of the Work(s)	
		beyond the period of thirty two (32) months after	
		Effective Date of the Contract for each week of	
		delay an amount of () of the Contract	
		Price.	
	23.1.3	For delay in obtaining Commercial Production as	
		defined in Article 15.11 beyond a period of seventy-five	
		(75) days after Mechanical Completion of the Plant(s),	
		an amount of () for each the week (' date) of	
		delay, subject to a maximum of weeks.	
	23.1.4	For non-fulfilment of Absolute Guarantees at 100%	
		capacity but subject to fulfilment of Absolute	
		Guarantees at 95% of capacity, a sum of 1% of the total Contract Price ( <u>give amount</u> ) as stated in Article 11.1 for each 1% of lower production than of the 100% capacity of urea.	

In the event that the Absolute Guarantees have been successfully demonstrated and proved but the Penaltiable Guarantees are not met, the CONTRACTOR shall as soon as possible thereafter either execute modifications, additions and changes to the Plant(s)

as required by Articles '.' and 16.18 in which case the provisions of those Articles referred to therein and Article 26 shall apply, or to pay by way of liquidated damages, in consideration of any and all claims in connection with the Penaltiable Guarantees only but subject nevertheless to the provisions of Articles '9 and 20, the following:

23.2.1	For the Ammonia Plant: for each full 0.5%
	(zero point five percent) exceeding the daily
	guaranteed cost of manufacture as given in
	Article 23.2.4 below, an amount of
	up to a maximum of

23.2.2	For the Urea Plant: for each full 0.5% (zero
	point five percent) exceeding the daily guaranteed
	cost of mamufacture as given in Article 23.2.4
	below, an amount of up to a maximum of

- 23.2.3 For the Power Plant. for each additional \_\_\_\_\_\_ Keals of fuel (alternatively Nm<sup>3</sup> of gas or tons of fuel oil) per Kwh of power generated and the guaranteed auxilliary quantities of steam) over and above the guaranteed consumption, an amount of \_\_\_\_\_ up to a maximum of \_\_\_\_\_.
- 23.2.4 By virtue of the application of Article 23.2 the obligations of the CONTRACTOR in connection with the performance of the Penaltiable guarantees only shall be considered as fulfilled.
- 23.2.5 The daily guaranteed cost of manufacture referred to in Article 19.5 shall be computed by calculating the guaranteed daily cost of inputs of raw materials and utilities minus the guaranteed output of utilities, according to the costs given below for each item, and multiplying by the guaranteed daily capacity of each Plant, to obtain the daily guaranteed net cost of raw materials and utilities.

Natural Gas ( Value per million Kcal. HP Steam Value per ton MP Steam ( Value per ton LP Steam ( Value ) per ton Cooling Water Value ) per m Boiler Feed Water ( Value \_\_) per m-1 Purge Gas of Ammonia Plant ( Value ) per million Koal. Condensate ( Value ) per ton Ammonia Value ) per metric ton

- 23.2.6 In the event that the CONTRACTOR does not pay have the tamageo, the commander mark mall to traite to meriate the conand services pertaining to the modern at arc. of the par and/or dancer referred to in Astrolo Co. o with. ripe (1) months from the late of start-in of the Planting
- 23.3 In the event that the CONTRACTOR does not or is unable to complete the Performance Guarantee Tests within forty three (43) months from the Effective Date or nine (9) months after Start-up of the Plant as provided in Article 19.11 (whichever is the earlier), except where an extension has been granted due to circumstances outside the control of the CONTRACTOR or fault of the PURCHASER as provided therein, the CONTRACTOR shall pay Liquidated Damages to the PURCHASER in the amount of one (1) percent of the Contract Price for each month of delay subject to a maximum of nine (9) percent.
- Should the CONTRACTOR be unable or unwilling to fulfill the 23.4 Absolute Guarantees within fifty two (52) months of the Effective Date or eighteen (18) months after Start-Up (whichever is the earlier), extended by such time as provided in Article 19.11, the PURCHASER shall (at his option) have the right to recover the full costs necessary to correct the Plant or shall have the right to proceed to modify the Work(s) through engagement of such parties as the PURCHASER may deem fit, and the provisions of Articles 22 and 25 shall apply. The determination of costs incomed by the tangeramp chall be made by mut at astropomor + or + hanger Antitypoticion and advance of agreet a tion.

- If the CONTRACTOR should fail to complete the Work(s) thereof within the limits of time guaranteed in the Contract (Annexure XV) or within the authorised extension(s) of time (governed by Article 16, 19 and this Article the CONTRACTOR shall in addition to the Liquidated (amages stated to be payable in Article 23.3, shall be riable for fundamental breach of Contract.
- 23.6 The PURCHASER without prejudice to any other methor' of recovery may deduct the amount of such liquidated damage payments from any payments due or which may become due to the CONTRACTOR. The payment of or deduction of such liquidated damages shall not relieve the CONTRACTOR from its total obligations to complete the Work(s) or form any other of its obligations and liabilities under the Contract.

### BONUCE: ANI INCENTIVE

24.1	The CONTRACTOR hereby agrees to perform the work in well-
	planned and expeditious manner so that the completion of the
	work at various stages and that of the whole Works is
	achieved according to the time schedule given in Article 2
	and detailed in Annexure W of this Contract. In the event
	that the CONTRACTOR fully accomplishes the Mechanical
	Completion of the Flant work under Article 15 and demonstrate
	the Suarantees required pursuant to Article 19 during a
	period before the end of thirty six (36) months after the
	Effective Date of the Contract as required by the provisions
	of Article 4.26 the CONTRACTOR shall be entitled to receive
	Bonus or Incentive as hereunder specified for each complete
	week of saved time in terms of the completion of the works:
	(a, $(\underline{}\%)$ of fixed price(s under Article 11.1 subject to
	a maximum of (amount.
	Cayments under this Article shall (subject to Article 4.2
	be made within twelve (12) months after Provisional Acceptance
	of the Hant provided no defects appear in the Plant w
	expresse: in Article 15 and or equipment during this peri a
	affecting its capacity, performance and/or operations.
_ /* · ·	Should the Mechanical Sompletion of the Works be accomplishe:
	by the CONTRACTOR within thrity two (32) months of the
	Effective Date, and if for reasons attributable solely to the
	FURCHASER, the Plant cannot be started-up within four (4)
	months thereafter, the CONTRACTOR shall be entitled to a
	Bonus or Incentive as below for each complete fifteen (15)
	days of saved time:
	(a) ()% of the fixed price under Article 11 subject to a
	maximum of () amount.
24.3	All amounts payable pursuant to this Article shall be subject
	b-last baranes to any statote exect oc prolect

- to Articles 15, 19, 20, 21, 22 and 25 of this Contract.
- Payments due under this Article shall be made within twelve (12) months of Provisional Acceptance, but no later than upon Final Acceptance.

#### LIABILITIES

- 25.1 The CONTRACTOR shall be subject to liabilities and lamages for default of his contractual responsibilities, and shall be duty-bound to fulfill all the obligations as expressed more particularly in each of the Articles of the Contract.
- The CONTRACTOR shall be liable for the satisfactory fulfillment of the guarantee requirements, pre-commissioning and commissioning tests and performance guarantee tests; for the adequacy of warrenties, sufficiency of inspections, guarantee of workmanship and materials; and, shall be obligated to undertake necessary modifications to the Flant(s), and rectify and repair defective parts of the Work(s) and, or sections thereof, and shall be accountable for the completion of the work-scope and objects of the Contract as expressly specified.
- The CONTRACTOR shall be liable for any damage or loss to property or equipment of the PURCHASER during transportation, erection, start-up, during Guarantee Tests and for any other cause before Take-Over and in any event during the period thereafter until Final Acceptance where such loss or damage has occurred due to the negligence, errors, omissions or instructions attributable to or failing within the responsibility of the CONTRACTOR within the scope of work and services in the Contract.
- The CONTRACTOR shall reimburse the PURCHASER as to those amounts received by the CONTRACTOR under any insurance policies held by the CONTRACTOR pursuant to Article 26 as well as through those others required to be held or which should have been specifically taken out in any event for the purposes of this Contract, and the CONTRACTOR shall be liable to the PURCHASER under the provisions of Article 22.4.2 in the applicable case.

- 25.6 The CONTRACTOR shall not be liable under the Contract for loss of anticipated profits or for any consequential loss or damage arising from any cause, except to the extent of repaying to the PURCHASER any amount receivable under Article 26, and/or pursuant to other insurance policies held by the CONTRACTOR solely in connection with the types of losses referred to in this Article 25.6.
- Nothing in this Contract shall alter, vary or invalidate the CONTRACTOR's liabilities for damages and the responsibilities and obligations of the CONTRACTOR as required by law and in accordance with the stipulations of this Contract.

#### INSURANCE

- Without restricting in any manner the generality of any other provision of the Contract, and in particular any such provision as pertaining to the liability or responsibility of the CONTRACTOR, it is expressly agreed that throughout the period beginning from the date of commencement of the work or Effective Date of the Contract, whichever is earlier, and continuing until Final Acceptance of the Work(s) (and/or for such extended periods that the PURCHASER and CONTRACTOR may agree upon and/or required by law):
  - 26.1.1 The CONTRACTOR shall take out and keep in force various Insurance Policies including those enumerated in Article 26.5 for such period(s) of time as may be necessary under the Contract and for the full and complete discharge of the CONTRACTOR's responsibilities and liabilities
  - 26.1.2 The CONTRACTOR shall, at the CONTRACTOR's expense, maintain additional insurance policies, normal to its activities through its corporate coverage (in regard to which the PURCHASER shall be entitled to be informed), such policies to be of the respective natures, in the amounts, against the risks, and for the periods required by the Contract, or implied therein.

Each of the policies envisaged herein, shall contain such specific terms and conditions, stipulated as being required or obliged to be included by virtue of the responsibilities and obligations contained in this Contract.

Within thirty (30) days after obtainment of each of such colline contembrated by Article 20.1.1 above, the CNTEATHOR FIGURE and deposit originals of each of such policies with the PURCHASER as required by Article 26.3 below, PROVIDED HOWEVER that acceptance by the PURCHASER of any such original shall for no purpose be construed as an acknowledgement by the PURCHASER that the insurance is adequate in nature, amount and/or scope.

The CONTRACTOR shall, within thirty (30) days after obtainment of each policy contemplated by Article 26.1. ..., authenticated copies of the originals of each such policy, as proof that the insurance(s) contemplated by 26.1 above being its responsibility, remain in force and the PURCHASER shall be entitled to ask for such proof updated from time to time and duly authenticated.

Should the CONTRACTOR fail to take out and/or keep in force the insurances contemplated by 26.1 within the scope of its responsibility, then the PURCHASER may at the PURCHASER's option either:

- (a) take out insurance(s) considered appropriate and necessary in the circumstances, in which event any premiums paid or payable by the PURCHASER shall immediately constitute a debt due from the CONTRACTOR to the PURCHASER, the amount of which debt, without restricting, superseding or invalidating any other rights or remedies of the PURCHASER under this Contract or otherwise may be retained as the PURCHASER's monies out of any amount(s) otherwise payable by the PURCHASER to the CONTRACTOR;
- (b) hold the CONTRACTOR liable in the same manner and degree as if the CONTRACTOR were the insurance underwriter of the policies such as those contemplated by 26.1 above.

The Insurance Policies referred to in Article 26.1 required to be taken out by the CONTRACTOR (naming the PURCHASER as ultimate beneficiary) shall be as follows:

"Erection All Risks" (C.A.R.) liability or
"Erection All Risks" (E.A.R.) policy (inclusive of
third party cover) in the name of the PURCHASER and
JONTRACTOR to insure the project under construction,
including all plant, equipment and materials
incidental thereto, while at the site from the
start of work until find acceptance by the PURCHASER.
Endorsements to the policy shall include coverage

for E.A.R., "faults in design", requiring the replacement and repair of damaged machinery due to faults in design, faulty workmanship and faulty material, up to the guarantee tests. Specific insurances for Bodily Injury and Personal Liability Insurance, (excluding that to third parties) and endorsements for such items as elevator and hoist liability, shoring, blasting, excavating shall also be included.

- 26.5.2 "Loss of Advanced Profits Insurance" (otherwise called "Machinery Consequential Loss (Interruption) Insurance)") to cover consequential loss to the PURCHASER, which may arise following any damage to the Plant during testing and maintenance periods providing extended cover to that already provided by the C.A.R./E.A.R. policy.
- 26.5.3 "Machinery Breakdown Policy" to cover the breakdown of machinery during testing, at start-up or during trial operation of the Plant, including boilers, pressure vessels, turbines etc., and explosion risks incidental thereto.
- 26.5.4 "Professional Indemnity Insurance" to cover the liability for errors and omissions, negligence, failure in performance, mistakes in design, etc., arising from the CONTRACTOR's work.
- 26.5.5 "Marine Insurance" or "Cargo Insurance Policies" to cover the transit of goods ex-works from the fabricator's workshops to the site of the Plant.

  (This shall include War Risks insurance, under the discretionary responsibility of the CONTRACTOR).
- 26.5.6 Insurance Liability to cover for the use of Automobiles, Trucks, Aircrafts, Launches, Tugs, Barges, etc.
- 26.5.7 Liability insurance for payments under Workmens' Compensation Acts, as required under applicable legislation.

- To the extent not covered by the above policies and provided such policy is available, the PURCHASER and the CONTRACTOR shall by mutual agreement obtain a special insurance policy (where the PURCHASER shall be deemed to be the beneficiary) providing coverage for consequential loss caused by defective design, material or workmanship (including defective construction or erection) within the control of the CONTRACTOR or his sub-contractors, suppliers or mamufacturers. It is expressly agreed however that no liability to the extent that it refers to consequential loss only shall attach to the PURCHASER or the CONTRACTOR purely by reason of payment of the premium for such a policy.
- The CONTRACTOR shall be responsible for the taking out all of the policies referred to in Article 26.1 as enumerated in Article 26.5 together with other policies referred to in Article 26.1.2, except the following which the PURCHASER shall carry (unless otherwise agreed between the parties):
  - 26.7.1 Accident Insurance for PURCHASER's personnel at site.
  - 26.7.2 Insurance for PURCHASER's transport (e.g. Automobiles) of which PURCHASER is the owner.
  - 26.7.3 All policies taken out by the CONTRACTOR except Professional Indemnity Insurance shall be jointly in the name of the CONTRACTOR and the PURCHASER with the PURCHASER designated as the ultimate beneficiary.
- Any failure by the CONTRACTOR to maintain all or any of the Insurances required to be carried by is by virtue of this Article and in keeping with its contractual responsibilities shall be deemed to be a fundamental breach of this Contract.

Group on Contracts and Insurance, Vienna, 14-17 February 1979

#### RECTIFICATION OF DEFECTS

- In the event that due to mistakes, negligence, omissions or 27.1 errors in the processes and/or in the construction, erection, engineering, manufacturing and/or fabrication performed by the CONTRACTOR and/or in the CONTRACTOR's supply and procurement, or specifications instructions and inspection, or for whatever reason falling within the CONTRACTOR's obligations, the CONTRACTOR is unable to demonstrate any of the Guarantees, Performance Guarantee Tests or complete the Work(s), whether or not arising out of or due to the matters or subjects covered by Articles 15 to 20 (inclusive) or any one of them, the CONTRACTOR shall proceed to effect the rectifications, additions and/or changes which are necessary to eliminate the defects and/or faults and thereby to achieve the specified guarantees and criteria referred to in the aforementioned Articles. The CONTRACTOR shall provide free of charge to the PURCHASER all necessary work and services as required to complete the works. In the event that the PURCHASER performs any and all of the modifications and rectifications and other work referred to herein and/or as required pursuant to Article 15.18, the CONTRACTOR shall be liable to the PURCHASER for such costs and expenses as are due.
- If the CONTRACTOR shall neglect or refuse to take the necessary measures to ensure the elimination of the defects and/or faults expeditiously, then the PURCHASER may take such remedial steps to rectify, modify, correct and replace any equipment, part(s) or section(e) thereof and/or erect new equipment and/or undertake repair and/or replacement of used equipment to eliminate the defects and correct all associated problems, and the cost of such remedial steps taken by the PURCHASER shall be recoverable in any manner at the discretion of the PURCHASER in accordance with the provisions of this Contract and applicable laws.

- The PURCHASER, will in every case keep such contemporary and accurate records of the costs of making good any isfect(s) in pursuance of this Contract and as may be required under Article 27.3 and the CONTRACTOR shall be entitled to receive copies in the appropriate cases.
- The provisions of Articles 17 and 18 shall apply with regard to defects found during inspection (before deepatch) of equipment, machinery or materials or defects materialising during erection or pre-commissioning tests at the site or in the Plant or Work(s) and the CONTRACTOR shall immediately advice the PURCHASER as to the action proposed to be taken to replace or repair the defective equipment, defective parts, or inadequate material in the shortest possible time. The CONTRACTOR and PURCHASER agree that the procedure specified in Article 27.8 shall thereafter apply to facilitate such repair and/or replacement.

In the procurement of spare parts pursuant to Article 40, if any defect is found in the Vendor's supply within the period during the valid guarantee period, the CONTRACTOR shall assist the PURCHASER in immediately undertaking the necessary measures to have the Vendor(s) replace the defective supplies within the shortest possible time, including the air freighting of the equipment or parts etc. at Vendor's cost.

- 27.5 The provisione of Articles 21 and 25 shall apply mutatis mutandis as regarde the liabilities and obligations of the parties herein, in the circumstances envisaged in Article 27.4 and 27.9.
- The CONTRACTOR shall assume complete responsibility for any failure of the equipment process(es), materials or poor workmanship due to improper: engineering, basic design, procurement specifications, and quality of workmanship; and the CONTRACTOR shall be liable to take the necessary corrective measures under Article 27 and shall be subject to the liabilities contained in Articles 16, 23 and 25.

- Until all defective or faulty work has been made good, altered or eliminated through replacement or otherwise as provided in this Contract, the PURCHASER shall have the right to use any such faulty or defective work at the CONTRACTOR's sole risk and without thereby affecting the PURCHASER's rights under this Contract, unless however, the CONTRACTOR shall notify the PURCHASER in writing that, in its opinion, the faulty or defective work cannot be so used without undue risk to the work or persons operating or working in the vicinity of the Work.
- whenever any of the refects referred to in Article 27.4 appear, the CONTRACTOR shall immediately thereafter advise the EURCHACER, and the procedure specified hereunder shall apply in connection with any repair and/or replacement as also referred to in Article 16.4.3. The defective material, machinery and/or equipment shall be examined by the CONTRACTOR and FURCHASER (or their duly authorised representatives.
  - 27.8.1 In the event that the defect and/or damage is agreed to be minor the CONTRACT R shall satisfactorily rectify the same through the most expeditious means.
  - 27.3. In the case of a serious or extensive defect or dama\_e the NTRATOR shall state the method of making good the defect or damage in any event at its own cost, and one of the following methods shall be adopted, subject however to the considerations of efficiency, speed and the contractual time schedules:
    - (a) The undertaking of repair, rectification work  $\ni r$  alteration at site.
    - (b) Removal of the defective material or equipment from the site and the undertaking of repair or rectification away from the site.
    - (c) The removal of defective material, machinery or equipment and replacement by new and unused materials, machines or equipment.

- The PONTRA TOR shall embody the most efficient means recommended in a report indicating the method proposed to be adopted and the detailed reasons for the course of action he intended to be taken, and shall submit such report as early as possible to the PURCHASER. If the PURCHASER has no objection, the CONTRACTOR shall undertake such repair and/or replacement immediately. The provisions as to warranties, guarantee requirements as elsewhere expressed in this Contract shall apply with equal force and effect.
- 27.8.4 Upon completion of such repair or replacement, the PURCHASER may require the CONTRACTOR to carry out necessary additional tests required under the Contract prior to accepting the repair or replacement.
- 27.9 For the purposes of this Contract, the liabilities and obligations contained in Articles 16 and 27 shall be deemed to be complementary to each other.

## VARIATIONS, CHANGES AND ADDITIONS TO SCOPE OF WORK

- The PURCHASER shall have full powers, subject to this Article and other provisions of the Contract from time to time during the execution of the Contract by notice in writing to direct the CONTRACTOR to alter, amend, omit, change, modify, add to or otherwise vary any of the Works and the CONTRACTOR shall carry out such work and be bound by the same conditions, so far as applicable, as though the said variations were stated in the Contract and Specifications.
- Notwithstanding the detailed instructions provided in 28.2 Annexure XIX, when the CONTRACTOR has received any direction from the PURCHASER/Engineer which may, in the opinion of the CONTRACTOR, involve a change in the Contract Price, the CONTRACTOR shall, as soon as reasonably possible and before proceeding with the variation, advise the PURCHASER in writing to that effect. Subject to the provisions of Article 28.3 and 28.9, the difference in cost to the PURCHASER, if any, occasioned by any such variations, shall be added to or deducted from the Contract Price as the case may be. The amount of such difference shall be agreed to after discussions between the Engineer and the CONTRACTOR, subject to approval of the PURCHASER. In the event of any difference in opinion, the cost of the variation may be assessed in accordance with Article 45.
- If the changes requested by the PURCHASER are due solely to defects, omissions or errors in the Plant(s) or Work(s) as indicated in Article 15.17 and requiring additional time. provided for in Article 16 which could alter, add to, change or vary considerably the amount of work already within the scope of obligations of the CONTRACTOR or its sub-contractor(s),

the PURCHASER shall not be liable to pay any additional costs. The CONTRACTOR acknowledges that there shall be no entitlement for any plaims for any increases in the amount of work undertaken or to be undertaken for rectification work or modifications undertaken whether or not related to design and/or other errors, mistakes, omnotions and lack of accuracy, in undertaking its obligations herein, including those mortioned in Article 2004.

- 28.4 The CONTRACTOR may at any time during his performance of the Contract submit to the PURCHASER for his approval written proposal(s) for a variation of the Works. If the CONTRACTOR is of the opinion that such variation is necessary to correct any defect in the Works which has occurred or which would otherwise occur, then such proposals shall specify such defect and state the reasons for the CONTRACTOR's said opinion. The CONTRACTOR, in connection with any proposal he makes pursuant to this article and Article 4.4.2 and/or for a contract modification pursuant to Article 16.2 and/or any other Article, shall furnish a breakdown in sufficient detail to permit an analysis of all material, labor, equipment, sub-contracts and project schedule overruns (estimated) and design changes and shall include in such proposal or report all work involved in the variation and/or modification, whether such work was deleted, to be added or changed. The request for time extension shall be supported by such justification as may be deemed necessary.
- 28. Changes or variations pursuant to this Artisle shall not justify extra costs in any event, even if such changes or variations are as a result of changes in detailed project schedule created by change in material deliveries, and/or incidental to time changes related to mechanical completion, or due to changes in piping layout or design performed by the CCMTRACTOR as a result of detailed engineering.

- If the PTROBAGER as proves the summand the property term only est to Arts len 30.1, 20.5 and 20.4, the summand of the stable of the variation is seen as a summand of the variation of as prove any unique, in the variation of as a seen any defect in the Works which the summand of the summand of the summand are required persuant to Article 15.10. It all other cases, the PTRCHACER may give on refuse his approval as to trinke fit and his decision shall be final.
- The CONTRACTOR shall not be entitled to any extra cost on account of a variation proposed or initiated by him. Any deduction in the Contract Price agreed to between the PURCHASER/Engineer and the CONTRACTOR pursuant to such Subarticle 28.0, shall be deducted from the Contract Price.
- Upon receiving a change order from the PURCHASER and if in the opinion of the CONTRACTOR such variation is likely to provent or prejudice the CONTRACTOR from fulfilling any of his obligations under the Contract, he shall notify the PURCHASER thereto in writing and the PURCHASER shall decide forthwith whether or not the same shall be carried out. If the PURCHASER re-confirms in writing his intention to carry out the variations, then the said obligations of the CONTRACTOR shall be modified to such an extent as may be justified and subject to the provision of Articles 25,
- 28.9 Except for the provision of Article 28.8, any variations or alterations ordered by the PURCHASER/Engineer shall not in any way vitiate or invalidate the obligations of the CONTRACTOR under the Contract.
- In the event that the PURCHASER and the CONTRACTOR are unable to agree on whether such required services are within the contractual obligations of the CONTRACTOR, or if the PURCHASER considers that the payment demanded for such

required services by the CONTRACTOR is exorbitant, a neutral person (mutually apointed by the CONTRACTOR and PURCHASER) shall have the right to decide on the quantum of payment, if any, which may be payable by the PURCHASER to the CONTRACTOR. In such an eventuality the CONTRACTOR shall proceed without delay to carry out the design changes, and/or provide the services which are the subject of the dispute, pending the decision of the neutral person. The decision of the neutral person shall be without prejudice to the rights of the CONTRACTOR and PURCHASER for submission of the dispute to Arbitration.

- All additional payments for the required work or services due from the PURCHASER to the CONTRACTOR under the provisions of this Article shall be embodied in a Change Order upon conditions specified therein which shall be signed by the PURCHASER and the CONTRACTOR (or their authorised representatives), and such Change Order(s) shall be deemed to form part of the Contract and subject to all of the terms and conditions therein, unless otherwise excepted.
- Any and all modifications to the technical specifications pursuant to the Contract (as may be specified further in the Annexures) agreed to by the PURCHASER shall be embodied in a Change Order which shall be signed by the PURCHASER and the CONTRACTOR (or their authorized representatives), and such Change Orders shall be deemed to form part of the Contract and subject to all of the terms and conditions therein, unless otherwise excepted.
- The PURCHASER and CONTRACTOR estimate that an amount of (<u>Amount and Currency</u>) may be required for variations, and additions as provided by this Article and/or for any further specialized equipment which may be required by the PURCHASER. The PURCHASER shall be obliged to make the necessary arrangements for obtaining the amount(s) if due under the terms of this Contract. However, the extent, necessity and requirement for the expenditure of such amount(s) shall be at the sole discretion of the PURCHASER.

28.14 The provisions of Articles 15, 16, 17, 21 and 27 shall apply mutatis mutandis to the terms of this Article.

## RIGHT FOR USE OF PROPRIETARY RIGHTS AND LICENCES

- 29.1 The CONTRACTOR hereby affirms that it has or has obtained the unqualified right(s) to grant, and hereby does grant to the PURCHASER irrevocable, non-exclusive, non-transferable, fully paid-up licence(s) for use in the operation of all the processes in the life time of the Plant, and in particular, the Ammonia Process and the Urea Process.
- The CONTRACTOR shall ensure (through specific arrangements, with proof provided to the PURCHASER) that the Process Licensors shall make available to the PURCHASER through the CONTRACTOR all basic process data (received by the CONTRACTOR from Process Licensors) relating to the Contract, and that all basic process documentation and all drawings prepared by the CONTRACTOR shall also be made available to the FURCHASER together with copies of all documents mentioned in Article 3. The CONTRACTOR also hereby undertakes to make available to the PURCHASER the latest know-how and techniques available to the PURCHASER the latest know-how and techniques available to the Process Licensors at the signing of the Contract and to the CONTRACTOR at the time of design.
  - 29.2.1 In circumstances where the CONTRACTOR is unable or unwilling to make available to the PURCHASER the necessary process know-now and related information, the PURCHASER shall be free to approach the Process Licensor(s) directly.
  - 29.2.2 The PURCHASER shall also have the right to establish direct contractual arrangements with the said Process Licensor in the event that the circumstances envisaged in Article 36 apply.
- 29.3 The CONTRACTOR shall ensure that the Process Licensors and the CONTRACTOR shall make available to the PURCHASER for a period of ten (10) years from the Effective Date of the Contract:

- 29.3. Free of charge any technological level pments and improvements in operating techniques, preventive maintenance and safety measures applicable to the Plants constructed pursuant to this Contract, and other relevant data and proprietary information that may or may not become licensable by the Process Licensors within the same period. The PURCHAGER will also make available to the Process Licensor, free of charge, any improvements in operating techniques which the PURCHAGER shall have made in the same period.
- 29.3.2 On payment, at a reasonable cost, rights to use proprietary processes developed or acquired by the CONTRACTOR including patented processes which could result in eignificant improvement(s) in the capacity, reliability and efficiency of the Plant, and quality of the products.
- 29.3.3 The CONTRACTOR shall be required to undertake of its own accord the obligations set forth in Article 29.3.1 and Article 29.3.2 for the period specified in Article 29.3. The PURCHASER shall be under no obligation to monitor the technological developments and other items referred to in Article 29.3.1 to be entitled to the benefits flowing by virtue of this Article.
- The CONTRACTOR shall undertake to enter into specific arrangements with the Process Licensor(e) (with satisfactory proof provided to the PURCHASER) to ensure the continued availability to the FURCHASER of confidential information similar in ecope and content to that provided pursuant to Article 29.3.
- The PURCHASER shall not be isemed to have infringed the conditions stipulated in this Article and Article 30, where following the final acceptance of the Plant(s) (but within the period specified in Article 30.5) the PURCHASER determines that modifications of

the Plant(s are required to be made (which in its opinion would result in improved or better Plant operation) or where the PURCHAGER requires an expansion or modernization of the Flant(s) with incorporation of contemporary technology, and, in consideration of the foregoing the PURCHAGER has requested the CONTRACTOR to assist in accomplishing the necessary work, and the CONTRACTOR is unable or unwilling (for whatsoever reason) to undertake same, then the PURCHASER shall have the right to employ or retain any other person, firm or agency to undertake and complete such work above referred to, and in such an eventuality, the PURCHASER shall not be held to be in breach of the secrecy provisions of Article 30.

- 29.6 For the purposes of this Article, the grant to the PURCHASER of the right to use the processes referred to in Articls 29.1 shall not be interpreted to mean a passing to the PURCHASER of proprietary rights and titls to the processes.
- 29.7 The provisions of Article 30.5 in connection with termination and/or cancellation shall apply in like manner to the provisions of this Article.

#### SECRECY

- The PURCHASER agrees that he shall treat as confidential all process and technical information, proprietary know-how, patented processes, documents, data and drawings supplied by the CONTRACTOR (whether owned by the CONTRACTOR or otherwise) in accordance with this Contract, all of which is hereinafter referred to as "confidential information". The PURCHASER shall not without the prior approval of the CONTRACTOR divulge such confidential information available to a third party, other than when required by law, and provided that when so required by law, the PURCHASER shall duly advise the CONTRACTOR.
- 30.2 This Article shall not apply to such confidential information:
  - 30.2.1 Which is or becomes a part of the public domain, through no fault of the PURCHASER.
  - 30.2.2 Which is already known to the PURCHASER, his representatives or Technical Advisor, before the agreement as to confidentiality was given under Article 30.1.
- The PURCHASER shall not utilise the confidential information for any purpose other than for completing, operating, using, repairing, maintaining or modifying the Plant(s). Similarly, the CONTRACTOR will not use or divulge any technical data or confidential information and drawings or technical documents given by the PURCHASER, his representative or Technical Advisor, to the CONTRACTOR except for the purposes strictly connected with the Contract.
- The COMTRACTOR shall provide firm guarantees to the PURCHASER relative to the continued use of know-how and patented processes, and associated proprietary knowledge, similar in scope and content to the "confidential information" in Article 30.1, without prejudice to any matters occurring which might inhibit the continued use of the acquired know-how and procedures.

- 30.5 The PURCHASER and CONTRACTOR hereby agree that the obligations contained in this Article subject to Article 30.6 below, shall not be affected by a Termination and/or Cancellation of this Contract under Article 36 herein.
- Except when otherwise agreed, the PURCHASER's obligations pursuant to the provisions of Subarticles 30.1, 30.2 and 30.3 shall be valid for a period of eight (8) years from the Effective Date of the Contract.

#### PATENTS

- The CONTRACTOR shall indemnify and hold harmless the PURCHASER and anyone directly or indirectly employed by it from and against all claims, damages, losses, and expenses (including legal fees) arising out of any infringement of patent rights in relation to the Contract (for patents granted up to Provisional Acceptance of the Plant) and/or know-how referred to as "confidential information" in Articles 30.1 and 30.6 during and after completion of the work, and shall defend all such claims (filed by whomsoever) in connection with any alleged infringement of such rights. The foregoing notwithstanding, the CONTRACTOR shall continue his performance of the work utilizing substantial non-infringing equipment and methods, where possible.
- The PURCHASER shall give the CONTRACTOR prompt notice, in writing, of any claim or suit of which it has knowledge. The CONTRACTOR shall have sole charge and direction of the defence and disposal of such suit of action and the PURCHASER shall render all reasonable assistance but shall not be obligated to sustain any expenses. The PURCHASER shall have the right to be represented by legal counsel experienced in technology contracts of its own choice at its own expense.
- 31.3 The CONTRACTOR shall have the right to acquire immunity from suit and to make or cause to be made alterations at its own cost to the Plant to eliminate the alleged infringement provided such alteration does not prevent the Plant from meeting its Performance Guarantees mentioned in Article 19.
- Neither the CONTRACTOR nor the PURCHASER shall settle or compromise any suit or action without the written consent of the other if such settlement or compromise would oblige the other to make any payment or part with any property, to assume any obligation or grant any licences or other rights, or to be subjected to any injunction by reason of such settlement or compromise.

# DISCLOSURES

- The PURCHASER shall not disclose any "confidential information" defined in Article 30.1 obtained from the CONTRACTOR other than third party without the approval of the CONTRACTOR other than where required by law when the PURCHASER shall inform the CONTRACTOR (Article 30.1).
- The CONTRACTOR shall not solicit, request or tolerate any commission, fee, discount or other payments whenever he is acting on behalf of the PURCHAGER with respect to any procurement and/or services relating to the acquisition of spare parts or otherwise from any Vendor. Should the CONTRACTOR receive any such payment (whether directly or indirectly) the CONTRACTOR shall forthwith disclose and reimburse the same without any deduction whatsoever to the PURCHASER.
- The CONTRACTOR shall not pay fees, discount or other commissions in relation to the award to him of this Contract. If any agent's fees are payable to agents in ( PURCHASER's country ) by virtue of legal agency agreement(s) made before the award of this Contract, then the CONTRACTOR shall (before the award of this Contract) make full disclosure to the PURCHASER the name of the agent and quantum of fees that were or are to be paid.

#### INDEXINIFICATION

- 33.1 Subject only to Article 33.2 below, the CONTRACTOR shall indemnify and save harmless the PURCHARER from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by whomsoever made, brought or prosecured in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the CONTRACTOR under or in connection with this Contract, or to an infringement or alleged infringement by the CONTRACTOR of a patent or invention. The foregoing notwithstanding, the CONTRACTOR shall continue its performance of the work utilizing substantial non-infringing equipment and methods, but may be subject to reduction in payments as may be determined by the PURCHASER.
  - 33.1.1 For the purpose of Subarticle 33.1 above, "activities" includes an act improperly carried out, an omission to carry out an act and a delay in carrying out an act.
- The PURCHASER shall indemnify and eave harmless the CONTRACTOR from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the CONTRACTOR's activities under this Contract which are directly attributable to lack of, or a defect in, title or an alleged lack of, or a defect in, title or the Works.

# FORCE MAJEURE

In this Contract, Force Majeure shall be idemed to be any cause beyond the reasonable control of the CONTRACTOR or the PURCHASER (as the case may be) which prevents, impedes or delays the due performance of the Contract by the obligated party and which, by due diligence, the affected party is unable to control, despite the making of all reasonable efforts to overcome the delay, impediment or cause.

Force Majeure may include, but shall not be limited to anyone or other of the following:

- any war or hostilities;
- any riot or civil commotion;
- any earthquake, flood, tempest, lightning, unusual weather or other natural physical disaster. Impossibility in the use of any railway, port, airport, shipping-service or other means of transportation (occurring concurrently and to be proven to the satisfaction of the PURCHASER);
- any accident, fire or explosion;
- any strike, lock-out or concerted acts of workmen (except where it is within the power of the party involving the Force Majeure to prevent);
- shortages or unavailability of materials (compounded by the same shortage or inavailability from alternate sources) if beyond the CONTRACTOR's control, to be proven to the satisfaction of the PURCHASER.
- If either party is prevented or delayed in the performance of any of its obligations under this Contract by circumstances of Force Majeure, and if the affected or obligated party has given written notice thereof to the other party within ten (10) days of the happening of such event, specifying the details constituting Force Majeure, with necessary evidence that a

contractual obligation is thereby prevented or delayed, and that the anticipated period (estimated) during which such prevention, interruption or delay may continue, then the affected or obligated party shall be excused from the performance or punctual performance (as the case may be; of such obligation as from the date of such notice for so long as may be justified.

- The PURCHASER or the CONTRACTOR (as the case may be) shall be diligent in endeavouring to prevent or remove the cause of Force Majeure. Either party upon receipt of the Notice of Force Majeure under article 34.2 shall confer promptly with the other and agree upon a course of action to remove or alleviate such cause(s), and shall seek reasonable alternative methods of achieving the same performance objectives under the Contract.
- 34.4 If by virtue of Article 34.2, either of the parties is excused from the performance or punctual performance of any obligation for a continuous period of six (6) months then the parties shall consult together to seek agreement as to the required action that should be taken in the circumstances and as to the necessary amendments that should be made to the terms of the Contract.
- If by virtue of Article 34.2 either of the parties is excused from the performance or punctual performance of any obligation for a continuous period of nine (9) months for one or more causes and if the consultations referred to in the preceding Subarticle 34.4 have not resulted in mutual agreement (or have not taken place because the parties have been unable to communicate with one another), the parties shall thereupon agree to amend the terms of this Contract by virtue of the prevailing Force Majeure circumstances and shall determine the course of further action. If the parties are unable to reach an agreement to amend the terms of this Contract by virtue of the prevailing and continuous Force Majeure, then the parties shall resort to Arbitration pursuant to Article 46 in the event of a dispute as to any justification for termination.

- The PURCHASER acknowledges that any eventual inability on its part to make bona fide payments to the CONTRACTOR under this Contract, shall not be claimed or deemed to constitute Force Majeure. In the event of a dispute as to the bona fide payments due, payments shall be determined by the provisions of Article 16.1(a) in like manner as suspension of the Work, failing which the parties shall have recourse to the provisions of Article 45 and 46.
- Nothing herein shall in any manner affect the validity of the Contract. Both the PURCHASER and the CONTRACTOR shall be prompt and diligent to remove all causes of interruption or delay in the work, insofar as each is liable to do so.

#### SUSPENSION OF WORK

- The FURCHASER may, when in the FURCHASER's opinion it is deemed necessary, require the CONTRACTOR to suspend execution of the work or part of the work, either for a specified or unspecified period by communicating notice to that effect to the CONTRACTOR. If the period is unspecified, the FURCHASER shall specify the period of suspension within forty-five (45) days thereafter.
- The CONTRACTOR, upon receiving notice of the PURCHASER's requirement pursuant to Article 35.1 above, shall suspend all operations except those which, in the PURCHASER's and CONTRACTOR's opinion, are necessary for the care or preservation of the Works.
- During the period of suspension, the CONTRACTOR shall not remove from the Site any material, any part of the Works, or any Plant without the consent of the PURCHASER.
- 35.4 If the period of suspension is ninety (90) days or less, the CONTRACTOR, upon the expiration of the period of suspension, shall resume the execution of the Contract in accordance with an extension of time granted pursuant to Article 16.1 and payments due upon Suspension of Work in the relevant case shall be determined in accordance with the provisions of Article 16.1(b)
- If the period of suspension is more than ninety (90) days and if, upon the expiration of the period of suspension, the CONTRACTOR shall resume operations and fulfill the Contract in accordance with the terms and conditions of this Contract, subject to any further amendments pursuant to Article 16.2 that may be required by virtue of prior non-completion of work. Fayments to the CONTRACTOR shall be governed by Article 16.1(a).

- 35.6 If the period of suspension exceeds one hundred and eighty (180) days and if the PURCHASER requests the CONTRACTOR to recommence the work upon amended terms (to be agreed mutually, and the PURCHASER and CONTRACTOR are unable to reach agreement on the completion of the Contract by the CONTRACTOR, or the CONTRACTOR is unwilling in any event to undertake further work, the parties shall resort to Arbitration pursuant to Article 46.
- Nothing herein shail affect the validity of the Contract. Both the PURCHASER and CONTRACTOR shall make bona fide endeavours to resume the work as expeditiously as possible.
- 35.8 Payments if any done under this Article shall be governed by the provisions of Article 16.1(b).

## TERMINATION OF CONTRACT

- In the event that the PURCHASER is subject to any recumstances which are wholly unavoidable and or teriod his control (but not including occurrences which are covered by Article 34) then the PURCHASER may at any time by giving notice in writing to that effect terminate this Contract.
- 36.2 The CONTRACTOR shall upon receipt of a notice pursuant to Article 36.1 above cease all operations forthwith.
- 36.3 If the Contract is terminated pursuant to Article 36.1, the PURCHASER will pay to the CONTRACTOR an amount equal to the greater of:
  - 36.3.1 The cost of the Works properly supplied or done by the CONTRACTOR as at the date of the termination less all amounts already paid to the CONTRACTOR by the PURCHASER, and less all amounts which the CONTRACTOR is liable under the Contract to pay to the PURCHASER or owing to the PURCHASER, or which the PURCHASER claims is due as damages pursuant to other Articles herein.
  - 36.3.2 The amount calculated in accordance with the Terms of Payment which would have been legitimately payable to the CONTRACTOR up to the date of Termination had such CONTRACTOR fulfilled his contractual obligations to such date, without prejudice to PURCHASER-rights as expressly provided for in this Contract.
- In the event that the CONTRACTOR and the PURCHASER are unable to agree upon the amount of payments then the aggrieved party may report to Arbitration as provided for in Article 46.

- In the event of a termination of this Contract pursuant to this Article, the following rights shall accome to the PURCHASER:
  - To the extent that the PURCHASER has made payments pursuant to Article 11.2 (subject to recovery or deduction of other monies by the PURCHASER under Contract terms) the PURCHASER shall have the right to obtain from the CONTRACTOR where he is also the Process Licensor the documentation for know—how and basic engineering (unless already supplied by the CONTRACTOR);
    - (11) To the extent that the PURCHASER has made payments to the CONTRACTOR pursuant to Article 11.2, the PURCHASER shall have the right to directly obtain from the Process Licensor (where the CONTRACTOR is not the Process Licensor) the documentation referred to in Article 36.4.1(1) unless already supplied through the CONTRACTOR.
  - 36.5.3 The PURCHASER shall be entitled to receive all detailed engineering documents, calculations, computer printouts and other materials related thereto as completed up to the date of the Termination.
  - 36.5.3 The PURCHASER shall be entitled to receive lists of all equipment for which orders have been placed, together with all copies of Purchase Orders for plant supplied and not supplied.
  - 36.5.4 The PURCHASER shall be entitled to take delivery and receive the shipping papers for all equipment for which whole or partial payment(s) have been made by the CONTRACTOR.

- The PURCHASER shall be provided with all procurement documentation for purchases under Article 40 including copies of all tenders issued or prepared, bids received, bid tabulations completed or under preparation and CONTRACTOR's recommendations completed and Purchase Orders prepared and issued up to the date of Termination.
- 36.5.6 The PURCHACER shall be provided with all inspection reports, reports on visits to the factories of the CONTRACTOR's suppliers and copies of test certificates received from them up to the date of Termination.
- 36.5.7 The PURCHASER shall be entitled to receive all completed or incomplete documentation pertaining to work and services to be provided by the CONTRACTOR pursuant to Article 4 (as detailed in Annexure VI and in particular to the technical documentation specified in Annexure XV).
- 36.5.8 In circumstances where Article 36 applies, the PURCHASER shall have the right to establish the strict contractual arrangements with the Process Licensor as provided under Article 29.2.2.
- 36.5.9 The PURCHASER shall have the right to take over the Works including all work done to date on the site.
- 36.5.10 The PURCHASER shall be entitled to receive copies of all detailed Civil Engineering, Piping,

  Instrumentation, lay-out and erection drawings.
- Nothing herein shall invalidate the rights of the PURCHASER as to contractual grounds of action (in relation to damages or costs due to the PURCHASER) whether through litigation or arbitral procedures, and, notwithstanding the Termination of of the Contract herein, the parties to this Contract shall be subject to the courts of competent jurisdiction.

# CANCELLATION OF THE CONTRACT

- 37.1 In any of the following cases, namel :
  - 37.1.1 where the CONTRACTOR has made default or delayed in commencing or in executing the work or any portion thereof to the reasonable satisfaction of the PURCHASER, and the PURCHASER has given notice thereof to the CONTRACTOR and has by such notice required the CONTRACTOR to put an end to such default or delay, and such default or delay continues for a period of after such notice was given;
  - 37.1.2 where the CONTRACTOR has made default in the completion of the Works, or any portion thereof;
  - 37.1.3 where the CONTRACTOR has become insolvent and/or made an assignment of the Contract without the approval of the PURCHASER;
  - 17.1.4 where the CONTRACTOR has committed an act of bankruptcy;
    - 1.1.5 where the CONTRACTOR has abandoned the work;
      - 1.6 where the CONTRACTOR has failed to make proper disclosures as referred to in Article 32;
    - .1.7 where the CONTRACTOR has failed to deliver to the PURCHASER any/or all portions of the Works;
  - PURCHASER may, without any other authorization, take all my part of the Contract and/or of the work to be undertaken the CONTRACTOR out of the CONTRACTOR's hands and may employ means as the PURCHASER sees fit to complete this Contract ant/or the Works.
- 37.2 where this Contract or any portion or portions thereof has or have been taken out of the CONTRACTOR's hands under Subarticle 37.1, the CONTRACTOR shall not, except as provided in Subarticle

- 37.3 hereunder, be entitled to any further payment including payments then due and payable but not paid and the obligation of the PURCHAGER to make payments as provided for in the Terms of Payment shall be at an end, and the CONTRACTOR shall be liable to settle costs and, or damages under the Contract pursuant to Articles 15, 22, 25 and 26 and the FURCHAGER (at its option) may decline to proceed to Arbitration for the recovery of damages and may instead institute actions in the courts of competent jurisdiction.
- Where this Contract, or any portion or portions thereof has or have been taken out of the CONTRACTOR's hands under Article 37.1 and is subsequently completed by the PURCHASER, subject to the rights of the PURCHASER specified in Articles 23 and 25 and the provisions therein, the FURCHASER may at its option determine the amount, if any, of retention monies and progress claims of the CONTRACTOR unpaid at the time of taking the work out of the CONTRACTOR's hands that, in the PURCHASER's opinion, are not required by the PURCHASER for the purposes of the Contract and subject to any actions already instituted or proposed to be commenced in courts, the PURCHASER shall, if of the opinion that no financial prejudice to the PURCHASER will result, authorise payment of that amount to the CONTRACTOR.
- The taking of this Contract, or of any portion thereof, out of the CONTRACTOR's hands pursuant to this Article does not operate so as to relieve or discharge the CONTRACTOR from the obligations imposed upon the CONTRACTOR by this Contract and by law.

37.5 If this Contract, the Works, or any part thereof is taken out of the CONTRACTOR's hands pursuant to this Article, all material, plant and interest of the CONTRACTOR in all real property, licences, power and privileges acquired, used or provided by the CONTRACTOR for purposes of this Contract shall be the property of the PURCHASER and in particular, but without affecting any liability or obligation of the CONTRACTOR and/or any PURCHASER right imposed, conferred, or contemplated by any other provision of this Contract, the PURCHASER may, at his option, utilize the equipment or sell or otherwise dispose of, at public auction or at private sale or otherwise, the whole or any portion of such material, and/or plant at such price or prices as he may consider reasonable and retain the proceeds of any such sale or disposition as well as all other amounts then or thereafter due by the PURCHASER to the CONTRACTOR, all in satisfaction or partial satisfaction (as the case may be) of any loss or damage which the PURCHASER has sustained or may sustain by reason aforesaid.

37.6 Subject to Article 37.5 above, if the PURCHASER considers that any PURCHASER property-interest possessed by virtue of Article 37.5 above, is no longer required for the purposes of the Contract, and that it is not in the interests of the PURCHASER to retain such property-interest then, upon written notice to such effect from the PURCHASER to the CONTRACTOR, such property-interest shall become the property of the CONTRACTOR.

# GENERAL PROVISIONS

38.1 Entirety of the Contract and Implied Obligations.

This Contract supersedes all communications, negotiations, and agreements, either written or oral, relating to the work and made prior to the date of this Contract, and, without limiting the generality of the following, no implied obligation of any kind by or on behalf of the PURCHASER or the CONTRACTOR shall arise from anything in this Contract, and the express covenants and agreements herein contained and made by the PURCHASER and the CONTRACTOR are and shall be the only covenants and agreements upon which any rights against the PURCHASER or the CONTRACTOR are to be founded; the provisions of the Articles of this Contract and the contents of the Technical Annexures shall be complementary to each other, but in the event of any conflict, the provisions of the Articles shall prevail.

# 38.2 Waiver or Estoppel

Notwithstanding anything contained elsewhere in this Contract no waiver or estoppel (if any) arising against a right or remedy of the PURCHASER, on any occasion shall be deemed operative against such right or remedy if the relevant factual circumstances continue in existence beyond the date upon which such waiver or estoppel first arose or if there occur, subsequent to the said date, factual circumstances (whether or not similar to those first mentioned above) upon or against which the PURCHASER right or remedy would normally be invocable.

No bond, undertaking or payment given, supplied or offered by the CONTRACTOR to the FURCHACER (whether required by the terms of this Contract or by any other agreement between the parties hereto) shall in any way or to any degree affect, after or limit the liability of the CONTRACTOR under this Contract and the acceptance by the PURCHACER of any such bond, undertaking or payment shall neither be interpreted or construed as effecting or implying any waiver by the PURCHACER of any PURCHACER-rights or remedies nor as the acceptance of coverage or protection in lieu of any PURCHASER-rights or remedies under this Contract.

# 38.3 Right of Set-Off

In the event that the PURCHASER considers that it possesses a claim against the CONTRACTOR under, arising out of, or in any way connected with, this Contract, the FURCHASER may at any time (whether before or after the completion of the work under this Contract and whether such completion is effected by the CONTRACTOR, the PURCHASER or another person) calculate the amount of the damage or loss upon which such claim is based and (without restricting any right of set-off or counter-claim given or implied by law) may set-off against any amount then or to be subsequently payable to the CONTRACTOR under this Contract, any sum deemed by the PURCHASER to be payable to the PURCHASER by the CONTRACTOR pursuant to any such abovementioned claim, and, without restricting the generality of the foregoing, the PURCHASER may deduct from any sum otherwise then or to be subsequently payable or repayable to the CONTRACTOR under any provision of this Contract (including inter alia Articles 11, 12, 28, 29 and 40) any sum so deemed payable or retainable to or by the PURCHASER by virtue of any other provisions of this

Contract or by virtue of the right of set-off or conterdaim, whether an inferred by this Arti le or otherwise. Chould the PHRCHATER exer use any such right of set-off as envisaged berein, the PMRCFACER shall spelifically notify the CONTRACTOR in writing that the said right is being exergised IT BEING EXPRESSIV AGREED that no letter or other communication to the PHECHAMER shall constitute such notification to the COMMPACTOR unless the said letter or other communication so stipulates. At any time up to thirty (30) days after the releipt of the notification comtemplated above the CONTRACTOR may institute proceedings in a Court of competent jurisdiction to establish that the damage or loss as calculated by the PURCHACER did not in whole or in part constitute a valid legal laim against the CONTRACTOR but after the exply of the said thirty (30) days the CONTRACTOR shall to deemed to have a knowledged the validity, both as regards quantum and otherwise, of the aforesaid claim of the PURCHASER. Should the amount of the abovementioned claim of the PURCHASER exceed the amount or value of the set-off nothing herein shall be construed as a bar to the right of the PURCHASER to adopt any other legal measures available against the CONTRACTOR for the amount of such excess.

- Precautions Against Damages, Infringements, Fire. e.g. and Safety Measures
  - 38.4.1 The CONTRACTOR shall at the CONTRACTOR's own expense do whatever is necessary to ensure that:
    - (a) no person, property, right, easement, or privilege is injured, damaged or infringed by reason of the CONTRACTOR's activities under this Contract;

- (b) pedestrian and other traffic on any public or pricate road or waterway outside the battery limits of the Plant is not unduly impeded, interrupted or endangered by the execution or existence of the Work, material and/or Plant;
- (c) fire hazards are eliminated and in the case of a fire in or about the Works, that it is promptly extinguished;
- (d) the health of all persons employed in connection with this Contract is not endangered;
- (e) adequate medical supervision of all persons employed in connection with this Contract is maintained;
- (f) adequate sanitation measures in respect of the Work are taken; and
- (g) all stakes, pegs, huoys and marks placed on or about the Works by or under the authority of the Engineer are protected and are not removed, defaced or altered.
- (h) On completion of the work, the Site is cleared of all obstruction, temporary structures and unused material.
- 38.4.2 The Engineer may direct the CONTRACTOR to do such things and to construct such Works as the Engineer considers reasonable and necessary to ensure compliance with or to remedy a breach of Subarticle 38.4.1 above.
- 38.5 The invalidity of a portion of this Contract shall not affect the validity of the remainder of the Contract unless such remaining portion should be thereby rendered meaningless or impracticable.

- 38.6 Article headings appearing herein are included for convenience only and shall not be deemed to be a part of this Contract.
- 38.7 Protection of Work and Documents
  - 38.7.1 If any document or information given or disclosed to the CONTRACTOR is given a security rating the CONTRACTOR will take all measures directed by the PMS HASER to ensure the maintenance of the security rating.
- 38.8 Sales Territory

The PURCHASER shall have the right to sell the products and intermediates in the international market without any restriction imposed by the CONTRACTOR.

# ACCOUNTING AND INTERCTION OF PETORDS

- The CONTRACTOR shall maintain suitable accounting and other relevant records pertaining to the payments received by him from the PURCHAGER and the quantum of work done or equipment supplied against which such payments were made, and shall preserve these records for a period of at least two years after Final Acceptance of the Works or the Termination of the Contract under Article 36.
- The CONTRACTOR shall provide facilities to the PURCHASER and the Engineer to have access to and inspect the CONTRACTOR's accounting and other records for evaluating (if necessary) the cost of any work undertaken pursuant to Article 20 or in assessing the cost of any work done on the request of the PURCHASER.
- The CONTRACTOR shall be subject to audit by the PURCHASER of time-logs of the CONTRACTOR, if any prices or part of prices under the provisions of Article 28 are based on time-charges as well as increased costs incidental to Article 42(a)::.
- The PURCHAGER or any Auditors nominated by the PURCHAGER, or its Government, shall have the right to audit all payments made on behalf of the PURCHAGER by the CONTRACTOR under the Contract, and the CONTRACTOR shall be obliged to provide any other financial data and information required at the option of the PURCHAGER in regard to the transactions between the PURCHAGER and the CONTRACTOR, pursuant to this Contract.

## PROCUREMENT OF SPARE PARTS

- 40.1 The CONTRACTOR shall supply to the PURCHASER the following services in connection with the procurement of two-years requirement of spare parts, in accordance with Annexure XXVI, and subject to Articles 17, 25 and 27.
  - 40.1.1 The CONTRACTOR shall submit a list of spare parts for the approval of the PURCHASER in any event not later than the twelfth month after Effective Date.
  - 40.1.2 Where spare parts of a proprietary nature are to be produced, the CONTRACTOR will obtain from the suppliers directly in the name of, and for, the PURCHASER a list of 2-years supply of spare parts as recommended by the supplier, for approval of the PURCHASER.
  - 40.1.3 For all other spare parts, and for any other equipment to be purchased through the CONTRACTOR, the CONTRACTOR shall prepare bid documents on the basis of the technical specifications prepared by him and submit the same to the PURCHASER or his Technical Advisor deputized for this purpose, for relevant approval, and shall issue the same to the Vendors.
  - 40.1.4 The CONTRACTOR shall send the bid documents on behalf of the PURCHASER to the respective Vendors listed in the Vendore list (which list shall be previously agreed upon between the parties).
  - 40.1.5 The CONTRACTOR shall use its best endeavours to obtain from the Vendors a minimum three competitive (3) offers.

- 40.1.6 The effers received from the Vendors shall be evaluated by the CONTRACTOR who shall submit the bid evaluation with appropriate recommendations to the PURCHASER or his Technical Advisor for the relevant final selection. The PURCHASER's final selection of the Vendor shall be communicated to the CONTRACTOR within tweet days from the date of the CONTRACTOR's submission of the bid tabulation.
- 40.1.7 After the selection of the Vendor's) by the PURCHASER, the CONTRACTOR shall purchase the spare parts or other equipment and on delivery despatch them, in accordance with Article 10.
- 40.2 The provisions of this Article 40 shall be subject to the application of Article 17.10 and 27.5 mutatis mutandis and the CONTRACTOR acknowledges furthermore that the procurement of spare parts are inherently part of the essential requirements of the Contract and CONTRACTOR's obligations for performance.

# LANGUAGE GOVERNING THE CONTRACT

- 41.1 The governing language of the Contract shall be and the definitions in such language shall be final in the use and interpretation of the terms of the Contract.
- 41.2 All correspondence, information, literature, date, manuals, etc. required under the Contract shall be in the language.
- 41.3 All expatriates sent by the CONTRACTOR to the Site, and all personnel sent by the PURCHASER for training shall be conversant in the language.

# APPLICABLE LAWS AND CONFORMITY WITH LOCAL STATUTES

- 42.1 The laws applicable to the Contract shall be the laws of the land where the Plant Site is located or as otherwise agreed between the parties in conformity with laws of the country where the Plant is located.
- The CONTRACTOR, his staff, and representatives shall observe all codes, laws and regulations in force in the country of the PURCHASER and in the region where the Plant is located. In the event that any code, law or regulations are enacted after the Effective Date of the Contract, (which are proven to the satisfaction of the PURCHASER) to have adverse effect on the CONTRACTOR's obligations, scope of work, prices and/or time schedule under this Contract, the FURCHASER shall e, her
  - (1) obtain appropriate exemption(s) from the relevant authorities on the CONTRACTOR's behalf, or
  - negotiate with the CONTRACTOR for commensurate change(s) in the scope of the work to be performed under the Contract, together with such changes in price as properly reflect the actual increased costs that are anticipated. The increased amount shall be subject to full audit by the PURCHASER.
  - (b) Nothing herein shall in any manner affect the validity of the Contract or derogate from the specified obligations of the CONTRACTOR, and his liabilities under the Contract and law.

# STANDARDS AND CODES

- The standards and codes used for the Plant(s) and the Worksshall be those listed in the relevant Annexures attached to the Contract. In the event that Codes and Standards have not been specified in the Annexures, internationally recognised standards shall be utilized, and when these are not available, (unless mandatory Standards in the PURCHASER's country are available) the national standards prevalent in the CONTRACTOR's country shall be used.
- 43.2 Wherever relevant international or national standards are not readily available, and where special known standards of the CONTRACTOR or his Vendor have been used as a basis for Ammonia and/or Urea Plants, these may be used for such Plant(s) and/or Works provided that these are approved by the PURCHASER.
- 43.3 Mandatory national standards to which equipment must be designed or procured are indicated in Annexure II.
- In case of dispute arising on any matter concerning the acceptability or the qualitative level of Standards or Code(s) the onus shall be upon the CONTRACTOR to prove to the PURCHASER the superiority or better competence of those Standard(s) or Code(s) recommended (or adopted) by the CONTRACTOR pursuant to this Contract.

## ARTICLF 44

#### NOTICES AND APPROVALS

- 44.' Any notice to be given to or served upon either party under this Contract shall be deemed to have been properly served in the following circumstances:
  - 44.1.1 (a) Any notice to be given to the CONTRACTOR is to be conveyed by registered air mail post, or left at the address stated below, followed thereafter by the transmission of the same notice by cable or telex with a copy to be delivered to the CONTRACTOR's office at ( town ).
    - (CONTRACTOR's address, cable address and telex number) (marked for the attention of (Designation)).
    - (b) In the case of a notice to be served on the PURCHASER it is to sent by registered air mail post to or left at the address stated below, followed thereafter by the transmission of the same notice by cable or telex.

      (PURCHASER's address, cable address and telex number) (marked for the attention of (Designation)).
    - (c) In the case of a notice or information to be sent to the Technical Advisor by the CONTRACTOR, or to be sent by the Technical Advisor to the CONTRACTOR, such notice shall be delivered to the respective Site offices at (town).
  - 44.1.2 When any such notice is sent by registered mail post it shall be deemed to have been duly served following the expiration of seven(7) days following the date of posting and in proving such services it shall be sufficient to show that the letter containing the notice was properly addressed and conveyed to the postal authorities for transmission by registered air mail.

- 44.2 Either party may, by notice to the coner party in writing, change its postal address, cable address or telex address for receiving and/or forwarding such notices.
- 44.3 For the purposes of this Contract "Approval" shall be deemed to mean approval in writing. Decision requiring approval shall also be deemed to encompass modifications or rejections, all of which shall be in writing. Any and all approvals which amends, modified or varies the Contract and/or involves an increase in payment(s) shall be forwarded in like manner as the procedure specified for the notices under this Article.

#### ARTICLE 4°

#### SETTLEMENT OF DISPUTES

- In the event of any dispute, difference or contention in 45.1 the interpretation or meaning of any of the Articles to this Contract or reasonable inference therefrom, both parties shall promptly make endeavour to resolve the dispute or differences by mutual discussions and agreement. Should the dispute or differences continue to remain unresolved, both parties may each nominate a person to negotiate and reconcile the dispute or differences to resolve thereby the matter of contention between the parties arising out of the Contract. In the event that these two persons referred to cannot agree, they shall nominate a third neutral person to reconcile the dispute or difference. In case the efforts of the neutral person nominated by the two parties fail to resolve the differences, both parties to the Contract shall proceed to Arbitration pursuant to Article 46 of this Contract.
- Pending resolution of any such claim or dispute, the CONTRACTOR shall perform in accordance with the PURCHASER's instructions without prejudice to any claim by the CONTRACTOR for additional compensation and/or time to complete the work if such instructions (are in his opinion) above and beyond the requirements of the Contract.
- Notwithstanding the existence of a dispute, the CONTRACTOR and PURCHASER shall continue to carry out their obligations under the Contract, and appropriate payment(s) to the CONTRACTOR shall continue to be made in accordance with this Contract subject to the provisions of Article ii, and the other Articles of the Contract that may in the appropriate case qualify such payment(s).

#### ARRITRATION

- 46.1 Subject to the provisions of this Article, either the PURCHASER or the CONTRACTOR may demand arbitration with respect to any claim, dispute or other matter that has arisen between the parties.
  - 46.1.1 However, no demand for arbitration of any euch claim, dispute or other matter shall be made until the later of (a) the date of which the PURCHASER or the CONTRACTOR, as the case may be, has indicated its final position on such claim, dispute or matter, or (b) the twentieth day after the CONTRACTOR or PURCHASER, as the case may be, has presented its grievance in written form to the other, and no written reply has been received within twenty days after such presentation of the grievance.
  - 46.1.2 No demand for arbitration shall be made after the sixtieth (60) day following the date on which the PURCHASER has rendered his written final position in respect of the claim, dispute or other matter as to which arbitration is sought; and the failure to demand arbitration within said sixty (60) days periode shall result in the PURCHASER's decision being final and binding upon the CONTRACTOR.
- All claime, disputee and other matters in question arising out of, or relating to, this Contract or the breach thereof which cannot be resolved by the parties shall be decided by arbitration in accordance with the terms contained in Annexure \_\_\_\_ \* attached hereto. This agreement so to arbitrate shall be enforceable under the prevailing arbitration law. The award rendered by the arbitrator shall be final, and judgments may be entered upon it in any court having jurisdiction thereof.

<sup>\*</sup> To be drafted by the UNIDO Secretariat.

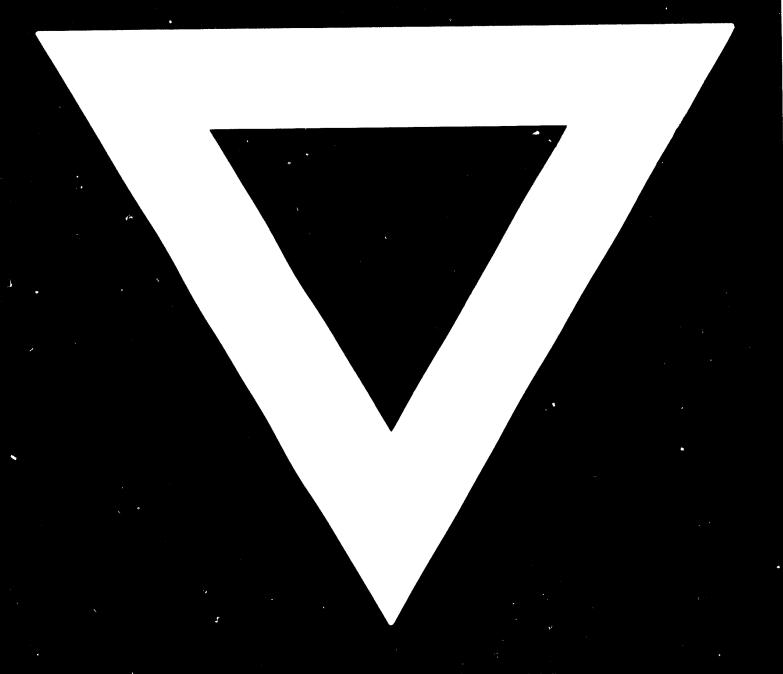
- Notice of the demand for arbitration shall be filed in writing with the other party to the Contract in accordance with the conditions contained in the Annexure referred to in Article 46.2 above. The demand for arbitration shall be made within the period specified in Article 46, and in all other cases, within the time specified in Annexure \_\_\_\_\_, after the claim, dispute or other matter in question has arisen, and in no event shall the demand for arbitration be made after institution of legal or equitable proceedings based on such claim, dispute or other matter in question if it would be barred by the applicable statute of limitations.
- The CONTRACTOR shall continue the work and undertake his obligations under the Contract and maintain the progress schedule during any arbitration proceedings, unless otherwise agreed by the PURHCASER in writing.
- In the event of Arbitration, the CONTRACTOR and PURCHASER agree that the Arbitrator(s) shall have unrestricted access to the Plant (notwithstanding anything contained in Article 30) for the purpose of the said Arbitration.
- 46.6 Arbitration shall be at (town) and all proceedings will be in language. The Governing Law shall be in accordance with Article 42.

#### TRAIN ING

- 47.1 The CONTRACTOR agrees and acknowledges that the adequate training of the PURCHASER's personnel is a necessary condition for the fulfillment of the objectives of the Contract.
- The CONTRACTOR shall provide training for the PURCHASER's personnel both at site and at plants outside (PURCHASER's country) in accordance with Article 4 and 11 subject to the provisions of Article 25.
- 47.3 Training facilities to be provided by the CONTRACTOR are detailed in Annexure XVIII.
- The PURCHASER and the CONTRACTOR shall agree at the first Co-ordination Meeting contemplated under Article 6.8—the time, place and details shall be established for the training of the PURCHASER's personnel and complete details for training shall be forwarded to the PURCHASER within \_\_\_\_\_ months following the Effective Date. The CONTRACTOR covenants that he shall competently train the PURCHASER's personnel for the purposes and on the basis referred to herein for the periods contemplated in Article XVIII at a plant or plants, using the Processes of the Licensors identified in Article 4.5 which have commenced production in the five years, immediately preceding the Effective Date of this Contract.
- 47. Subject to availability, the PURCHASER shall undertake to provide personnel for training with qualifications and experience recommended by the CONTRACTOR.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche

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