INDIAN OIL CORPORATION LIMITED
PIPELINES DIVISION
GUWAHATI SILIGURI PIPELINES
GUWAHATI

TENDER NO. GSPL/GHY/TS/2018-19/16

PART- I of II: TECHNO-COMMERCIAL PART

TENDER DOCUMENT
FOR

"Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector"

Issued by

CHIEF TECHNICAL SERVICES MANAGER,
INDIAN OIL CORPORATION LIMITED,
GUWAHATI-SILGURI PIPELINE,
P.O.: NOONMATI, SECTOR-III, GUWAHATI,
DIST.: KAMRUP, ASSAM– 781020, PH. 8811093472

INDIAN OIL CORPORATION LIMITED
(PIPELINES DIVISION)

TENDER NO: GSPL/GHY/TS/2018-19/16

PART- I of II: TECHNO-COMMERCIAL PART

TENDER DOCUMENT
FOR

"Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector"

INDEX

S. No.	DESCRIPTION
1	INNER COVER
2	INDEX
3	NOTICE INVITING TENDER
4	SPECIAL INSTRUCTIONS TO TENDERERS
5	SPECIAL CONDITIONS OF CONTRACT
6	GENERAL CONDITIONS OF CONTRACT
7	TECHNICAL SPECIFICATIONS
8	ANNEXURE-A TO Q
9	PREAMBLE TO SCHEDULE OF RATES
10	FORM OF SCHEDULE OF RATES

INDIAN OIL CORPORATION LIMITED, PIPELINES DIVISION, GSPL, GUWAHATI
DETAILED NOTICE INVITING E-TENDER

Indian Oil Corporation Ltd. invites electronic bids through its website https://iocletenders.nic.in under two bid system for the subject work, from bonafide experienced Contractors of sound financial standing and reputation and fulfilling the qualifying requirements stated hereunder and in the tender document:

<table>
<tr><td>1</td><td>Name of Work</td><td>Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector</td></tr>
<tr><td>2</td><td>E-tender No./ E-tender ID</td><td>GSPL/GHY/TS/2018-19/16</td></tr>
<tr><td>3</td><td>Type of tender</td><td>Open (National)/ e-Tender/ Two Bid</td></tr>
<tr><td>4</td><td>Area and Location</td><td>
<table>
<tr><th>Group</th><th>Area</th><th>Locations</th></tr>
<tr><td>Group A</td><td>Assam Sector</td><td>GSPL mainline from Guwahati to Sankosh River, Srirampur</td></tr>
<tr><td>Group B</td><td>West Bengal Sector</td><td>GSPL mainline from Sankosh River, Srirampur to Siliguri</td></tr>
</table>
</td></tr>
<tr><td rowspan="2">5</td><td rowspan="2">Time for completion of job</td><td>Six (06) months for each group independently</td></tr>
<tr><td>The above time period shall be reckoned from the date of site clearance given by Engineer-in-Charge through specific notice. This is excluding the monsoon period and the monsoon period will be at the discretion of EIC as per site condition.</td></tr>
<tr><td>6</td><td>a) Tender Fee</td><td>NIL</td></tr>
<tr><td rowspan="4"></td><td>b) Download period of e-tender documents</td><td>From 09:00 Hrs on 22.06.2018 to 16:00 Hrs on 12.07.2018
The tender document can be downloaded from IOCL's e-tender portal https://iocletenders.nic.in</td></tr>
<tr><td>c) Pre-bid Meeting</td><td>On 11:00 Hrs of 28.06.2018
Venue : GSPL unit HQ , Sector 3, Noonmati, Guwahati, Assam – 781020
Contact No : 7637010850
Email Id : mohammada@indianoil.in
The queries regarding the particular tender shall be forwarded to the above mentioned mail id prior to pre bid meeting.</td></tr>
<tr><td>d) Online bid preparation & submission</td><td>From 09:00 Hrs on 22.06.2018 to 16:00 Hrs on 12.07.2018</td></tr>
<tr><td>e) Online bid opening</td><td>On 13.07.2018 at 16:00 Hrs or at the earliest convenience thereafter.</td></tr>
<tr><td>7</td><td>Earnest Money Deposit (EMD)</td><td>
<table>
<tr><th>Sl. No.</th><th>Group</th><th>EMD Amount</th></tr>
<tr><td>1</td><td>Group A</td><td>₹ 26,384.00</td></tr>
<tr><td>2</td><td>Group B</td><td>₹ 21,201.00</td></tr>
<tr><td>3</td><td>Group A + Group B</td><td>₹ 47,585.00</td></tr>
</table>
EMD shall be submitted/ remitted in any one of the following form/ mode:
• On line EMD payment through Net Banking/NEFT on e-tender portal. For more information regarding the same please refer "Special Instructions to the Bidders for participating in e-tender (SITB)".
• Bank Guarantee in lieu of EMD (value not less than ₹ 1.0 Lakh) from any Nationalized/ Scheduled Bank in the standard format annexed to the GCC.

<u>EMD SUBMITTED IN FORM OR THROUGH MODE OTHER THAN MENTIONED ABOVE SHALL NOT BE ACCEPTED</u>.

<u>Entities exempted from submission of EMD</u>: Central / State PSUs / JVs of IOC/ Micro and Small Enterprises registered with agencies/bodies as per the Public Procurement
</td></tr>
</table>

<table>
<tr><td></td><td></td><td>Policy for MSEs Order 2012, issued by Ministry of Micro, Small and Medium Enterprises, Govt of India, irrespective of the items for which they are registered with the said agencies/bodies. The registration shall be valid as on the Techno-Commercial bid opening date.

The scanned copy of the BG/ NSIC or MSME Registration Certificate shall be uploaded as EMD exemption document on the e-tender portal. The EMD in the form of BG in original shall be delivered through Post/ Courier/ in Person by Bank/ the Bidder to the office of Tender Inviting Authority within seven (07) working days from the date of opening of technical bids.
Tenders without EMD are liable to be rejected.</td></tr>
<tr><td>8</td><td>Pre-qualification Criteria (Financial):</td><td></td></tr>
<tr><td></td><td>a) Minimum Annual Turnover in any of the last three financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18</td><td>
<table>
<tr><th>Sl. No.</th><th>Group</th><th>Annual Turnover</th></tr>
<tr><td>1</td><td>Group A</td><td>₹ 15.83 Lakhs</td></tr>
<tr><td>2</td><td>Group B</td><td>₹ 12.72 Lakhs</td></tr>
<tr><td>3</td><td>Group A + Group B</td><td>₹ 28.55 Lakhs</td></tr>
</table>
Proof of annual turnover shall be submitted in the form of audited balance sheet of three preceding financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18. If the Bidder is not required to get its accounts audited under Section 44AB of The Income Tax Act, 1961, certificate from a Practicing Chartered Accountant towards the turnover of the Bidder along with copies of Income Tax Returns for preceding three financial years shall be submitted.</td></tr>
<tr><td></td><td>b) Minimum Value of Single completed Work Order for similar nature of work during last 05 (five) years ending on the start date for download of this tender.</td><td>
<table>
<tr><th rowspan="2">Number of similar completed Work(s)</th><th colspan="3">Single Work Order Value excluding Service Tax/ GST shall not be less than</th></tr>
<tr><th>Group A</th><th>Group B</th><th>Group A + Group B</th></tr>
<tr><td>1 (One) Work Order</td><td>₹ 11.18 Lakhs</td><td>₹ 8.98 Lakhs</td><td>₹ 20.16 Lakhs</td></tr>
<tr><td>Or 2 (Two) Work Order</td><td>₹ 8.94 Lakhs</td><td>₹ 7.19 Lakhs</td><td>₹ 16.13 Lakhs</td></tr>
<tr><td>Or 3 (Three) Work Order</td><td>₹ 6.71 Lakhs</td><td>₹ 5.39 Lakhs</td><td>₹ 12.10 Lakhs</td></tr>
</table>
The Bidder should have successfully completed similar nature of work(s) for the minimum aforesaid value, as a main or sub-contractor, during last 05 (five) years ending on the start date for download of this tender.

“(Carrying out coating survey (CAT/ DCVG/ CIPL)/ installation or maintenance of CP system/ interference survey in crude oil/ petroleum products/ Gas pipeline)” shall be treated as work of similar nature.

Bidders to note the following:
• Qualifying value of Single Work Order specified at Point Sr. No. 8(b) above shall be exclusive of Service Tax/ GST.
• The completion certificate submitted by the Bidder shall separately indicate the Service Tax/ GST amount included in the value of completed job OR separate certificate from respective Client, mentioning the Service Tax amount (if any), included in the value of completed job under consideration should be submitted by the Bidder.
• In case Service Tax/ GST amount/ component is not specified in the submitted completion certificate, then the amount equivalent to rate of applicable Service Tax/ GST for the subject tender shall be deducted from the value of completed job mentioned in the completion certificate to arrive at the value of completed job without Service Tax/ GST.</td></tr>
<tr><td>9</td><td>Pre-qualification criteria (Experience/ Technical):</td><td>The Bidder should have past experience of successfully completing the work of “(Carrying out coating survey (CAT/ DCVG/ CIPL)/ installation or maintenance of CP system/ interference survey in crude oil/ petroleum products/ Gas pipeline)” as a main or sub-Contractor, during last 05 (Five) years ending on the start date for download of this tender.</td></tr>
<tr><td></td><td colspan="2">Note: For details regarding qualification criteria and award of work please refer Clause 21.0.0 and Clause 28.0.0 & associated sub-clauses of Special Instructions to Tenderers.</td></tr>
</table>

10	Tender issuing/ receiving Authority	**Chief Technical Services Manager** Indian Oil Corporation Limited, Guwahati Siliguri Pipeline, Sector 3, Noonmati, Guwahati-781020, Assam **Contact-Phone Nos.**: +91-9435021762, +91-9540464555 **E-mail:**dasak6@indianoil.in;biswasj@indianoil.in;sauvikkg@indianoil.in; mohammada@indianoil.in
11	Mode of submission of bids	**Only e-submission is permissible**. **Physical Bids shall not be accepted.** The Bidders shall **upload the legible scanned copies** of the pre-qualification documents on the e-tendering portal along with their offer as stated in the Instructions to the Bidders for participation in e-Tendering.
12	Others: • IOCL reserves the right to cancel tender in full/part, extend e-tender download/submission date, etc. without assigning any reasons thereof. No compensation shall be payable for the efforts made by the Bidders. **Reasons for rejection shall be disclosed on written representation by the concerned Bidder whose bid is rejected**. • All the intending Bidders shall visit IOCL's website for any corrigendum/ amendment and take these into cognizance before submitting the tender. Failure of the Bidder to submit tender without taking cognizance of corrigendum/ amendment issued by IOCL shall make the bid liable for rejection. • In the event of any legal disputes arising out of the tender and/or contract, the same shall be within the jurisdiction of **Guwahati (Assam)** courts only.	

Place: Guwahati (Assam) **Chief Technical Services Manager**
Date: 21.06.2018

For more information please visit our website https://iocletenders.nic.in

CHAPTER-I

SPECIAL INSTRUCTIONS TO TENDERERS

CHAPTER-I

SPECIAL INSTRUCTIONS TO TENDERERS

INDEX

Cl. No.	DESCRIPTION	Page No.
1.0.0	INTRODUCTION	3
2.0.0	INFORMATION	3
3.0.0	BIDDING ENTITIES	4
4.0.0	TENDER DOCUMENTS	5
5.0.0	PRICE OF TENDER DOCUMENT	5
6.0.0	TENDER INSTRUCTIONS	6
7.0.0	SITE VISIT	7
8.0.0	LOCAL CONDITIONS	7
9.0.0	SUBMISSION OF TENDER	7
10.0.0	CURRENCIES AND PAYMENT	12
11.0.0	CORRIGENDUM/ ADDENDA/ CLARIFICATION	12
12.0.0	SIGNING OF TENDER	13
13.0.0	CONFORMITY TO TENDER TERMS & CONDITIONS	13
14.0.0	LAST DATE FOR SUBMISSION OF BIDS	14
15.0.0	VALIDITY OF OFFER	14
16.0.0	EARNEST MONEY DEPOSIT (EMD)	14
17.0.0	MODIFICATION/ WITHDRAWAL OF BIDS	16
18.0.0	LANGUAGE OF BID	16
19.0.0	PRE-BID MEETING	17
20.0.0	OPENING OF TENDER	17
21.0.0	CRITERIA FOR EVALUATION	17
22.0.0	EVALUATION AND COMPARISON OF BIDS	21
23.0.0	CLARIFICATION OF BIDS	21
24.0.0	APPOINTMENT OF CONSULTANTS	22
25.0.0	PRE-PRICE BID MEETING	22
26.0.0	NEGOTIATIONS	22
27.0.0	RIGHTS OF THE OWNER TO ACCEPT OR REJECT TENDERS	22
28.0.0	AWARD OF WORK & NOTIFICATION	22
29.0.0	ORDER OF PRECEDENCE	23
30.0.0	EXCLUSION OF LIABILITY	23
31.0.0	RETIRED COMPANY DIRECTORS	24
32.0.0	CANVASSING	24
33.0.0	COLLUSIVE OR FRAUDULENT TENDERS	24
34.0.0	COST OF PREPARATION & SUBMISSION OF BIDS	24
35.0.0	SIGNING OF CONTRACT	24
36.0.0	BENEFITS/PREFERENCE FOR MSE (MICRO AND SMALL) BIDDERS:	24
37.0.0	ISSUANCE OF COMPLETION CERTIFICATE	26

CHAPTER-I

SPECIAL INSTRUCTIONS TO TENDERERS

1.0.0 INTRODUCTION

1.1.0 Indian Oil Corporation Limited, a company registered in India under the Companies Act 1956, through its **Chief Technical Services Manger , GSPL , Guwahati** (hereinafter called as "Tender Inviting Authority") invites tenders in electronic format from bona fide and experienced Indian Contractors of requisite financial standings and reputation for the following job(s):

Name of Work:	**Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector**
Tender No.	**GSPL/GHY/TS/2018-19/16**
Location:	**Group A** – **Assam Sector** – **GSPL mainline from Guwahati to Sankosh River, Srirampur** **Group B** – **West Bengal Sector** – **GSPL mainline from Sankosh River, Srirampur to Siliguri**
Unit/Region/Division:	**Guwahati Siliguri Pipeline (GSPL) of Pipelines Division**

(More specifically described in the Tender Documents, upon the terms & conditions mentioned in the Tender Documents)

1.2.0 Indian Oil Corporation Limited (IOCL), the largest commercial Government of India undertaking in the country is engaged in the business of refining, transportation and marketing of crude oil and petroleum products. The Indian Oil Corporation Limited is one of the Fortune "Global 500" companies.

1.3.0 The Pipelines Division of the Owner owns and operates about 11,000 Km of petroleum (Crude, Product, LPG, R-LNG) pipeline network across the length & breadth of the country.

The owner has constructed Guwahati Siliguri pipeline, which is primarily meant for transporting refined petroleum products ex-Guwahati refinery to Betkuchi, Siliguri and ex- Bongaigaon refinery to Hasimara and Siliguri. The Guwahati Siliguri pipeline consists of approximately 434.7 km long 8 inches nominal dia pipeline from Guwahati to Siliguri having intermediate stations at Betkuchi, Bongaigaon, Hasimara and Madarihat.

2.0.0 INFORMATION

2.1.0 Special Instructions to Tenderers (SIT) shall be read in conjunction with the "Instructions to Tenderers" annexed to the General Conditions of Contract (GCC) (Page No. 114 to 121) and other documents forming part of this contract wherever the context so requires.

2.2.0 Notwithstanding the sub-division of the documents into these separate parts and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract in so far as it may be practicable to do so.

2.3.0 Where any portion of the "Instruction to Tenderers" is repugnant to or at variance with any provision of the Special Instructions to Tenderers, then the provision of the Special Instructions to Tenderers shall be deemed to override the provisions of the "Instruction to Tenderers" and shall, to the extent of such repugnance or variations prevail.

2.4.0 The information given in the Tender Documents and in the Plans and Drawings forming part thereof is merely intended as a general information without undertaking on the part of the Owner as to its accuracy and without obligation relative thereto upon the Owner. Tenderers are expected to conduct their own surveys and investigations prior to tendering.

2.5.0 All headings of the clauses in the Tender Documents are intended solely for the purpose of giving a broad indication of the contents of the clause and not as a summary of the contents thereof.

2.6.0 The "Tender Document" shall mean the same as the "Bid Document". "Tender" shall have the same meaning as "Bid" or "Offer". The "Tenderer" shall have the same meaning as the "Contractor" or "Bidder".

3.0.0 BIDDING ENTITIES

3.1.0 Tenders may be submitted by following entities provided they meet the pre-qualification criteria as specified in the detailed NIT and amplified under Clause 21.0.0 hereof:

a) An Individual (Proprietary)/ Partnership/ Limited Company (called Sole Bidder)

b) Joint Venture (JV) Company registered in India as per Company Act'1956.

c) Indian company wholly owned Subsidiary of a foreign or Indian company on the strength of its parent/ sister company.

3.2.0 **The bids from Consortium shall not be accepted.**

3.3.0 **Wholly owned Indian Subsidiary of a Foreign/ Indian Company**

3.3.1 A company registered in INDIA which is a wholly owned subsidiary of a foreign/Indian company can be qualified based on the experience, technical and financial standings of its parent company provided the parent company declares under a memorandum of understanding with the Indian subsidiary that it would be jointly and severally responsible for all the jobs being carried out by its subsidiary.

3.3.2 In such a case the following shall be complied and necessary documents from Parent Company/ sister concern shall be submitted:

a) The works under consideration shall either be executed by the Parent Company/ sister concern or shall be executed under supervision and back-up of the Parent Company/ sister concern.

b) Details of mode of work execution, manpower, machinery deployment by the parent company/ sister concern shall be furnished along with the Bid.

c) Responsibility matrix of Parent company, sister concern & bidding company not limited to the following shall be furnished along with the bid:

i) Overall responsibility for execution of entire work under the contract shall be with the parent company/ sister concern.

ii) Both the parent company, sister concern & bidding company are jointly & severely responsible in terms of tender.

iii) Parent company/ sister concern will provide all technical & technology transfer to bidding company.

iv) Experienced technical personnel from parent company/ sister concern will be stationed at work site to provide technical support during execution of field works.

v) The parent company/ sister concern will ensure deployment of requisite equipments required for undertaking the different works as per tender requirements.

vi) The correspondences for execution of work will be made with bidding company. However, parent company/ sister concern is to ensure its presence in progress review meeting

whenever called for by the Owner.

vii) The Parent Company & sister concern shall furnish an undertaking to be jointly and severally responsible with the subsidiary for due, proper and timely performance of the Contract and discharge of liabilities of its subsidiary in the event of the award of work to its subsidiary.

3.3.3 Failure to honour the commitment as per Memorandum of Understanding shall attract all actions including but not limited to General Conditions of Contract Clause 7.0.0.0, 4.7.3.0, 4.7.4.0, holiday listing of bidding company, Parent company/Sister concern.

3.3.4 Bidder to submit notarised copy of deed between parent company / sister concern and bidding company (subsidiary / sister). The deed should be signed by the competent authority of both the company respectively. Proof of competent authority should also be submitted.

3.4.0 Each tenderer can submit only one tender bid for one package. The names of specialized sub-contractor(s) may, however, appear in different offers submitted by different tenderers.

3.4.1 It is clarified that a person shall be deemed to have submitted more than one bid if a person bids in an individual or proprietorship format and/or in a partnership or association of persons format and/or in a Company format.

3.4.2 A company shall for this purpose include any artificial person whether constituted under the laws of Indian or of any other country.

3.4.3 A person shall be deemed to have bid in a partnership format or in association of persons format if he is a partner of the firm which has submitted the bid or is a member of any association of persons which has submitted a bid.

3.4.4 A person shall be deemed to have bid in a company format if the person holds more than 10% (ten percent) of the voting share capital of the company which has submitted a bid, or is a Director of the Company which has submitted a bid, or holds more than 10% (ten percent) of voting share capital and/or is a Director of a holding Company which has submitted the bid.

4.0.0 TENDER DOCUMENTS

4.1.0 The Tender Documents shall consist of the following:

Part	Contents
I of II Techno-commercial Part	• Invitation to Tender • Instructions to Tenderers (GCC Page No. 114-121) • Special Instructions to Tenderers (SIT) • Special Conditions of Contract (SCC) • General Conditions of Contract (GCC) • Technical Specifications (If any) • Plans & Drawings (if any) • Form of Contract (GCC Page No. 130-132) • Form of Tender (including formats annexed to it) • Annexure(s) • Form of Schedule of Rates • Corrigendum(s)/Addendum/Addenda/Clarification(s) to Tender Documents (issued at later date if necessary)
II of II Price Bid	• BOQ

5.0.0 PRICE OF TENDER DOCUMENT

5.1.0 **Tender Fee is not applicable for this tender.** The tender document can be downloaded from the Owner's e-tendering portal https://www.iocletenders.nic.in

5.2.0 The Owner has hosted the complete set of the Tender Documents on its e-tendering web site https://www.iocletenders.nic.in and has ensured its availability for downloading the full set comprising of the above.

5.3.0 **Bidders to note that Physical/ Hard Copy of the Tender Documents shall not be issued from the office of Tender Inviting Authority. Any request in this regard shall not be entertained under any circumstances.**

6.0.0 TENDER INSTRUCTIONS

6.1.0 The Bidder is expected to download the complete set of tender document from the Owner's website as per the index of the tender, fully read, understand & compile the same as per the various instructions contained herein and in "Instructions to Tenderers".

6.2.0 All information disclosed to the Tenderers by way of the Tender Documents shall be considered confidential and any person/ Tenderer shall not part with possession of the Tender Documents or copy or disclose information thereof to any party, except as may be necessary for carrying out the work. It being understood that the Tender Documents have been downloaded by the eligible Tenderer solely for the purpose of bidding. Where it is found that any Tenderer has violated and has disclosed sensitive and vital information impugning on the security of the installation/ national security, necessary action, as may be called for, may be taken against the Tenderer concerned in addition to his being liable to be black listed and/ or barred from participating in future bids.

6.3.0 The Tender Documents shall always be & remain the exclusive property of the Owner without any right with the Bidder to use them for any purpose except for submitting the tender in accordance with the provisions of these instructions by the prospective Bidders and for use by the successful Bidder with reference to the work. The Owner shall have no obligation to return to the Bidder the Tender Documents submitted by the Bidder.

6.4.0 The Tender shall be completely filled in all respects and shall be tendered together with requisite information & annexures. The Bidder is expected to examine the Tender Documents, including all instructions, specifications and drawings in the tendering document. Failure to furnish all the information required by the tendering documents or tender incomplete in particulars or submission of tender not substantially responsive to the tendering document in every respect shall result in rejection of the Tender.

6.5.0 Tenderers shall set their quotations in firm figures and without qualifications or variations or additions in the terms of the Tender Documents. Tenders containing qualifying expressions such as "subject to minimum acceptance" or "subject to prior sale", or any other qualifying expression or incorporating terms & conditions at variance with the terms and conditions incorporated in the Tender Documents shall be liable to be rejected.

6.6.0 It is hereby stipulated that the Tenderers shall not affect any corrections/ alterations/ modifications in the Tender Documents and various formats contained therein. Any correction/ alteration/ modification in the Tender Documents by the Bidder shall make their tender liable for rejection.

6.7.0 All communication from the Owner to the Tenderers shall be sent by speed post/courier as may be applicable. The tenderers must acknowledge each and every communication sent by the Owner by returning the duplicate copy or the Xerox copy of the said communication duly signed by the Tenderer(s) in token of receipt. Wherever feasible, communications may be sent by Fax/E-mail also followed by confirmatory copies by speed post/ courier.

6.8.0 The Bidder shall be deemed to have satisfied him before tendering as to the correctness and sufficiency of his tender for the works and of the rates stated by him in the Schedule of Rates, which shall cover his entire obligation under the contract and all matters and things necessary for proper completion of the works.

7.0.0 SITE VISIT

7.1.0 The tenderer may visit the site to pre-assess the nature of terrain before submission of the tender to have an idea & familiarize themselves with the existing conditions & the nature of the job. Non-familiarity of the site shall not be considered for extra claim or for not carrying out the work in strict conformity with the specifications. Owner shall not be responsible for any variation in the crossing and terrain details mentioned in the tender. Bidder should quote their prices considering amount for rock removal / trenching in waterlogged / marshy areas etc. for satisfactory execution of the work. The intending Bidders may contact the following office(s) of the Owner with due appointment for necessary guidance and help regarding site visits:

Address	Contact person/ Contact details
Indian Oil Corporation Ltd. (Pipelines Division) Guwahati Siliguri Pipeline, Noonmati, Sector-iii, Guwahati-781020	**Shri Dulal Chakraborty,** **Maintenance Manager,** **Phone:** +91- 9540464555 **E-mail: dulalc@indianoil.in**

8.0.0 LOCAL CONDITIONS

8.1.0 The Tenderer shall before tendering and shall be deemed before tendering to have undertaken a thorough study of the proposed work, the job site(s) involved, the site conditions, soil conditions, the terrain, the climatic conditions, the labour, power, material and equipment availability and transport and communications facilities, the availability and transport suitability or borrow areas, the availability of land for right of way and temporary office and accommodations, quarters, and all other facts and facilities necessary or relevant for the formulation of the tender, supply of materials and the performance of the work. Without prejudice to the aforegoing, the tenderers may be allowed access to any information regarding the site of the work, the investigations conducted relative thereto, such as soil investigation etc. But, these shall be only indicative in nature and tenderers are expected to collect their own data for preparation and submission of their tender. Any claim at a later date based on either incorrectness or inadequacy of the information/data made available by the Owner to a tenderer shall not be entertained. The Owner shall be fully absolved of any and all liabilities in this regard.

8.2.0 It will be imperative on the part of each Tenderer to acquaint himself with all local laws, conditions and factors which may have any effect or bearing on the execution of works and supplies under the scope of this tender. In their own interest, the Tenderers are required to familiarise themselves with (but not limited to) the Indian Income Tax Act, Indian Companies Act, Indian Customs Act, Factories and Boiler Act, Contract Labour (Regulation and Abolition) Act, Arbitration Act, PF Act and other related Acts and Laws and Regulations of India with their latest amendments as applicable. The Owner shall not entertain any clarification from the Tenderer(s) regarding such local conditions.

8.3.0 It must be understood & agreed that above factors have been properly investigated and considered while submitting the offer. Any claim regarding financial or any other adjustments to contract price or completion time or non-conformity to specifications on account of lack of clarity of such factors shall not be entertained.

9.0.0 SUBMISSION OF TENDER

9.1.0 Tenders shall be submitted **online only** on the Owner's e-tendering portal https://www.iocletenders.nic.in**. Manual Bids submitted in any form through Telex/ Fax/ Telegram/ E-mail/ Courier/ Registered Post/ manually shall not be accepted.**

9.2.0 However, documents which necessarily have to be submitted in originals like EMD and any other

documents mentioned in the Tender Documents have to be submitted offline. The Owner shall not be responsible in any way for failure on the part of the Bidder to follow the instructions.

9.3.0 The Tender shall be submitted in "**Two Bid System**" in two parts viz. **Techno-commercial Bid** and **Price Bid (BoQ)** as detailed below:

TECHNO-COMMERCIAL BID	:	Technical and commercial aspects of the offer along with the techno-commercial volumes of the Tender Documents digitally signed. **NO PRICE** shall be indicated in this part.
PRICE BID (BOQ)	:	Price portion of the offer (**not to be opened along with Technical Bid**) shall be submitted separately. BOQ (.xls file) shall be uploaded in "Finance" Packet **without any change in format**. This part shall **CONTAIN ONLY PRICE** and no conditions whatsoever. Any condition mentioned in this part of the tender shall not be considered at the time of evaluation of the tender.

9.4.0 **TECHNO-COMMERCIAL BID**

9.4.1 The Bidder shall furnish, in Techno-commercial part, the requisite information/ data/ detail, etc. strictly in manner described below and shall be supported by the requisite documents/ annexure. Failure to furnish all information required as per the Tender Documents or submission of bid not substantially responsive to the Tender Documents, in every respect, shall result in rejection of the bid. Decision of the Owner, in this regard, shall be final & binding on the Bidder.

9.4.2 All amendments to the Tender Documents issued by the Owner subsequently, if any, must be signed and submitted along with the Tender. The Tender submitted by the Bidder shall take into account all such amendments.

9.4.3 Bidders shall upload legible scanned copies (preferably 300 or higher dpi resolutions) of the following documents in already pre-configured packets (named as Fee/PreQual/Technical individually or in combination) & "Other Important Documents" section on the e-tender portal:

1) Earnest Money Deposit (EMD) instrument amounting to and in manner specified under Clause 16.0.0 hereof. If the Bidder is claiming exemption from the payment of EMD as per Clause 16.7.0 hereof, a Copy of registration certificate under NSIC/ Micro, Small or Medium enterprise Development Act 2006 shall be uploaded.

2) Complete set of the Tender Documents as specified under Clause 4.0.0 hereof.

3) **Certified (Notarised/ Attested by a Gazetted Officer) copy of Power of Attorney** or other proof of authority, in favour of person who has signed the Tender using his Digital Signature Certificate (DSC), as required by Clause 12.0.0 hereof. The document shall be supplemented/ supported with the following documents:

   a) Partnership firms shall furnish the full names & current addresses of all partners, and shall annex a certified (Notarised/ Attested by a Gazetted Officer) copy of the partnership deed.

   b) If the Bidder is a Private Limited Company, the certified (Notarised/ Attested by a Gazetted Officer) copy of the Memorandum of Association, Certificate of incorporation of Private Limited Company.

   c) If the Bidder is a Public Limited Company, the certified (Notarised/ Attested by a Gazetted Officer) copy of the Memorandum of Association, Certificate of incorporation of Public Limited Company.

   d) In case of bid from the Joint Venture (JV) Company, the certified (Notarised/ Attested by a Gazetted Officer) copy of Memorandum of Association, Article of Association & Certificate of incorporation from ROC, JV agreement.

4) **Income Tax Permanent Account Number (PAN) Card**. Income Tax Permanent Account Number will be required as precondition of release of payment.

5) **Goods and Services Tax Registration Number** or copy of application for allotment of GST registration no. with tax authorities.

   The Bidder, not having GST registration, shall submit an undertaking (on company letterhead) that in case of award of contract to him it shall obtain the GST registration for its establishment and shall furnish the copy of same to the Engineer-in-Charge within 15 (fifteen) days from the date of issuance of Letter of Acceptance, otherwise the contract of the L1 bidder is liable to be cancelled.

6) **Employees Provident Fund Registration Certificate** or copy of application for allotment of Provident Fund Code with PF authorities.

   If the Bidder is not registered with the PF authorities, it has to submit the undertaking (on company letter head) that in case of award of contract to him it shall obtain the PF Code for its establishment and shall furnish the copy of same to the Tender Inviting Authority. In absence of the same, the Tender shall be liable to be rejected. In case of failure on part of the Bidder/ Contractor to furnish the PF Code Registration Certificate, the contract is liable to be terminated pursuant to the provisions of Clause 7.0.1.0 of the General Conditions of Contract. **It would also be obligatory for contractor to obtain UAN form PF authorities in respect of all workers engaged by contractors under this contract.**

7) **Audited Balance sheets for the last 03 (three) financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18 OR Certificate from a Practicing Chartered Accountant** towards the turnover of the Bidder along with copies of Income Tax Returns if the Bidder is not required to get its accounts audited under Section 44AB of The Income Tax Act, 1961.

8) Bidder's Checklist for submission of offer as per **Annexure-C** of the Tender Document.

9) Form of Tender (For Commercial Bid) in Performa as per **Annexure-A** of the Tender Document.

10) Duly filled Form of Tender (For Price Bid) in Performa as per **Annexure-B** of the Tender Document. **The space for indicating price is to be left blank in this copy.**

11) Undertaking of the Bidder for acceptance of tender terms & conditions in Performa as per **Annexure-D** of the Tender Document.

12) Exceptions/ deviations pertaining to Instructions to Tenderers, Special Instructions to Tenderers, General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Technical Specifications, Scope of Work and other general tender conditions in Performa as per **Annexure–E** of the Tender Document.

13) Each Tenderer/ Bidder shall give a declaration in the prescribed format (as per **Annexure-F** of the Tender Document) annexed to the Form of Tender that he/it/they is/are not under any blacklist declared by the Owner or by any Department of the State or Central Government or by any other Public Sector Organisation, and that there is no inquiry in respect of any corrupt or fraudulent practice pending against him/it/them. In case he/it/they are under any such list, or any inquiry is pending, he/it/they shall in the declaration give full details thereof. Such declaration in respect of a partnership firm or association of persons shall cover every partner or member of the association, and in the case of Company, shall cover every Director and Principal Shareholder of the Company and any Holding Company and/or subsidiary Company(ies) if any.

    If a tenderer is on any such List or if any such inquiry is pending against it/him/them or if the Bidder makes a false declaration, the Owner reserves the right to reject the Bid, and if the Bid has resulted into a contract, the contract is liable to be terminated pursuant to the provisions of Clause 7.0.1.0 of the General Conditions of Contract.

14) Undertaking for non-engagement of Child Labour in Performa as per **Annexure-G** of the Tender Document.

15) Declaration of relationship with the directors of IOCL in Performa as per **Annexure-H** of the Tender Document.

16) Information about the Tenderer in Performa as per **Annexure-I** of the Tender Document.

17) Consent for e-payment and bank details in Performa as per **Annexure-J** of the Tender Document. **A copy of a cancelled cheque must be attached with the document.**

18) Declaration of applicable GST in Performa as per **Annexure-K and Annexure-L** of the Tender Document.

a) The Bidder, not having **Goods and Service Tax Certificate** registration, shall submit an undertaking (on company letterhead) that in case of award of contract to him it shall obtain the **Goods and Service Tax Certificate** registration for its establishment and shall furnish the copy of same to the Engineer-in-Charge within 15 (fifteen) days from the date of issuance of Letter of Acceptance.

b) **On implementation of GST** within the "contractual delivery period"/prior to the scheduled delivery date, the bidder shall be responsible for timely updating of tax details in the GSTN so as to enable the owner to avail input tax credit. The bidder also shall inter alia comply with all requirements pertaining to "Input tax credit" provided under applicable GST Acts. In the eventuality that the owner fails to avail "input tax credit" due to mismatch on account of the vendor or owing to any reason whatsoever on account of default of the vendor, Owner, without prejudice to clause 8.15.0.0 of General Conditions of Contract and in addition to the same, reserves the right to recover the shortfall/under recovery from the bills and/ or Security Deposit (including recourse to Bank Guarantee (s)) of the vendor.

c) Tenders with estimated cost more than Rs. 20 lakhs, stating "Bidders are required to submit copies of GST Registration pertaining to the State of its operation along with the techno- commercial bid. Bidders not registered under GST Laws are liable to be rejected".

d) Tax Invoice to be submitted by the bidder in compliance with the prevailing Tax laws at the time of execution/delivery. No other invoice will be accepted as Owner intends to avail Input Tax/Cenvat Credit.

e) "Bidders to take note of Anti-profiteering measure clause in CGST (Section 171) wherein it is stated that any reduction in rate of tax on any supply of goods and services or the benefit of input tax credit shall be passed on to the recipient by way of commensurate reduction in prices."

f) Bidder is requested to acquaint themselves about GST Law/Act and other tax provisions before bidding. Bidders are advised to quote the rate considering "input tax credit" available to bidder under GST. Format for submission of GST Registration is attached as **Annexure-L** (to be submitted on bidder's Letter Head along with copy of GST Registration).

19) Details of the Bidder's experience towards completion of similar nature works during any of the last **05 (five) years** ending on the start date of download of this tender shall be submitted in format as per **Annexure-M** of the Tender Document. The details shall be duly supported with copy (ies) of Work Order(s) for similar nature works along with Completion/ Execution/ Experience Certificate(s), Schedule of Rates, etc.

20) Copy(ies) of Work Order(s) of successfully completed work(s) & of requisite value (as per

Financial Qualification Criteria detailed under SIT Clause 21.1.0) along with Completion/ Experience Certificate(s), Schedule of Rates, TDS Certificates, Payment Receipts etc.

21) Acceptance of Performa of "Indemnity Bond (For Work Completion Certificate)" attached as **Annexure-N** to the Tender Documents. The Indemnity Bond shall be submitted by the Contractor along with request for issuance of Completion Certificate.

22) **Annexure-P** New Tax Clause in GCC for GST in service contracts/Composite contracts.

23) Any other document as specified anywhere in the Tender Documents.

9.4.4 **Whether explicitly stated or not**, **Annexure A-Q** **of the Tender Document shall be submitted on Bidder's company letterhead or on the non-judicial stamp paper of appropriate value duly notarised. These annexures shall be submitted duly filled with the requisite information/ data/ details as required. None of the annexure shall be submitted blank.**

9.4.5 **Price shall not appear anywhere in TECHNO-COMMERCIAL BID.**

9.5.0 **PRICE BID**

9.5.1 **The Price Bid (BOQ) shall be uploaded in "Finance" packet on e-tender portal. The Bidder shall not upload any other documents except BOQ in this cover.**

9.5.2 **Physical price bid(s) submitted in a sealed envelope or any other form other than mentioned above shall not be accepted.**

9.5.3 **The rates/ prices quoted by the Bidder in Price Bid shall be in compliance with & taking into consideration the following provisions:**

1) The Bidder shall quote for the jobs on the basis of the items entered in the Schedule of Rates (BOQ), and shall quote for each and every item(s) entered in the Schedule of Rates (BOQ).The bidder shall quote the rates in % above or below our estimated rates.

2) Bidders to note that the prices quoted for the subject work shall be **exclusive of the applicable GST**.

3) All taxes, duties, levies & cess thereon **(excluding GST)**, including that relating to Works Contract Tax levied by certain State Governments/ Central Government shall be payable by the Bidder under the contract and shall be inclusive in the prices quoted by the Bidder. No other taxes, duties, levies & cess thereon other than those mentioned in the bid shall be deemed to form part of the bid.

4) Statutory deduction such as **Work Contract Tax, Income Tax, etc.** as applicable, shall be made by the Owner as per Govt. Rules & Regulations.

5) The prices quoted shall be all inclusive as proved for in respect of Schedule of Rates in the General Conditions of Contract and the Owner shall not entertain any claim(s) for enhancement of the price(s) on any account whatsoever.

6) For supply items under the scope of the Contractor supply, the rates quoted by the Bidder shall be all inclusive for delivery of materials at site (F.O.R. destination basis). It shall include Basic Cost, all applicable taxes, duties & levies, inspection charge, transportation charges, transit insurance auxiliary taxes, octroi, etc. as may be applicable. The consignee for despatch of materials shall be the Owner. However, the Contractor/ Supplier shall be responsible for any incidental consequences arising out during the transit of materials up to destination (site).

7) For supply of imported items under the scope of the Contractor, the Bidder shall offer the quoted price in Indian Rupees only and the cost of supply of such imported item(s) shall include Basic Cost, Packing & Forwarding, Ocean Freight, Custom Duties, Port handling charges, demurrage, wharfage and other auxiliary duties, inland transportation, insurance

and all cost incidentals to delivering the materials at work site.

8) The bid prices shall conform to the provisions of Clause 11.0.0 (Currencies & Payments) hereof.

9) Prices quoted by the Bidders shall be strictly in the given price format of bid. Prices should not be clubbed with any of items in any way i.e. complete break up as suggested to be given after each item for the materials and works covered under the scope of contract, otherwise the bid may be considered as non-responsive.

10) Unless stated otherwise in the Tender Documents, the contract shall be for the complete supplies, services and composite works as described in the relative scope of supplies, services and composite works.

9.5.4 Price Bid shall not contain any conditions whatsoever. Any condition mentioned therein shall not be considered for evaluation.

9.5.5 The Bidders are advised to fill the BOQ file as per following instructions:

1) The Bidders are advised to check the BOQ file before submitting the price bid with respect to the "Form of Schedule of Rates" attached with the Tender Documents. In case of any discrepancy in Item text, Quantity & Units in the BOQ file vis-a-vis "Form of Schedule of Rates", the "Form of Schedule of Rates" attached with the Tender Documents shall prevail.

2) Before filling the rates in BOQ, macros shall be enabled to see the quoted figures in words.

3) The Bidders are advised to fill the name of the Bidder and rates in the designated cells only. No changes shall be made by the Bidder in the matter contained in protected cells.

4) The Bidders are advised strictly not to alter or change the BOQ format/ contents. The Bidders are also advised not to paste any image file or put any additional conditions in the BOQ work sheet.

5) The Item Rates shall be filled in protected excel sheet only and shall not be submitted in other form like copy of BOQ sheet etc. as the same shall not be considered for evaluation.

6) **Any alteration/ change of BOQ format/ contents shall make the bid liable for rejection.**

9.6.0 Any Bid incomplete in any of the above requirement shall be considered as non-responsive and shall be summarily rejected without any reference whatsoever to the Bidder.

10.0.0 CURRENCIES AND PAYMENT

10.1.0 The Bidders shall quote their prices in **Indian Rupees (INR)** only.

10.2.0 All payments will be made in Indian Rupees only. In case the Contractors are required to pay any amount in foreign exchange to their sub-Contractor or for any imported items, necessary arrangement for such foreign exchange payment shall be made at their end.

11.0.0 CORRIGENDUM/ ADDENDA/ CLARIFICATION

11.1.0 Corrigendum(s)/ Addenda/ Clarification(s) to the Tender Documents may be issued prior to the date of opening of the tender (and in the case of two bid system, prior to the date of opening of price part of the bid) to clarify documents, issues arising out of various queries/ clarifications relevant to the Tender Documents from the Bidders or to reflect modifications in the design or contract terms & conditions.

11.2.0 Such Corrigendum(s)/ Addenda/ Clarification(s) shall be uploaded by the Tender Inviting Authority on the Owner's e-tendering portal https://www.iocletenders.nic.in.

11.3.0 Each participating Bidder shall download and submit one digitally signed copy of such Corrigendum(s)/ Addendum(s)/ Clarification(s) along with his/its/their tender. All such Corrigendum(s)/ Addenda/ Clarification(s) issued shall form part of the Tender Documents.

11.4.0 It is incumbent on all the Bidders to view, download, understand and furnish Corrigendum(s)/ Addenda/ Clarification(s) along with his/its/their tender. Any deviation/ clarification due to non-receipt of Corrigendum(s)/ Addenda/ Clarification(s) at later stage should not be entertained. Any bid without copy of Corrigendum(s)/ Addenda/ Clarification(s), if issued, as mark of its acceptance may not be accepted.

12.0.0 SIGNING OF TENDER

12.1.0 The tender comprising of all attached documents should be digitally signed using digital signatures issued by an acceptable Certifying Authority (CA) in accordance with the Indian IT Act 2000.

12.2.0 All the Tenderers are required to obtain a legally valid Digital Signature Certificate (abbreviated as DSC) as per Indian IT Act 2000 from the licensed Certifying Authorities (CA) operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The DSC is issued by licensed Certifying Authorities in the name of a person authorized for filing Bids/ Offers on behalf of his Company. The Bidder can submit his Bid/ Offers online only after digitally signing the bid/ documents with the above allotted Digital Signatures.

12.3.0 Digital Signature Certificate (DSC) is a unique digital code which can be transmitted electronically and primarily identifies a unique sender. The objective of digital signature is to guarantee that the individual sending the message is who he or she really claims to be just like the written signature. The Controller of Certifying Authorities of India (CCA) has authorized certain trusted Certifying Authorities (CA) who in turn allots Digital Certificates on a regular basis. Documents which are signed digitally are legally valid documents as per the Indian IT Act (2000).

12.4.0 The person signing the tender shall state his capacity and also the source of its ability to bind the Tenderer. The power of attorney or authorisation or other document constituting adequate proof of ability of the signatory to bind the Tenderer shall be furnished with the Tender. The Owner may reject outright any tender unsupported by adequate proof of the signatory's authority.

12.5.0 **Witnesses:** Name, occupations and addresses of the Witnesses shall be stated below their signatures. Witnesses shall be persons of status.

12.6.0 If the Bidder is a Proprietary firm, the Tender shall be digitally signed by the Proprietor of the firm or its authorised representative holding power of attorney.

12.6.1 If the Bidder is a Partnership firm, the Tender shall be digitally signed in the partnership name by all the partners of the firm or by the partner holding power of attorney or by the authorised representative of the firm holding power of attorney.

12.7.0 If the Bidder is a Private Limited Company, the Tender shall be digitally signed in the name of company by the authorised representative of the company holding power of attorney.

12.8.0 If the Bidder is a Public Limited Company/ Corporation, the Tender shall be digitally signed in the name of company by the authorised representative of the company holding power of attorney.

12.9.0 In Bidder is a Joint Venture, the Tender shall be digitally signed by an authorised representative of JV holding power of attorney signed by legally authorised signatories of all the JV members.

13.0.0 CONFORMITY TO TENDER TERMS & CONDITIONS

13.1.0 Bidders are expected to bid strictly on the format and subject to the terms and conditions specified in the Tender Documents. Any bid containing any deviation which in the sole opinion of the Owner is material, or which in the opinion of the Owner cannot be evaluated so as to place other bidders at a disadvantage, shall be liable to have his/its/their bid rejected.

13.2.0 In case any Bidder/ Tenderer considers it inevitable or unavoidable to make certain deviations from requirements and stipulations of the Tender Document, such Bidder/ Tenderer shall bring out the same separately and prominently in a separate statement (in format attached at **Annexure-E**) enclosed with the tender (or techno-commercial part of the tender in case of two part tenders) so

as to make it prominently noticeable by the authority opening the tender. Such a statement should clearly indicate the particular page number, clause, or section of the Tender Document deviated from, the scope and extent of the deviations and explanation as to why the said deviation is considered inevitable or unavoidable in the view of the Tenderer.

13.3.0 Any exceptions/ deviations stipulated anywhere in Tender other than in "Schedule of Exceptions and Deviations" (in format attached at **Annexure-E**) shall not be considered and any and all implication of such non-consideration shall be to the Bidder's account. In case the prescribed form is not submitted, it shall be presumed that the Bidder confirms to fully agree with and comply with the tender stipulations in all respects.

13.4.0 All correspondences from the Owner as well as from the Contractor regarding clarifications during techno-commercial evaluation of the bid and mutually accepted deviations to tender document shall be concluded as "Agreed Variations". The "Agreed Variations" shall form part of the contract and all other correspondences in this regard will be treated as null and void.

14.0.0 LAST DATE FOR SUBMISSION OF BIDS

14.1.0 The Bidders are advised in their own interest to ensure that bids are submitted on e-tendering portal well before the due date and time of submission of bids. The Owner does not take any responsibility in case of failure of the Bidder to upload the documents or to submit bid within specified date & time of bid submission.

14.2.0 Bids cannot be submitted/ modified/ re-submitted on e-tendering portal once the due date & time for submission has reached.

14.3.0 The system time (IST) that will be displayed on e-tendering web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance.

15.0.0 VALIDITY OF OFFER

15.1.0 The Tender shall remain valid and irrevocable up to the expiry of **120 (One Hundred Twenty) days** from the date of opening of **Techno-commercial Bid**. The rates quoted in the schedule of rates shall remain firm during the validity period.

15.2.0 Within the validity period of **120 (One Hundred Twenty) days**, any tender submitted against this Tender Notice/ Tender Enquiry, no reduction in price by the Tenderer suo motto would be permitted after opening of tenders. If any Tenderer, on his own reduces the price quoted by him in this tender after the opening of tenders, the concerned tender would be liable for rejection.

15.3.0 In exceptional circumstances, prior to expiry of the original bid, the Owner may request the Bidder for a specified extension in the period of validity. The request and the responses thereto shall be made in writing or by fax/ e-mail. The Bidder may refuse the request without forfeiting his bid security. The Bidder agreeing to the request will not be permitted to modify his bid, but will be required to extend the validity of his bid security correspondingly. The provisions of discharge and forfeiture of bid security shall continue to apply during the extended period of the bid validity.

16.0.0 EARNEST MONEY DEPOSIT (EMD)

16.1.0 The Bidder shall, as a condition for the consideration of the Tender, pay the sum specified in form & manner below:

Earnest Money Deposit (EMD)		
Group	**In Figures**	**In Words**
Group A	**₹ 26,384.00**	**Rupees Twenty Six Thousand Three Hundred Eighty Four Only**

Group B	**₹ 21,201.00**	**Rupees Twenty One Thousand Two Hundred One Only**
Group A + Group B	**₹ 47,585.00**	**Rupees Fourty Seven Thousand Five Hundred Eighty Five Only**

16.2.0 Bidders shall submit EMD in any one of the forms & manner as described hereunder:

16.2.1 Bidders can remit EMD through **online payment gateway** available on e-tender portal. **For detailed information regarding online EMD payment through e-tender portal, please refer "Special Instructions to the Bidder for participating in e-Tender (SITB)" uploaded separately with tender documents**.

16.2.2 A Bank Guarantee (BG) may be accepted by the Owner towards Earnest Money Deposit or Initial Security Deposit or Security Deposit or otherwise, as the case may be, provided the amount of such Bank Guarantee is not less than Indian Rupees 100,000.00 (Indian Rupees One Lakh). It shall be an unconditional Bank Guarantee issued by a Scheduled Bank in India or an Indian Branch of foreign Bank (acceptable to the Owner) and operating in India under the guidelines of Reserve Bank of India. The BG shall be valid up to **06 (six) months** from the date of opening of **Techno-commercial Bid** of the tender.

Bank Guarantee shall be strictly in the format prescribed (as annexed to General Conditions of Contract) by the Owner for the specific purpose for which the Bank Guarantee is required to be furnished. The Bidders to ensure that the text of bank guarantee submitted shall match the prescribed format verbatim including all comma/ full stops. In case of a deviation/ variation, necessary amendment shall be sought from the Bidder/ their bankers.

The scanned copy of the Bank Guarantee shall be uploaded as EMD exemption document on the e-tender portal. The EMD in the form of Bank Guarantee in original shall be delivered through Post/ Courier/ in Person by Bank/the Bidder to the office of Tender Inviting Authority within seven (07) working days from the date of opening of Technical bid. The Bank Guarantee shall be furnished in sealed envelope clearly super-scribing the **Tender No. and Name of the work, last date & time of submission.** The **Name, Complete postal address, Contact Number & E-mail ID** of the Bidder/ Bank shall be written on the bottom left corner of the each envelope. The envelope should be addressed in the name of Tender Inviting Authority and should be delivered at the following address:

CHIEF TECHNICAL SERVICES MANAGER,
INDIAN OIL CORPORATION LIMITED,
GUWAHATI-SILGURI PIPELINE,
P.O.: NOONMATI, SECTOR-III, GUWAHATI,
DIST.: KAMRUP, ASSAM– 781020

Note:
a) For the purpose of receipt of BG, the time recorded in the Receipt / DAK section against receipt shall also be considered as receipt time.
b) Only those Physical BG instruments found matching with the copy submitted in the e- portal shall be considered as valid.
c) However, bids of bidders who have deposited permanent EMD (if applicable) and have mentioned the same on the portal shall be considered as valid bids.

16.3.0 The tenderer is liable to be rejected for failure to deposit EMD in the manner aforesaid or for

failure to furnish proof of having deposited earnest money along with the Tender.

16.4.0 The Owner takes no responsibility for delay, loss or non-receipt of EMD sent by Post/ Courier. In case of non-receipt of EMD at the office of Tender Inviting Authority on or before due date, the Bids received shall be considered as without EMD and shall liable to be rejected. No further communication shall be entertained in this regard.

16.5.0 **Entities exempted from submission of EMD**: Central / State PSUs / JVs of IOC/ Micro and Small Enterprises registered with agencies/bodies as per the Public Procurement Policy for MSEs Order 2012, issued by Ministry of Micro, Small and Medium Enterprises, Govt of India, irrespective of the items for which they are registered with the said agencies/bodies. The registration shall be valid as on the Techno-Commercial bid opening date.

16.6.0 In case an Indian Company, otherwise eligible for exemption from submission of EMD as per Government of India Guidelines, submits a bid in association (as Joint Venture or in any other manner) with another company (not eligible for EMD exemption) then the EMD must be submitted with the offer.

16.7.0 The EMD of the successful Bidder (hereinafter called the Contractor) will be discharged after the Bidder has signed the agreement and furnished the required Initial Security Deposit/ Security Deposit or shall be adjusted against Initial Security Deposit as required as per General Conditions of Contract.

16.8.0 The Earnest Money deposited by the successful Tenderer shall be forfeited if the successful Tenderer fails to deposit or furnish the requisite Initial Security Deposit as specified in the General Conditions of Contract and/or fails to commence work at each job site within 10 (ten) days of handing over the job or any part thereof to him and/or fails to execute the contract in accordance with the Form of Contract within 30 (thirty) days of receipt of Letter of Acceptance in this behalf from the Owner or within such extended period as may be permitted by the Owner for the purpose.

16.9.0 The Earnest Money of unsuccessful Bidder(s) shall be refunded/ deposited to their respective bank accounts through e-payment without any interest. Bidders should provide their bank details in the format as per Annexure-J for the purpose.

17.0.0 MODIFICATION/ WITHDRAWAL OF BIDS

17.1.0 A bidder who has submitted his/it/their bid are permitted to alter/amend or withdraw/ resubmit his/its/their bid as per the instructions given in the online bid re-submission document in the Bidder's Manual Kit on www.iocletenders.nic.in, provided the bid(s) has/have not yet been opened.

17.2.0 After the bid(s) has/have been opened, Bidders shall not be permitted to alter/modify or withdraw his/its/their bid.

17.3.0 A bidder who purports to alter/modify or withdraw his/its/their bid/offer after opening of bid(s), within the period during which he/it/they promised to keep his/its/their bid valid, shall be liable to have his/its/their tender rejected and his/its/their Earnest Money Deposit or Bank Guarantee submitted by way of Earnest Money forfeited/encashed.

17.4.0 A bidder who offers unsolicited reduction in the price offer whether before or after the opening of the price part of the tender(s)/bid(s) shall be liable to have his/its/their bid(s) rejected. Bidders may, however, at any stage offer a reduction if such reduction is solicited or if the Owner gives the Bidder an opportunity to offer such reduction.

18.0.0 LANGUAGE OF BID

18.1.0 The bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the Owner shall be written in English language only. Supporting

documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an appropriate translation of pertinent passages in the above stated language. For the purpose of interpretation of the bid, the English language shall prevail.

19.0.0 PRE-BID MEETING

19.1.0 Pre-bid meeting shall be held as per time & at the venue specified in the Tender Invitation. In case pre-bid meeting information is not available in the Tender Invitation & the Owner decides to have a pre-bid meeting to clarify any issues, necessary intimation with adequate notice shall be posted on e-tendering portal.

19.2.0 Bidders can submit their queries through the e-tendering portal before the due date of Pre-bid meeting. The queries shall be replied during the pre-bid meeting or the Owner will respond through the e-tendering portal to any request for clarification received by the dead line for submission of queries.

19.3.0 Brief summary of the queries received through e-tendering portal, queries raised by the attending tenderers during pre-bid meeting and the clarifications given by the Owner respect thereof, as well as any further information which the Owner choose to furnish to the tenderers, shall be posted on e-tendering portal in the form of Minutes of the Meeting or Addendum, which shall form a part of the Tender Documents, unless otherwise specified.

19.4.0 Further, during the pre-bid meeting, the Owner may also arrange demonstration of the e-tendering system to the Bidder present and who may be interested in attending the same.

19.5.0 **If pre-bid meeting information is not available in the e-tender notice then the same shall not be held.**

20.0.0 OPENING OF TENDER

20.1.0 The **Part-I: Techno-Commercial Bid** of all the tenders submitted online up to the due date & time for receipt of bids shall be opened as per due date and time as specified in e-tender notice. The system time (IST) that will be displayed on e-Procurement web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance.

20.2.0 The Owner shall not be responsible for delayed submission of offers or non-submission of offers due to any reason whatsoever. The responsibility of ensuring online & on-time submission of their offers lies entirely with the Bidders. The Bidders are requested to submit the bid online much before date and time of submission, failing which the Owner shall not be responsible for any such technical problem.

21.0.0 CRITERIA FOR EVALUATION

Any Bidder participating in this tender enquiry must have qualification as described herein and the evaluation of their offers shall be primarily done on the basis of the following qualifying criteria:

21.1.0 **Financial Criteria**

21.1.1 **Minimum Annual Turn Over:**

21.1.1.1 Annual Turnover of the Bidder for at least one of the last 03 (Three) financial years i.e. 2015-16, 2016-17 & 2017-18 shall not be less than the Minimum Annual Turnover value as specified below:

Group	Minimum Annual Turnover
Group A	**₹ 15.83 Lakhs**
Group B	**₹ 12.72 Lakhs**

Group A + Group B	**₹ 28.55 Lakhs**

21.1.1.2 Proof of annual turnover shall be submitted in form of audited balance sheets for preceding three financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18. However, if the Bidder is not required to get its accounts audited under **Section 44AB** of **The Income Tax Act, 1961**, certificate from a Practicing Chartered Accountant towards the turnover of the Bidder along with copies of Income Tax Returns for preceding three financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18 shall be submitted.

21.1.2 **Financial Experience (Single Work Order Value):**

21.1.2.1 The Bidder should have successfully completed similar nature works of value mentioned below, as a main or sub-Contractor, during last 05 (Five) years ending on the date of commencement of download of this tender:

Number of similar completed Work(s)	**Single Work Order Value excluding Service Tax/ GST shall not be less than**		
	Group A	**Group B**	**Group A + Group B**
01 (One) similar completed work	**₹ 11.18 Lakhs**	**₹ 8.98 Lakhs**	**₹ 20.16 Lakhs**
OR			
02 (Two) similar completed works	**₹ 8.94 Lakhs**	**₹ 7.19 Lakhs**	**₹ 16.13 Lakhs**
OR			
03 (Three) similar completed works	**₹ 6.71 Lakhs**	**₹ 5.39 Lakhs**	**₹ 12.10 Lakhs**
"Carrying out coating survey (CAT/ DCVG/ CIPL)/ installation or maintenance of CP system/ interference survey in crude oil/ petroleum products/ Gas pipeline" shall be treated as work of similar nature.			

21.1.2.2 The Bidder shall submit supporting documents towards their financial experience of having successfully completed requisite value of similar nature work in the form of copy (ies) of work order(s) along with Schedule of Rates (SOR) and successful Experience/ Completion certificate(s). The Experience/ Completion certificate(s) shall have details like work order no., date of work order, brief description of the work, ordered & final executed value of job, duration of the work, completion date etc. in addition to other stated requirements. The supporting documents towards required qualification and experience shall be self-certified.

21.1.2.3 Completed value of work (excluding Service Tax/ GST) as mentioned in the completion certificate shall be considered for evaluation against required single work order value. The completion certificate submitted by the Bidder shall separately indicate the Service Tax/ GST amount included in the value of completed job OR separate certificate from respective Client, mentioning the Service Tax/ GST amount (if any), included in the value of completed job under consideration should be submitted by the Bidder. In case Service Tax/ GST amount/ component is not specified in the submitted completion certificate, then the amount equivalent to rate of applicable Service Tax/ GST for the subject tender shall be deducted from the value of completed job mentioned in the completion certificate to arrive at the value of completed job without Service Tax/GST.

21.1.2.4 If the Bidder submits the work order(s) issued by Private Limited Company, Partnership or Proprietary firms, then the Bidder shall also submit the TDS Certificate(s). In case the TDS certificate is not available, the Bidder must submit the proof of payment received against the work

order(s).

21.1.2.5 The similar nature of work(s) completed by the Bidder as a sub-contractor shall be considered for the purpose of meeting financial experience criteria as mentioned above subject to submission of following documents (in addition to documents stipulated under Clause 21.1.2.3 & 21.1.2.5 above):

a) Certificate(s) from the End user/ Owner/ Consultant of the Owner stating that they have been allowed/ permitted as sub-contractor for the job.

b) Copy of work order along with SOR & completion certificate issued by the Client to Main Contractor.

21.1.2.6 The aforesaid documents must be for the work executed during last 05 (Five) years ending on the date of commencement of sale of this tender. The value of job done before or after this period will not be considered for this purpose. In case, the document submitted is for the period exceeding the said period, the Owner reserves the right to calculate the pro-rata amount.

21.2.0 **Experience (Technical) Criteria:**

21.2.1.0 The Bidder should have past experience of successfully completing the work of **"Carrying out coating survey (CAT/ DCVG/ CIPL)/ installation or maintenance of CP system/ interference survey in crude oil/ petroleum products/ Gas pipeline"**, as a main or sub-Contractor, during last 05 (Five) years ending on the date of commencement of download/ sale of this tender.

21.2.1.1 The Bidder shall submit supporting documents towards their experience of having successfully completed requisite value of similar nature work in the form of copy(ies) of work order(s) along with Schedule of Rates (SOR) and successful Experience/ Completion certificate(s). The Experience/ Completion certificate(s) shall have details like work order no., date of work order, brief description of the work, ordered & final executed value of job, duration of the work, completion date etc. in addition to other stated requirements. The supporting documents towards required qualification and experience shall be self-certified.

21.2.2 The Bidder shall enclose documents to show that he has previous experience in having successfully completed the works in the recent past together with the name of Owner, location of sites and value of contract in the format as per **Annexure-N**. It shall be the responsibility of the Bidders to fill complete, correct and accurate information in line with the requirements/ stipulations of the Tender Document, regarding their past experience and other information required to facilitate due evaluation/ consideration of their tenders.

21.2.3 Any technical deviation must be mentioned in the **Annexure-E** only, otherwise **NIL** shall be marked by the bidder.

21.3.0 **Qualification Criterion to be met by different Bidding Entities as defined under Clause 3.0.0 hereof:**

21.3.1 **An Individual (Proprietary)/ Partnership/ Limited Company (called Sole Bidder):**

Sole Bidder has to meet both financial qualification criteria as per Clause 21.1.0 and experience (Technical) qualification criteria as per Clause 21.2.0 amplified above.

21.3.2 **Joint Venture (JV) Company registered in India as per Company Act'1956:**

i) One JV member has to meet financial qualification criteria as per Clause 21.1.0 and 60% of the experience (Technical) qualification criteria as per Clause 21.2.0 amplified above.

ii) The other JV member has to meet the experience (Technical) qualification criteria as per Clause 21.2.0 and 60% financial qualification criteria as per Clause 21.1.0 amplified above.

21.3.3 **Indian company wholly owned subsidiary of a foreign or Indian company on the strength of its Parent/ Sister company:**

A company registered in INDIA which is a wholly owned subsidiary of a foreign or Indian company

can be qualified:

i) Based on the qualification (financial qualification as per Clause 21.1.0 & experience (Technical) qualification as per Clause 21.2.0 amplified above) of its parent company provided the parent company declares under a memorandum of understanding with the Indian subsidiary that it would be jointly and severally responsible for all the works being carried out by the bidding company.

OR

ii) Based on the qualification (financial qualification as per Clause 21.1.0 & experience (Technical) qualification as per Clause 21.2.0 amplified above) of its sister concern, which is also a 100% subsidiary of parent company provided that:

a) Bidding entity shall enclose an agreement between them, parent company and the sister company, mentioning therein that all would be jointly and severally responsible for all the jobs carried out by the bidding company and successful execution of job.

b) The sister subsidiary company on its own and not through any other arrangement like Technical Collaboration agreement meets the experience (Technical) qualification as per Clause 21.2.0 amplified above.

21.4.0 **Notwithstanding any other condition/ provision in the tender documents, in case of ambiguity or incomplete documents pertaining to pre-qualification criteria, bidders shall be given only one opportunity with a fixed deadline after bid opening to provide complete & unambiguous documents in support of meeting pre-qualification criteria. In case the Bidder fails to submit any documents or submits incomplete documents within the given time, the Bidder's tender shall be rejected.**

21.5.0 **Based on the details/ data/ information submitted by the Bidder as a part of its bid, the Owner shall evaluate the capability & credentials of the Bidder either by visiting the site(s) or by any other means. Such evaluation shall also form the basis of technical qualification of the Bidder.**

21.6.0 In addition to above, Techno-commercial evaluation of the Bidders shall be done on the basis of their financial soundness, past experience credentials, present commitments, deployment capability of specified equipment for the work and confirmation regarding strict adherence to the proposed schedule (to be submitted in the form of a bar chart) for the present work.

21.7.0 In case pre-qualification of potential bidders/ tenderers had been undertaken earlier and completed for the work, only bids from pre-qualified bidders will be considered for evaluation and award of the contract. It shall be incumbent on the Tenderer to submit necessary evidence of having been pre-qualified for the particular job in question or part thereof, by submitting copies of intimation received from the Owner intimating about their being pre-qualified.

21.8.0 In case no pre-qualification of bidders/tenderers had been undertaken by the Owner, the Tenderer shall include full details in support of their capacity, capability and financial standing for taking up and completing the work successfully.

21.9.0 In case it is found that the Bidder is not meeting the pre-qualification criteria as per the supporting document submitted by the Bidder, their offer shall be liable to be rejected.

21.10.0 The Bidders to note that the issuance of the tender document shall not to be construed in any manner as the qualification for the tendered work. While bidding, the prospective Bidder(s) shall ensure on their own that the above qualifying criteria have been fully understood and complied with and the same shall be evaluated based on the documents submitted with their offer in line with tender conditions.

21.11.0 The Bidders to note that the issuance of the tender document shall not to be construed in any manner as the qualification for the tendered work. While bidding, the prospective Bidder(s) shall

ensure on their own that the above qualifying criteria have been fully understood and complied with and the same shall be evaluated based on the documents submitted with their offer in line with tender conditions.

22.0.0 EVALUATION AND COMPARISON OF BIDS

22.2.0 The Owner reserves the right to consider/ evaluate only substantially responsive tenders. A substantially responsive tender is one, which, in the opinion of the Owner (which shall be final and binding on the Tenderer(s)), substantially conforms to all the terms, conditions, specifications and requirements of the Tender Document without material deviations or reservations in respect of any of the following:

a) Scope, Quality or Performance of the work;

b) The Owner's rights or the Tenderer's obligations under the contract as per the tender documentation;

c) Such deviations the correction of which would affect the competitive position of other tenderers, who have submitted substantially responsive bids;

d) Any tender unaccompanied by the Earnest Money in a form which is not acceptable as per the Tender Documents, or falling short of the requirement of the Tender Document, shall be liable for rejection.

22.3.0 Prior to detailed evaluation of bids, the Owner will determine whether each bid is substantially responsive to the requirement of bidding documents. If the bid is not substantially responsive to the requirements of the Tender Documents, it will be rejected by the Owner, and may not subsequently be made responsive by the Bidder having corrected or withdrawn the non-conforming deviation or reservation.

22.4.0 The requirements of specifications shall be approximately studied for compliance on each of the points. The Bidder may explain clearly his stand on the specifications not complied with. However bids in compliance to each point would be deemed "Responsive Bid".

22.5.0 Bids which do not cover the complete scope of work will be treated as incomplete and shall be rejected.

22.6.0 Bid stipulating delivery schedule beyond that specified may not be considered.

22.7.0 Substantially responsive bids shall be evaluated by the Owner to ascertain the relative position of the best evaluated bid in the interest of the Owner, for the total of the complete supplies and services covered by the Tender Documents including Technical Specifications and as set out in the Price Schedule.

22.8.0 The evaluation of bids shall be done on the basis of total prices quoted for the complete scope of work and supply, services and conditions elsewhere as specified in the tender.

22.9.0 Techno-commercial evaluation of bids shall be done group-wise as per pre-qualification criteria for individual groups amplified under Clause 22.0.0 hereof and other conditions stated elsewhere in the Tender Documents.

22.10.0 Upon conclusion of techno-commercial evaluation, the price bids of all the techno-commercially qualified/ acceptable bidders shall be opened and **lowest (L-1) bidder** shall be identified.

23.0.0 CLARIFICATION OF BIDS

23.2.0 The Bidder shall submit all relevant data, documentation and drawings as specified in the Tender Documents so as to enable the Owner to conclude the evaluation at the first instance itself. In complete information/ submission will be treated as non-compliance and no technical clarification may be sought from the Bidders.

23.3.0 The Owner may, at his discretion, call for technical/commercial clarification or any other

clarifications required, from any Tenderer(s), in respect of his/its/their tender(s).

23.4.0 To assist in the examination, evaluation and comparison of bids, the Owner may ask the Bidders individually for clarification of their Bids, including break-down of unit rates. The request for clarification and the response shall be in writing, but no changes in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of errors discovered by the Owner during the evaluation of bids.

24.0.0 APPOINTMENT OF CONSULTANTS

24.2.0 The Owner shall have full discretion to engage consultant of his choice for expert advice on the evaluation of bids, inspection of equipments, supervision of installation and commissioning or any other services deemed necessary from time to time. The Bidder shall be bound to answer all relevant queries from the Owner/ Consultant.

25.0.0 PRE-PRICE BID MEETING

25.2.0 Pre-price bid meeting shall be held as a prelude to price bid opening if required. Representatives of the Bidders shall attend the pre-price bid meeting for resolving the outstanding issues, if any, and for other mutual clarifications. The date and time shall be conveyed to the technically and commercially qualified Bidders at a later date.

25.3.0 Any modification to the tendering document which may become necessary as a result of the pre-price bid meeting shall be made by the Owner exclusively by issue of an addendum.

26.0.0 NEGOTIATIONS

26.2.0 Negotiations shall not be conducted with the Bidder as a matter of routine. However, the Owner reserves the right to conduct negotiation.

27.0.0 RIGHTS OF THE OWNER TO ACCEPT OR REJECT TENDERS

27.2.0 The Owner reserves the right to reject, accept or prefer any or all or part of the Tender or to annul the bidding process at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders. **The reasons for rejection shall be disclosed on written representation by the concerned Bidder whose bid is rejected.**

27.3.0 Although ordinarily the lowest responsive bid amongst the bids submitted by tenderers and considered by the Owner as qualified and competent shall be preferred, the Owner reserves the right not to accept the lowest bid if in its opinion this would not be in the interest of the work.

27.4.0 Tenders in which any of the particulars and prescribed information is missing or is incomplete in any respect and/or the prescribed conditions are not fulfilled shall be considered non-responsive and are liable to be rejected.

27.5.0 The Owner may waive any minor infirmity or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

27.6.0 The price bid of only those Bidders will be opened who are considered techno-commercially acceptable to the Owner. Date of opening of the price bid shall be informed to the technically qualified Bidders.

28.0.0 AWARD OF WORK & NOTIFICATION

28.1.0 **Entire work under the scope of each group of this tender is indivisible in nature and shall be awarded to a single Tenderer without any bifurcation of scope of work**. However, if the Owner in its discretion considers that the interest of the work requires split, the Owner may split the works between two or more tenderers.

28.2.0 Separate work orders shall be issued for each group of this tender.

28.3.0 Prior to the expiry of bid validity prescribed by the Owner and any extension thereof granted by the Bidder, the Owner may notify the successful Bidder in writing by e-mail or telefax, with post confirmation copy by registered letter intimating the Owner's intention of accepting the bid. The said Letter hereinafter and in Conditions of Contract shall be referred to as the "Letter of Intent". The Owner shall issue a Letter of Acceptance subsequently which shall indicate besides all the relevant details of the contract, the rates which corporation will pay to the Bidder in consideration of the Services by the Bidder as prescribed by the Contract.

28.4.0 The Owner shall not be liable for any obligation until such time it has communicated to the successful Bidder its decision to entrust the work.

28.5.0 The Contract shall be prepared after the notification of award. Until the formal contract is signed, the bid documents and Addendum(s) at any time and any modification thereto and/or there from agreed upon the corporation read with the Bidder's Final bid shall be considered as contract.

28.6.0 The contract documents thus shall consist of the following:

a) Form of Contract

b) Original Bid Document issued with its Annexure, etc.

c) Addendum/ Corrigendum/ Amendment to Bid documents issued, if any.

d) Letter of Intent.

e) Letter of Acceptance along with Schedule of Rates including statement of agreed variations, if any.

29.0.0 ORDER OF PRECEDENCE

29.1.0 In case of contradiction between General Conditions of Contract, Special Conditions of Contract, Schedule of Rates, the following shall prevail in order of precedence:

a) Formal Contract

b) Acceptance of Tender

c) Price schedule annexed to the letter of acceptance/work order

d) Agreed variations annexed to the letter of acceptance

e) Addenda to the Tender Documents

f) Special Conditions of Contract

g) Special Instructions to Tenderers

h) General Conditions of Contract

30.0.0 EXCLUSION OF LIABILITY

30.1.0 It is expressly understood and agreed that:

a) Indian Oil Corporation Limited is entering into this contract solely on its own behalf and not on behalf of any other person or entity. In particular, the Government of India is not a party to this contract and has no liabilities, obligations, or rights whatsoever hereunder.

b) Indian Oil Corporation Limited is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and the general principles of contract laws.

30.2.0 The Contractor expressly agrees, acknowledges and undertakes that:

a) Indian Oil Corporation Limited is not an agent, representative, or delegate of the Government of India, and that the Government of India is not and shall not be liable of any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly the Contractor

hereby expressly waives, releases and forgoes any and all actions or claims whatsoever, including cross claims impending claims or counter claims, against the Government of India arising out of the contract and covenants not to sue, the Government of India for any manner of claims, causes of action or things whatsoever arising of or under this contract.

31.0.0 RETIRED COMPANY DIRECTORS

31.1.0 No Director of the Owner is allowed to tender for a period of 2 (two) years after his retirement from the employment of the Owner, without the previous permission of the Owner. The Contract, if awarded, is liable to be cancelled if the Tenderer is found at any time to be such a person and has not obtained the permission of the Owner before submission of the Tender. Any tender by a person aforesaid shall carry a disclosure thereof on the tender, and shall be accompanied by a copy of the document by which the requisite consent is given. Such disqualifications shall apply to every partner of a partnership firm.

31.2.0 The Tenderer is required to submit a declaration (in Performa attached at **Annexure-H**) stating whether he is a relative of any Director of the Owner, or whether the Tenderer is a firm, whether a Director of the Owner or relative of such Director is a partner in the firm, or whether the Tenderer is a Company, whether a Director of the Owner or relative of such Director is a substantial member holding more than 10% (ten percent) of the paid up capital in the Company, or a Director of the Company.

32.0.0 CANVASSING

32.1.0 Canvassing in connection with tenders is strictly prohibited and the Tenders submitted by the Tenderers who resort to canvassing shall be liable to rejection.

32.2.0 Subject to the provisions concerning clarification of Bids, no Bidder shall contact the Owner on any matter relating to its bid from the time of the bid opening up to the time that the contract is awarded.

32.3.0 Any effort by the Bidder or Bidder's representative however described to influence the Owner in any way concerning scrutiny, consideration, evaluation of the Bid(s) or decision concerning award of contract shall entail rejection of Bid.

32.4.0 The Owner will deal with the Bidder on a principal bases, without involvement in any manner in India or abroad of any agent or consultant or associate or other person howsoever described.

33.0.0 COLLUSIVE OR FRAUDULENT TENDERS

33.1.0 In case it appears to the Owner, after examining the tenders received, that any 2 (two) or more tenders are collusive or otherwise manipulated to the disadvantage of the Owner and against the spirit of ethical competition, the Owner reserves the right to summarily reject such tenders. It shall not be incumbent on the Owner to prove any collusion or other malpractice in this regard.

34.0.0 COST OF PREPARATION & SUBMISSION OF BIDS

34.1.0 The Bidder shall prepare the tender at his/its/their own risk and shall bear all costs of preparing and submitting his/its/their tenders, as well as all other costs of tendering for the work and the Owner shall take no liability for these costs, regardless of the conduct of outcome of the tendering process.

35.0.0 SIGNING OF CONTRACT

35.1.0 The successful Tenderer(s) shall be required to execute a formal contract in accordance with the Form of Contract within 30 (thirty) days from the date of receipt of Letter of Acceptance from the Owner, or such extended time as may be permitted by the Owner for the purpose to do so. In case of default on part of the successful Tenderer, the Earnest Money deposited by the successful Tenderer shall be forfeited.

36.0.0 BENEFITS/PREFERENCE FOR MSE (Micro And Small) BIDDERS:

36.1.0 As per Public Procurement Policy for Micro & Small Enterprises (MSEs) Order, 2012 issued vide Gazette Notification dated 23.03.2012 by Ministry of Micro, Small and Medium Enterprises of Govt. of India, Micro & Small Enterprises must be registered with any of the following in order to avail the benefits/ preferences available vide Public Procurement Policy MSEs Order, 2012:

a) District Industries Centres (DIC)
b) Khadi and Village Industries Commission (KVIC)
c) Khadi and Village Industries Board
d) Coir Board
e) National Small Industries Corporation (NSIC)
f) Directorate of Handicraft and Handloom
g) Any other body specified by Ministry of MS&ME

36.2.0 MSEs participating in the Tender must submit the certificate of registration with any one of the above agencies indicating the details of the particular tendered item along with their bid.

36.3.0 The registration certificate issued from any one of the above agencies must be valid as on the Techno-commercial bid opening date. The successful bidder should ensure that the same is valid till the end of the Contract Period.

36.4.0 The MSEs who have applied for registration or renewal of registration with any of the above agencies/ bodies, but have not obtained the valid certificate as on the Techno-commercial bid opening date, are not eligible for exemption/ preference.

36.5.0 The MSEs registered with above mentioned agencies/ bodies are exempted from payment of Earnest Money Deposit (EMD).

36.6.0 **Purchase Preference:** subject to meeting terms and conditions stated in the tender document including but not limited to prequalification criteria, MSEs registered with the above mentioned agencies/bodies for the tendered item/services shall be allowed purchase preference as under:

Where the tendered quantity can be split, MSEs quoting a price within a price band of L1 price + fifteen percent (15%) shall be allowed to supply/ provide services up to twenty percent (20%) percent of total tendered quantity provided they match L1 price for the Tender. In case the tendered quantity cannot be split, MSE shall be allowed to supply total tendered quantity provided their quoted price is within a price band of L1 price + fifteen percent (15%) and they match the L1 price for the Tender. In case of more than one such MSEs are in the price band of L1 price + fifteen percent (15%) and match the L1 price, the supply/ services may be shared proportionately in case the job can be split. If the job cannot be split, then the first opportunity to match L1 price of the Tender shall be given to MSE who has quoted lowest price among the other MSEs and the total job shall be awarded to them if they match the L1 price of the Tender. If the MSE who has quoted lowest price among the other MSEs in the price band of L1 + fifteen percent (15%) does not agree to match the L1 price for the Tender, then the MSE with next higher quoted price in the price band of L1 + fifteen percent (15%) in order shall be given chance to match the L1 price for award of the complete job.

Type of Tendered Work	Price Quoted by MSE	How to Finalise Tender
Can be Split	L1	Full Order on MSE
Can be Split	Not L1 but within price band of L1+15%	20% order on MSE subject to matching L1 price
Cannot be Split	L1	Full order on MSE

Cannot be Split	Not L1 but within price band of L1+15%	Full order on MSE subject to matching L1 price

36.7.0 Out of the twenty percent (20%) target of annual procurement from Micro & Small Enterprises, four percent (4%) shall be earmarked for procurement from MSEs owned by Scheduled Caste (SC) & Scheduled Tribe (ST) entrepreneurs. In the event of failure of such MSEs to participate in the tender process or meet the tender requirements and L1 price, four percent (4%) sub-target so earmarked shall be met from other MSEs.

36.8.0 To qualify for entitlement as SC/ST owned MSE, the SC/ ST Certificate issued by District Authority must be submitted by the Bidder in addition to certificate of registration with any one of the agencies/ bodies mentioned under Clause 26.1.0 hereof. The Bidder shall be responsible to furnish necessary documentary evidence for enabling IOCL to ascertain that the MSE is owned by SC/ST Entrepreneurs. MSE owned by SC/ ST is defined as:

a) In case of proprietary MSE, proprietor(s) shall be SC/ST
b) In case of partnership MSE, the SC/ST partners shall be holding at least fifty one (51%) shares in the enterprise.
c) In case of Private Limited Companies, at least fifty one 51% share shall be held by SC/ ST promoters

36.9.0 The subject tendered works shall be treated as Non-Split tender unless & otherwise mentioned specifically for splitting the job. Hence the purchase preference to MSEs shall be applicable for complete 100% job as per conditions stated above.

37.0.0 ISSUANCE OF COMPLETION CERTIFICATE

In consonance with the provisions of clause 5.5.3.0 of General Conditions of Contract, only a completion certificate duly issued by Engineer-in-Charge shall be considered to be a valid completion certificate under the contract. Any completion certificate, communication or the like purported to be read as a completion certificate issued by any authority/person/official other than the Engineer-in-Charge shall be invalid and void for all intents and purposes whatsoever.

CHAPTER-II

SPECIAL CONDITIONS OF CONTRACT

CHAPTER-II

SPECIAL CONDITIONS OF CONTRACT

INDEX

Cl. No.	DESCRIPTION	Page No
1.0.0	GENERAL	2
2.0.0	BRIEF DESCRIPTION OF WORK & SITE LOACTION	3
3.0.0	SCOPE OF WORK	4
4.0.0	CATHODIC PROTECTION SYSTEM:	5
5.0.0	SURVEY PROCEDURE:	5
6.0.0	REPORT/ DOCUMENTATION	7
7.0.0	OTHER TERMS AND CONDITIONS:	8
8.0.0	VARIATION IN ITEM QUANTITIES	9
9.0.0	MATERIALS SUPPLIED BY THE CONTRACTOR	9
10.0.0	SCOPE OF SUPPLY	9
11.0.0	WATER & POWER SUPPLY	10
13.0.0	PERMITS, CONSENTS, LICENCES, ETC.	10
14.0.0	PERFORMANCE OF WORK	10
15.0.0	SETTING OUT OF THE WORKS	10
16.0.0	CONDITIONS OF WORK	11
17.0.0	TIME OF COMPLETION	11
18.0.0	FORCE MAJEURE	11
19.0.0	PROGRESS SCHEDULE	11
20.0.0	PROGRESS REPORT	12
21.0.0	DEFECT LIABILITY, LATENT DEFECTS AND GUARANTEE	12
22.0.0	SECURITY DEPOSIT	13
23.0.0	MEASUREMENT AND PAYMENT TERMS	13
24.0.0	PLACE & MODE OF PAYMENT	13
25.0.0	PERSONAL ACTS AND LIABILITIES	13
26.0.0	TAXES & DUTIES	14
27.0.0	LABOUR LAWS AND REGULATIONS	18
28.0.0	INDEMNITY AND INSURANCE	19
29.0.0	PATENT AND ROYALTIES	20
30.0.0	ENVIRONMENTAL PROTECTION & POLLUTION CONTROL	20
31.0.0	SAFETY, FIRE AND SECURITY REGULATIONS	20
32.0.0	ADHERANCE TO SAFETY PROCEDURES AND PRACTICES	22
33.0.0	CLEARING OF SITE	23
34.0.0	ARBITRATION & JURISDICTION	23
35.0.0	CONCILIATION	23
36.0.0	COMPLIANCE TO ISO-14001	24

CHAPTER-II

SPECIAL CONDITIONS OF CONTRACT

1.0.0 GENERAL

1.1.0 Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, Technical Specifications, Drawings and other documents forming part of this contract wherever the context so requires.

1.2.0 Notwithstanding the sub-division of the documents into these separate parts and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract in so far as it may be practicable to do so.

1.3.0 Where any portion of the General Conditions of Contract is repugnant to or at irreconcilable variance with any provision of the Special Conditions of Contract, then the relevant provision of the Special Conditions of Contract shall to that extent be deemed to override the said provision of the General Conditions of Contract and shall, to the extent of such repugnance or variations prevail.

1.4.0 Wherever it is mentioned in the specifications that the Contractor shall perform certain works or provide certain facilities, it is understood that the Contractor shall do so at his own cost, being deemed to be part of the relevant item in the Schedule of Rates (SOR) whether expressly stated or not.

1.5.0 The materials, design and workmanship of the Contractor shall satisfy the relevant Indian Standards, the specifications contained herein and codes referred to. Where the specifications stipulate requirements in addition to these contained in the standard codes and specifications, these additional requirements shall also be satisfied.

1.6.0 The Contractor shall employ qualified technical staff having experience of carrying out similar works and who are conversant with the type and standard of works elaborated under the scope of work.

1.7.0 The information given in the Scope of Work and in the plans and drawings forming part thereof is merely intended as a general information without undertaking on the part of the Owner as to its accuracy and without obligation relative thereto upon the Owner. The Bidders are expected to conduct their own surveys and investigations prior to Bidding.

1.8.0 Before bidding, the Bidder shall undertake and shall be deemed before bidding to have undertaken a thorough study of the proposed work, the job site(s) involved, the site conditions, the labour, power, water, material and equipment availability, transport and communication facilities and temporary offices and accommodation quarters, and all other factors, constraints and facilities necessary for the formulation of the Bid, supply of materials and the performance of the work.

1.9.0 The bidder shall inspect and examine the site and its surroundings and shall satisfy himself before submitting his tender as to the nature of the ground present, physical conditions and all roads, approaches and lands which may be used temporarily otherwise in connection with the works, means of access to the site accommodation he may require and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender.

1.10.0 The Bidder shall submit the duly completed data sheet as mentioned in this enquiry.

1.11.0 The Bidder shall submit all relevant data, documentation and drawings as specified in the check-list so as to enable the owner to conclude the evaluation at the first instance itself. Incomplete information / submission will be treated as non-compliance.

1.12.0 Expressions like "can offer if required' will be submitted later, will be taken up during detailed engineering after order is placed, noted etc." will be construed as TOTAL NON-COMPLIANCE and the BID shall be deemed ' NON-RESPONSIVE AND INCOMPLETE ' and REJECTED WITHOUT ANY FURTHER

NOTICE.

1.13.0 Clause-to clause compliance is required. Attaching a mere deviation statement would mean the remaining clauses stand complied.

2.0.0 BRIEF DESCRIPTION OF WORK & SITE LOACTION

The main purpose of the work is **"Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector".**

Site Location: All along the Guwahati Siliguri Pipeline in Assam & West Bengal state From GSPL Ch. 0 km To 434 km. The work is split in two parts as per the following details:

Group	Area	Locations
Group-A	Assam Sector	GSPL mainline from Guwahati to Sankosh River, Srirampur
Group B	West Bengal Sector	GSPL mainline from Sankosh River, Srirampur to Siliguri

Guwahati –Siliguri Products Pipeline is the oldest product pipeline of India and the first cross-country pipeline of Indian Oil Corporation ltd. which is in operation since 1964. There are three pumping stations namely Guwahati, Bongaigaon & Madarihat and 2 delivery Terminal/ TOP i.e Betkuchi & Siliguri existing along the pipeline. The pipeline details are as under:

LENGTH OF THE LINE	434.7 KMS
NOMINAL DIAMETER OF PIPE :	8"
OUTSIDE DIA. OF PIPE :	8.625"
THICKNESS OF PIPE	a) 0.219" (ERW Pipe) in Mainline (underground)
	b) 0.322"(8.18MM) Seamless pipe (ASTM-A-106 GR.B) in railway bridge, submerged crossing & pump station.
	c) 0.375"(9.525MM) AT SUBMERGED CROSSING(8.18 MM) SEAMLESS ASTM-A-106 GR-B)
GRADE OF PIPELINE	API-5L , GR – B
PRODUCTS PUMPED	MS, SKO, HSD
RAIL – BRIDGES	16 NOS.
SUBMERGED CROSSINGS	42 NOS
MAINLINE VALVES	62 NOS
C.P. STATIONS	13 NOS
HDD CROSSINGS	09 NOS HDD &, 01 NOS. MICRO TUNNELLING.
Line Protection measures	Impressed current Cathodic Protection system

As a matter of routine, on line PSP monitoring is being carried out quarterly and monitoring of CP System is done every fortnightly. The objective of carrying out CAT, DCVG, CIPL survey is to know:-

- Status of pipeline coating & Identify poor coating stretch & the possibilities of coating disbondment.
- Detection of coating defect / holiday including location and sizing.

3.0.0 SCOPE OF WORK

3.1.0 The Contractor's scope of work under the contract shall include but not limited to the following:

3.2.0 Pipeline Identification and marking using suitable Pipeline Locator, measuring distances, GPS tracking, Conducting CAT, CIPS and DCVG Survey, Collection of data and compiling with respect to pipeline / ROW features/ references, calculation of %IR Loss, bell hole inspection and repair, identification of coating holidays and prioritisation as per the items below:

3.3.0 Carrying out **Current Attenuation Survey (CAT)** at 100 M interval over the buried pipeline and measuring current loss along the mainline pipe and complete the entire work in all respect including locating the pipeline and supply of equipment, consumables, manpower, transportation including all taxes (excluding GST) etc. in all respects as per the given specifications, Procedure and directions of Site Engineer/ Engineer-in-Charge.

3.4.0 Conducting **Direct Current Voltage Gradient Survey (DCVG)** over the buried line to identify / pin point the coating defects in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications and approved procedures, identification of areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects as per directions of Site Engineer / Engineer-in-Charge.

3.5.0 Conducting **Close Interval ON/OFF Potential Logging (CIPL) Survey** at an interval of 1 m over the buried line in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications, and approved procedures identification of areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects and directions of Site Engineer / Engineer-in-Charge.

3.6.0 **Dig site verification/ Bell hole inspection** by manual excavation around the pipe and exposing upto bottom of the pipeline, inspection of coating visually & through holiday detector and backfilling complete as required.

3.7.0 **Repair of Coating Defects** exposed in Bell Hole Inspection using Owner Supplied Cold Applied Tape as per the detailed scope of work specified in special conditions of contract and specifications of the tender document and direction of Site Engineer/ Engineer in charge.

3.8.0 The excavated portion will be recoated with owner supplied materials (Cold Applied Tape) after proper removal of old coating and surface preparation/ cleaning, application of owner supplied primer as required. Backfilling and restoration of the area back to the original conditions after holiday testing of the coating and to the satisfaction of Engineer in Charge/Site Engineer.

3.9.0 GSPL line is laid in the common ROW along with other OIL Pipelines. The contractor to locate all the pipelines and optical fibre cable before start of the excavation work. During execution of job, any damage to the underground petroleum pipelines and/or optical fibre cable will be on account of the contractor & will be repaired by the contractor at no extra cost to the owner. Anything damaged by the contractor shall be restored by the contractor at no extra cost to the owner.

3.10.0 All the items shall be operated as per the Site requirement and as per decision of EIC/ Site Engineer.

3.11.0 Work shall be carried out simultaneously in multiple stretches/ locations. The Contractor shall open as many sites as per the instruction of EIC. Failing to do so may entitle the Contractor for penalty.

4.0.0 CATHODIC PROTECTION (CP) SYSTEM:

4.1.0 The impressed current is fed through the cathodic protection units which have been installed at CP stations and are powered by DG set/ State Electricity Board power. As back-up power DG set/ solar and battery back-up available to provide uninterrupted power to CP units. **Manual test stations (TLPs) for potential measurement are installed at every 1-2 KM along the pipeline. Details of the TLPs may be incorporated in the survey report**. Horizontal/ vertical remote Anode ground beds have been provided for CP system. All major Road (Highways)/ Railway crossings/ HDD crossing have been provided with casing pipe with TLP for potential measurement for casing as well as carrier pipes.

4.2.0 **COATING:** Primary protection is provided with CTE/ CAT coating along the Pipeline.

5.0.0 SURVEY PROCEDURE:

5.1.0 **CURRENT ATTENUATION (CAT) SURVEY**

i) Carrying out Current Attenuation Survey at 100 M interval using Radio Detection Instruments (Latest version) and measuring current loss along the mainline pipe as per direction of Engineer-in-Charge complete in all respect including locating the exact position of the buried pipeline.

ii) In this, the current injected into the pipeline creates a magnetic field around the pipe, the strength of this field being proportional to the amplitude of the current signal. Measurements of field strength after correction for depth of covered area made by recording the voltage generated in a sensing coil and indicated on a dB scale, when the coil is held over the pipeline. This should be carried out with special sensitive instrument. Loss of current from a coating defect creates a change in the field strength due to a change in the pipe current and this is detected as a change in output from the sensing coil.

iii) In this survey, surveyors measure the field strength at discrete and preset intervals. At each location, the field strength and pipeline chainage are recorded. A graph of distance versus field strength shall be produced. Sections of pipeline having poor coating quality are indicated by the steepest gradient on the line plot. The result shall also be expressed as histograms to aid interpretation. Any area indicating high signal losses may then be resurveyed using the same procedures to locate the coating defect(s) more precisely and may be conducted at a distance lesser than 100 M to pin-point the defect location.

iv) Result shall be presented in graphical form although quick analysis may be performed in the field from raw data. Areas of poor coating quality shall be readily identified from the final graphs.

v) Following the production of graphs and histograms, an evaluation system employed in pipeline coating quality assessment may assign values to the level of signal loss and the measurement distance interval. The same of the two values referred to as the “dB factor” and the “Km factor” shall be used to indicate the future action required and the level of priority for each section surveyed.

vi) The performance of the Radio detection instrument shall be checked before starting the actual field survey by measuring the field strength/dB loss per Km for the same defect when the transmitter is kept in one case ascending and in second case descending location. The dB loss measured at these two situations shall be compared and should be within permissible limit of 10%.

5.1.1 DC VOLTAGE GRADIENT SURVEY (DCVG)

i) DC Voltage Gradient survey involves the interruption of one rectifier to apply an identifiable signal to the pipeline. This is normal 1HZ frequency (1/3 sec 'ON' 2/3 sec 'OFF'). Alternatively output current from galvanic anodes or a temporary impressed current system may be interrupted. Signal strength (difference between 'ON' and 'OFF' potentials) are measured at all the test points. Current is picked up by the pipe at coating defects. Voltage gradients are set up in the region of the test defect due to current flowing through resistive soil. These gradients are detected by an operator traversing the pipeline with pair of probes and a highly sensitive voltmeter.

ii) DC Voltage Gradient Coating Defect survey is to be carried out with special sensitive instruments designed to measure the effect of an impressed current cathodic system and locate & specify the size of bare areas on buried metallic pipelines and structures.

iii) To carry out the survey, the surveyor shall walk preferably above the pipeline or just to be side of pipeline and the probe shall be placed on the ground over the pipe in the front and at an interval of about 2 meters. The surveyor shall mark the place where maximum defect is noticed by means of maximum deflection in Milli Voltmeter needle.

iv) Pulsing signal from DCVG interrupter is picked up by the sensitive Milli Voltmeters with Operator when Operator is within 10-30 ft. (3 to 9 M) of the defect. The strongest signal is noted when one probe is immediately above the defect. Instrumentation polarity indicates the defects direction when the operator has walked past the epicentre.

v) The point where fault has been located shall be checked by walking with instrument perpendicular to both sides of the pipeline and the DCVG procedure shall be repeated.

vi) Once the epicentre proximity has been determined milling along equipotential gradients will rapidly locate the defect centre which then to be pegged and properly indicated with reference to pipeline route marker.

vii) The size of coating shall be determined / indicated or graded by comparing to other defects found in the same area. The relative size can be determined by measuring the defect after excavating the pipeline at one place where coating fault has been ascertained and corresponding needle size is to be determined by comparing the deflection of needle.

viii) Coating defect shall also be classified based on percentage IR drop. The larger the coating fault the greater the % IR drop.

$$\%IR\ drop = \frac{OL\ to\ RE\ Volt\ drop \times 100}{Signal\ strength}$$

OL = Over Line
RE = Remote Earth

OL/RE at each defect is the soil voltage drop measured from the defect to remote earth or over the line to remote earth. The over the line voltage shall be measured using the Milli Voltmeter. Remote earth is considered as that part where two consecutive reading show no deflection on meter.

ix) The speed for survey shall be around 2 Km per day in poorly coated line and 10 Km per day in good-coated line. The average speed shall be minimum 5 Km per day.

x) The data should be collected in such a manner that areas of active corrosion should be indicated after survey.

xi) Example for the % IR drops calculation

On Potential	=	1.45 V
Off Potential	=	0.95 V
Signal strength at Test Lead Point	=	1.45 V – 0.95V=0.5V or 500 mV

Signal strength at defect: If defect has been located at 1500 M from 1st TLP and 500 M from next TLP & if at first TLP signal strength is 200 mV and at second TLP 300 mV, then the signal strength at defect will be:

$$= S_1 - d\,\frac{(S_1 - S_2)}{(d_2 - d_1)}$$

Where d_2 = measured distance between two TLPs.

Therefore, signal strength $= 200 - \frac{1500\ (200 - 300)}{(2000-0)} = 275$ mV

If a series of lateral Milli Volt reading to remote earth are 25, 15, 6, 4, 3, 1, 1, 0 at end the attenuated signal at the following location where defect is noted and signal strength is 275 mV

$$\%\ \text{IR drop} = \frac{(25+15+6+4+3+1+1)\text{mV}}{275} \times 100 = 20\%$$

xii) Fault Severity rating & Coating Refurbishment Priority

Defect with largest percentage IR drop to be given first priority for recoating. Plotting of % IR drop for different defects is to be carried out for enabling proper assessment.

Finally the fault rating for each defect is to be calculated/ weighted according to signal strength and soil resistivity. The weight factor is to be referred to a standard 500 mV signals & 2000 ohm-cm soil resistivity. The fault severity is to be calculated (listed with chainage) and to be plotted (Chainage Vs Severity factor) as per following.

$$\text{Fault Severity} = V \times \frac{500}{S} \times \frac{2000}{P}$$

Where,

V = Voltage difference from epicentre of defect to remote earth (mV)

S = Magnitude of signal (mV)

P = Soil resistivity of defect location (ohm-cm)

Thus defects are to be graded according to their severity rating. The more the severity rating, the more urgent is the need of repairs.

6.0.0 REPORT/ DOCUMENTATION

6.0.1 The survey data/ record/ report shall be submitted in **2 sets of CDs** and also computerized print outs with graphical representation like histogram of data, with GPS co-ordinates indicating clearly the hot spot areas, well coated areas, bad coated areas, very bad coated areas, nearest markers correlated to chainages along with %IR, severity of defect indicating coating refurbishment priority. A detailed report of survey with observation, recommendation shall be furnished to owner **(2 hard copies).**

6.0.2 The contractor will maintain all records and relevant documents as required. The contractor will submit the day to day work progress reports in two copies. Other reports/documents shall have to be submitted as mentioned in the Scope of Work.

7.0.0 OTHER TERMS AND CONDITIONS:

7.0.1 Rates shall be inclusive of all related equipment with its accessories etc. tools, tackles, transportation (Vehicle), consumables if any, labour/manpower and any/ all relevant data collection as may be deemed necessary for carrying out the survey and interpretation/ presentation of the results thereof.

7.0.2 Apart from survey related equipment, each survey team shall have a set of two mobile phones and an engineering calculator at site.

7.0.3 All survey/ inspection/ testing work shall be carried out in presence of our authorized representative only. In general the survey work shall be done up to sunset only.

7.0.4 The party has to submit details equipment/instrument to be used in the survey. The equipment used shall be of reputed make and shall be in good working condition and the same shall be certified by our Engineer/ Authorized representative for use.

7.0.5 Party can visit the site to assess the conditions, quantum and nature of work.

7.0.6 Power supply at CP by State Electricity Board, is not continuous. However DG set and battery back-up power for CP has been provided. However in emergency /extraordinary case party may arrange back up power source of their own. Owner shall not be responsible for delay due to non-availability of power at CP station.

7.0.7 Whenever and wherever possible the survey shall be carried out using owner CP unit. Even if the survey teams make arrangement of power at CP stations during the power failure time, no extra claim shall be admissible for this. Similarly when the survey team is using the CP unit for survey, no deduction shall be made from the bill on account of power.

7.0.8 If any particular point or stretch indicates conflicting or fluctuating results, the survey shall be repeated or survey may be carried out at closer intervals as directed by EIC/ site representative. No extra payments shall be made towards these extra readings.

7.0.9 All transportation cost of tools, instrument, and manpower at work site and to & fro to site will be borne by the party.

7.0.10 Exact pipeline route is required to be identified for the survey and party should conduct pipe-locating survey for doing the Surveys. GPS profile of entire pipeline stretches with all the markers, CP/ TLPs major/ minor road/ rail /water channel crossings etc, exact identification of defect locations during surveys are required to be incorporated in the reports of the survey. Reference may also be made besides GPS coordinates to Permanent features with distance like Road, Turning Points, KM Post, TLP, Boundary Pillars, Tree, Building, Electric Poles, any other distinct markers. The recommended spots for verification / repair of coating fault should be identifiable from above references or the party & pegging at hot spots shall be done (as per direction of EIC).

7.0.11 If inbuilt GPS facility is not available with CAT/ DCVG instrument party must be having portable GPS instrument for GPS mapping.

7.0.12 The EIC shall select defect spots on random basis based on field data for bell hole inspection. The scope of making bell hole inspection to check with the survey result is with survey party.

7.0.13 The bell holes shall expose the required length of pipe surface all around with required room for inspection by the owner. The defect (bare pipe, disbonding etc) shall be noted. Inspection shall be made jointly with owner representative. If coating is visibly OK, the same shall also be confirmed through holiday detector.

7.0.14 During inspection and repair of bell hole, the spot shall be cordoned. Firefighting equipment and all necessary safety and security arrangement shall be made as per direction of EIC.

7.0.15 The work shall be executed as per direction / instruction of Engineer-in-Charge/ Site Engineer. Decision of owner shall be final and binding in all matters namely work execution including interpretation and presentation of the results thereof and adherence of time frame.

7.0.16 The contractor shall supply all materials, equipment, and instrument including consumables in

sufficient quantity as may be required for performing the specified survey. Contractor shall provide for transportation, lodging, boarding etc. for his crew deployed for the work.

7.0.17 The contractor shall deploy only qualified supervisory personnel who are well conversant and authorized for this type of work.

7.0.18 During CAT survey all DAC, grounding cells for IJ etc. pipeline bonding etc. should be removed and restoration should be done by the party after completion of survey.

7.0.19 Work shall be carried out as per standard practice and International Standards and specifications.

7.0.20 The contractor shall use modern method and practice to secure results that will present a high quality of workmanship.

7.0.21 The contractor shall do the survey in such way that ROW crops damage is minimum.

7.0.22 Contractor shall take and follow safety precautions necessary and abide by the relevant rules of safety including explosive rules and regulations for the pipeline length, which falls within the pump station battery limit. In addition to precautions taken for ROW area, contractor shall also take such other additional safety/ security measures as may be directed from time to time by the Engineer-in-Charge.

7.0.23 If the work is awarded to a party with more than one group, the party shall deploy proportional set of equipment and experienced personnel for carrying out the surveys for both the groups simultaneously. The party shall have to indicate the list of manpower deployed at all the sites and Schedule of Works in the form of a Bar Chart. The party shall also submit list of survey equipment for carrying out each job simultaneously and independently.

7.0.24 Party shall mobilize to site within two weeks after receipt of work order.

8.0.0 VARIATION IN ITEM QUANTITIES

8.0.1 OWNER has rights to increase /decrease the tendered quantity of any or every item and delete any item at any stage of work at the accepted rates. The Contractor's claim for compensation or damages on account of these shall not be entertained subject to provision contained in GCC. No claims other than items rate will be entertained under any circumstances, even if the total executed values falls below 80% of the contract value.

9.0.0 MATERIALS SUPPLIED BY THE CONTRACTOR

9.1.0 Further to the provisions of various relevant sub-clauses specified under Clause 3.1.0.0 of General Conditions of Contract, specific approval of the Engineer-in-Charge or his authorised site representatives must be obtained by the Contractor before purchase of any material proposed to be used in works under this contract. The approved samples for all materials shall be kept at Site office and exhibited for reference and inspection at all times and till the completion of works. No claim/ delay on this account will be entertained by the Owner.

9.2.0 The Manufacturer's guarantees for all bought out items shall be valid for the entire defect liability period. Guarantee certificates of all bought out items as mentioned shall be submitted to the Owner by the Contractor.

9.3.0 For supply Items, prior approval of make/model will be obtained by the contractor. Decision of EIC will be final in this regard.

10.0.0 SCOPE OF SUPPLY

10.0.1 All instruments, equipments, tools, tackles, materials, consumables, manpower, and vehicle etc shall be arranged by the contractor without any extra charge **other than cold applied tape and primer** to complete the tendered job as per the scope of work. In addition to this requisite number of service units shall be kept ready so as to meet any requirement at site during the progress of work.

10.0.2 Clearance of pipeline ROW from grass, bushes etc. to facilitate movement of survey personals to carry out the survey is the responsibility of the Contractor without extra cost to IOCL.

10.0.3 Supply of data/ drawings documents available with owner, which may be required for smooth execution of the work (Details of ROW route map and TLP details etc), shall be furnished to the contractor by owner.

11.0.0 WATER & POWER SUPPLY

11.1.0 Water & electricity shall not be provided by the Owner and have to be arranged by the contractor at his own cost.

12.0.0 JOB SUPERVISION & REPORTING

12.1.0 To ensure quality of the job & security/ safety at site, contractor is required to deploy for each job/ each job site experienced & trained supervisor(s) with due approval of Engineer-in-Charge.

13.0.0 PERMITS, CONSENTS, LICENCES, ETC.

13.1.0 The Contractor shall at his own cost and initiative arrange for and obtain all necessary permissions, permits, consents and licences, as may be necessary, to transport the equipment/ material, machinery and labour along or across highway, roadway, railway, bridge, dike, dam, river or through posts of toll collection, octroi checks or other line border or barrier.

14.0.0 PERFORMANCE OF WORK

14.1.0 In addition to the stipulations of Clause 4.0.3.0 of General Conditions Contract, it is hereby stipulated that for day to day supervision of site work a Graduate Engineer or an experienced Diploma Engineer (with minimum 5 years' experience) shall be permanently deployed at site. If the said engineer is not posted at site during execution, it would be considered as non-performance of contractual obligation.

14.2.0 In supersession of Clause 4.0.4.0 of General Conditions of Contract, the Contractor shall ensure for each job site that his representative is available at all hours during which work is being performed at the job site, for the receipt of orders, instructions, notices, and other communications.

14.3.0 The Contractor must note that relevant IS Codes shall be made available at site for reference whenever demanded.

14.4.0 The Contractor shall observe, in addition to codes specified in respective specifications, all national and local laws, rules and regulations and requirements pertaining to the work.

14.5.0 If due to the stipulation or requirements at site, a particular sequence of construction operations has to be followed due to which certain interruptions to any one or more of the Contractor's operations are inherent, no claim for extra compensation or idleness resultant upon such interruption or suspension of works shall be admissible or available to the Contractor except that suitable extension of time for completion shall be granted in accordance with the provisions of Clause 4.3.5.0 of General Conditions of Contract, if the reasons for delay are not attributable to the Contractor, and the Contractor hereby specifically waives any and all contrary rights and entitlements.

15.0.0 SETTING OUT OF THE WORKS

15.1.0 The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position and levels, dimension and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith.

15.2.0 The Contractor shall be responsible to protect and maintain the appurtenances/ washout rectification works on ROW and if the same are damaged/ disturbed/ destroyed during the course of the work the Contractor shall be responsible to ensure that these are restored again at his initiative and risk & cost and have these restorations approved by Site Engineer/ EIC. Alternatively, Site Engineer shall replace such appurtenances/ washout rectification works at the risk and cost of the Contractor in all respect

15.3.0 If at any time during the progress of the works any error shall appear or arise in the position, levels, dimensions or alignment in any part of the work; the Contractor, on being required to do so by the Engineer-in-Charge or the Site Engineer, shall at his own expense rectify such error to the satisfaction of the Engineer-in-Charge or Site Engineer unless such error is based on incorrect data supplied in writing by the Engineer-in-Charge or Site Engineer in which case the expense of rectifying the same shall be borne by the Owner.

15.4.0 The checking of any setting-out or of any line or level by the Engineer-in-Charge or the Site Engineer shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench marks, pegs and other things used in setting-out the works.

16.0.0 CONDITIONS OF WORK

16.1.0 In addition to the provisions of Clause 4.2.0.0 of General Conditions of Contract and other associated clauses there under, notwithstanding the shutdown of work during rain, the Contractor shall without entitlement to any additional compensation or remuneration at his own cost and initiative, shall take all steps necessary to protect the trenches already dug, and/or the pipes and other materials, equipment and machinery at site during the rain and from the effects thereof, and the Contractor shall, at his own cost and initiative, do and perform all such rectification, repairs and/or re-workings as shall be necessary.

17.0.0 TIME OF COMPLETION

17.1.0 Further to provisions of Clause 4.3.0.0 of General Conditions of Contract & sub-clauses thereof, the time of completion for entire works under each group independently shall be Six (06) months from the date of site clearance issued by the Engineer-in-Charge through specific notice. Specific notice will be issued within three months from date of LOA.

17.2.0 The time of completion shall be excluding the monsoon period and the monsoon period will be at the discretion of EIC as per site condition.

17.3.0 The time for completion shall also include time for approval of procedures by the Owner; Submission of documents; survey work at location; submission of draft as well as final report to EIC; Construction drawings; Site Acceptance Test, Mobilisation of equipment, manpower, machinery, etc. at site; supply of materials; installation; testing; trial run; commissioning of the entire work in all respect complete to the entire satisfaction of the Engineer-in-Charge.

17.4.0 In addition to the provisions of Clause 4.2.0.0 of the General Conditions of Contract and the associated Clause, thereunder, the Contractor shall be prepared to execute the works in odd hours of regular working days, Sundays and holidays if so directed by the Engineer-in-Charge. No claim for any compensation or extra payment whatsoever on this account will be entertained.

18.0.0 FORCE MAJEURE

18.1.0 In partial modification of Clause 4.3.8.0 of General Conditions of Contract, Local "Bandh" shall be included in "FORCE MAJEURE".

19.0.0 PROGRESS SCHEDULE

19.1.0 Without prejudice to generality of provisions of General Conditions of Contract relating to "Progress Schedule" the Contractor shall take into account the instructions of the Engineer-in-Charge regarding the constraints, restraints and other requirements of works and the required sequence of works, in preparing the Progress Schedule. Notwithstanding the provisions relating to "Approved Progress Schedule", weekly or monthly work programmes may be drawn up by the Engineer-in-Charge taking into account the availability of work fronts and the requirements of other Contractors or agencies involved at the work sites and the Contractor shall abide by the weekly or monthly work programmes also so drawn-up.

19.2.0 The progress of work shall be monitored on weekly basis and reasons for not attending the targeted progress shall be recorded jointly. In the event of failure on the part of the Contractor to adhere to the weekly or monthly work programmes drawn up by the Site Engineer/ Engineer-in-Charge, the provisions of Clause 4.7.4.0 of General Conditions of Contract shall apply. The decision of the Engineer-in-Charge as to whether a failure on the part of the Contractor to comply with the weekly or monthly work programmes drawn up has occurred or not shall be final and binding on the Contractor.

19.3.0 Any delay caused due to non-availability of work fronts (including delayed availability of work front, wherever applicable) and/or due to other stipulations/ requirements at site a particular sequence of construction operations has to be followed because of which certain interruptions to any one or more of the Contractor's operations are inherent and/or due to the requirements of other Contractors and/or agencies engaged at the work sites shall not entitle the Contractor to any extra payments/ claims whatsoever, whether for idleness or otherwise. Only suitable extension of time for completion shall be granted in accordance with the provisions of Clause 4.3.5.0 of General Conditions of Contract, provided the reasons for delay are not attributable to the Contractor, and the Contractor hereby specifically waives any and all contrary rights and entitlements.

20.0.0 PROGRESS REPORT

20.1.0 During execution of the contract the Contractor shall furnish monthly progress report to the Owner for the progress of the work achieved during the month, the total progress till the month as against scheduled and anticipated completion date in respect of activities covered in the "Progress Schedule" referred to above. If required by the Owner, the Contractor shall also furnish to the Owner resources data in a specified format and time schedule. The Contractor shall also furnish any other information necessary to ascertain the progress of the work, manufacture and/or procurement as required by the Owner.

20.2.0 The Contractor shall make every effort to keep the Owner adequately informed as to the progress of the work throughout the entire project. Apart from the periodic progress reports, if the Owner calls for additional progress reports/ information related to the project the Contractor shall reply to the Owner's call within 07 (Seven) days. For frequency of the progress reports and other details, Special Conditions of Contract of the bid document may please be referred.

20.3.0 Regular progress review meetings shall be held from time to time as per mutually agreed programmes/ schedule. It shall be binding on the Contractor to attend these progress review meetings with all information as desired by the Owner.

21.0.0 DEFECT LIABILITY, LATENT DEFECTS AND GUARANTEE

21.1.0 Further to the Clause 5.6.0.0 of General Conditions of Contract & sub-clauses thereof, the Defect Liability Period for this contract shall be Twelve (12) months and shall commence from the date of completion of the works as certified by the respective Engineer-in-Charge.

21.2.0 The Contractor shall perform all works with due diligence in accordance with sound engineering practice and shall be entirely responsible for construction method or directive plans, bills of materials or other information made, prepared, given, checked, verified or accepted by the Contractor and for construction method plans bills of materials or other information to meet the stated aims of the work.

21.3.0 During the said defect liability period, the Contractor shall correct/ repair and/or rectify all such defect(s) and/or imperfections in the works performed at his own cost and the initiative.

21.4.0 The Contractor shall indemnify and keep indemnified the Owner & its every employees against all actions, proceedings, claims, costs & expenses, losses and damages suffered by the Owner arising from any negligence/ omission or default on the part of the Contractor or breach of any of the terms of the contract by the Contractor, its servants or agents observed within the defect liability period.

22.0.0 SECURITY DEPOSIT

22.1.0 Further to provisions of Clause 2.1.0.0 of General Conditions of Contract & sub-clauses thereof, the security deposit will be refunded to the Contractor after completion of defect liability period as certified by the Engineer-in-Charge and as per the terms and conditions of the contract.

22.2.0 No interest shall be payable by the corporation on Security Deposit.

22.3.0 In case of Extension of contract, if any, the Security Deposit shall be refunded after completion of the contract including extension period. In this case, no Initial Security Deposit & Ernest Money Deposit shall be required to be deposited. However the Security Deposit deducted from his RA bills shall be kept under hold and released upon completion of contract in all respects including extensions, if any.

23.0.0 MEASUREMENT AND PAYMENT TERMS

23.1.0 **Pre-condition for release of On Account Payments:**

23.2.0 Release of on account payment shall be subject to the Contractor fulfilling the following conditions:

a) Signing of the Contract.

b) Submission of Initial Security Deposit and Security deposit as defined in Clause 2.1.0.0 of General Conditions of Contract and associated sub-clauses thereof.

c) Submission of necessary invoice(s) for payment.

23.3.0 All payments shall be considered as per Schedule of Rates (SOR) only on completion of work to the satisfaction of the Engineer-in-Charge/ Site Engineer.

23.4.0 Without prejudice to stipulations of Clause 6.4.0.0 of General Conditions of Contract and relevant sub-clauses thereof, Secured Advance(s) and Mobilisation advance shall not be given to the Contractor under this contract.

23.5.0 **PAYMENT TERMS:**

Payment shall be released in running account bills on monthly basis.

90 % of the payment shall be released after successful completion of the job in totality as per the instruction from EIC. Remaining 10 % of the payment will be withheld as security deposit which will be released with the completion of the defect liability period of 12 months from the date of commissioning.

24.0.0 PLACE & MODE OF PAYMENT

24.1.0 In partial modification to provisions of Clause 6.5.1.0 of General Conditions of Contract, all payment(s) by the Owner under or in terms of the Contract shall be made in official Indian currency only **through e-payment/ EFT** to the account notified by the Contractor. The successful Bidder should provide their bank details as per the format in **Annexure-J** at the time of submission of tender.

24.2.0 The Bidders are informed that all payments, covered under this contract, shall be released from **GSPL, Guwahati office** of the Owner.

25.0.0 PERSONAL ACTS AND LIABILITIES

25.1.0 Further to the provisions of Clause 8.0.4.0 of General Conditions of Contract, any money paid to any director, attorney, agent, officer or employee of the Contractor and any receipt, settlement, acknowledgement of liability or other arrangement, agreement or document whatsoever signed by any such director, attorney, agent, officer, or employee of the Contractor or erstwhile director, attorney, agent, officer or employee of the Contractor (without notice of his cessation of interest) or by any person held out to be a director, attorney, agent, officer or employee of the Contractor authorised to act on behalf of and/or to bind the Contractor, be binding upon the Contractor and

shall constitute a full release and discharge to the Owner and/or settlement, acknowledgement or obligation of, upon or with the Contractor, as the case may be, and the Owner shall not be concerned with the actual application of any money so paid or of the actual authority of such director, attorney, agent, officer or employee (actual, erstwhile or purported as the case may be) vis-à-vis the company to make the settlement, receipt, acknowledgement, agreement or other document concerned.

26.0.0 TAXES & DUTIES

26.1.0 **Amendment to Clause 8.1.1.0 of General Conditions of Contract**:

Notwithstanding anything to the contrary elsewhere provided in these General Conditions of Contract (GCC)-

26.1.1 **8.1.1.1:** If there is any increase in the rate of any output taxes (Central Sales Tax, VAT, Excise Duty or Service Tax/ GST etc.) applicable to invoices raised on the Owner, relevant to the execution of Contract (in the Clause referred to as the "said taxes") between rate(s) of the 'said taxes' as exist on the last date of submission of Price bid relevant to the Contract and the date of execution of activities under the Contract (in the Clause referred to as the "additional tax"), the Owner shall pay and bear the 'additional tax' provided the increase as stated is within the completion time as enumerated under the head 'TIME OF COMPLETION/ TIME SCHEDULE/ CONTRACT PERIOD' in Letter of Acceptance which will be inclusive of time extension, if any, granted by the Owner in terms of Clause 4.3.5.0 and/or 4.3.6.0 of GCC without imposition of any price discount under Clause 4.4.0.0 of GCC (in the Clause referred to as the "Contractual Completion Period"). Similarly, in case of any reduction in the rate(s) of the 'said taxes' between last date of submission of Price bid relevant to the Contract and the date of execution of activities under the Contract, the Contractor shall pass on the benefit of such reduction to the Owner with a view that the Owner shall pay the reduced duty/ tax to Government.

26.1.2 **8.1.1.2**: If after the date of submission of Price bid, any new output tax is introduced in addition to the taxes already quoted in the offer, on proof of payment by the Contractor, the Owner shall reimburse to the Contractor the amount of such new tax provided they are within the 'Contractual Completion Period'.

26.1.3 **8.1.1.3:** If after the date of submission of Price Bid, any new output tax is introduced (applicable to invoices raised on the Owner) in lieu of one or more of the then existing taxes and the rate and impact of the new taxes is in excess in aggregate of the rate and impact of existing output tax or taxes which it replaces, the Owner shall on satisfactory proof reimburse the Contractor the additional tax paid by the Contractor as the result of the imposition of the new taxes provided they are within the 'Contractual Completion Period'. If on the other hand, the rate and impact of the new tax is less than the aggregate rate and impact of the tax(es) which it replaces, the Contractor shall pass on to the Owner the benefit thereof by reduction in the amount payable by the Owner to the Contractor.

26.1.4 **8.1.1.4:** If there is an increase in the rate of any of the output taxes (Central Sales Tax, VAT, Excise Duty and Service Tax/ GST etc.) or any new output tax is introduced in addition to the existing taxes or in lieu of existing taxes where the total financial implication on account of new output taxes is more and arise beyond the 'Contractual Completion Period', the Owner shall reimburse the same if the increase in output taxes is entitled for tax credit. In other cases, the Contractor shall bear the increase in the rates of existing taxes or any new output tax.

26.1.5 **8.1.1.5:** For the purpose of calculating the impact of above changes-

26.1.5.1 The Contractor shall indicate in the bid the division between materials and services in the items schedule of rates and the applicable rate of tax(es).

26.1.5.2 The Contractor shall also indicate the proportion of the value of materials to be procured from within and outside the State.

26.1.5.3 It will be assumed that all materials from the outside the State will be covered under CST regime against 'C' form and those sales will be only through registered dealers.

26.1.6 **8.1.1.6:** Output tax means Value Added Tax, Central Sales Tax payable by the Contractor to the Tax Authority on materials transferred to the Owner and Service Tax payable by the Contractor directly to the Service Tax authorities in relation to the execution of works, applicable to the invoices raised on the Owner. It also includes the Contractor who is buying materials on behalf of the Owner where Excise duty paid on bought out items is reimbursed.

26.1.7 **8.1.1.7:** The Contractor will be liable to ensure to have registered with the respective tax authorities and to submit self-attested copy of such registration certificate(s) and any taxes/ duties/ levies being charged by the Contractor would be claimed by issuing proper invoice/ challan indicating details/ elements of all taxes charged and necessary requirements as prescribed under the respective tax laws and also to mention correct and valid registration number(s) on all invoices raised to IOCL.

26.1.8 **8.1.1.8:** The Contractor would be liable to reimburse or make it good of any loss/ claim by IOCL towards tax credit rejected/ disallowed by any of the tax authorities due to non-deposit of taxes or non-compliance of tax laws by the Contractor.

26.1.9 **8.1.1.9:** The Contractor will be under obligation for quoting/ charging correct rate of tax as prescribed under the respective tax laws. Further, the Contractor shall avail and pass on benefits of all exemptions/ concessions available under tax laws.

26.1.10 **8.1.1.10:** The Contractor has to get registered as per tax law of the State where the work is to be executed and the Contractor will be responsible for procurement of material in its own registration (TIN/CST etc.) and also to issue its own Road Permit etc.

26.1.11 **8.1.1.11:** IOCL will issue Road Permit to the Contractor only in those cases where materials are purchased by IOCL directly and the Contractor will be under obligation for proper utilization for the specific supply and in case of seizure of goods/ vehicle, the Contractor will be wholly responsible for release and also reimburse the litigation cost to IOCL.

26.2.0 Further to provisions of Clause 8.1.1.0 of General Conditions of Contract, all taxes, duties, levies, etc. including cess on all taxes, duties, levies, etc. **(excluding GST)** payable by the Contractor under the contract shall be included in the rate and prices submitted by the Bidder.

26.3.0 ~~**Sales Tax on Works Contract/ Value Added Tax (VAT):**~~

26.3.1 ~~Further to Clause 8.1.1.0 of General Conditions of Contract, special attention is drawn to the recent regulation of imposition of Sales Tax on composite works contract by various State Governments. The rates quoted by the Bidders shall be deemed to be inclusive of, amongst other things, any Sales Tax that may be levied by the concerned State Government on this contract. The sales tax on works contract shall be deducted from the Contractor's bills as per applicable rules. It is being clearly understood that the Owner shall not separately compensate the Contractor on this account. The Bidders shall get their names registered under Sales Tax Authority of the respective State Government.~~

26.3.2 ~~**Bidders to note that 'C' Forms for concessional Sales Tax shall NOT be issued by the Owner for subject contract.** This aspect must be taken into due consideration at the time of submission of their offer. The Bidder has to clearly indicate, the items for which concessional Sales Tax have been considered against 'C' Forms which shall be issued by the Owner to the Contractor after submission of documentary evidence by the Contractor with claims after supply of all the items is completed.~~

26.3.3 ~~While submitting the bid, the Bidder to consider the impact of VAT for the States in which VAT has been implemented. VAT shall be applicable for intra-state supplies only.~~

26.3.4 ~~The Bidders are also advised to make themselves fully conversant with applicable VAT laws. The Bidders shall have to furnish to the Owner, taxable invoices as per VAT laws for all such items as~~

~~referred to above for enabling the Owner to take credit of VAT.~~

26.3.5 ~~In case, after the award of work, the Contractor fails to submit appropriate tax invoices in an acceptable form as per our requirement, the amount of VAT informed in the price bid as above by the Bidder shall be deducted from the payment due to the party.~~

26.3.6 ~~Fulfilment of all the statutory requirements for supply of materials & services and any other statutory requirement shall be the exclusive responsibility of the Contractor~~.

26.4.0 **Income Tax:**

26.4.1 Income Tax along with surcharge of Income Tax as applicable at the prevailing rate on the gross amount billed shall be deducted from the Contractor's bill as per applicable laws.

26.4.2 Notwithstanding anything contained anywhere in the tender documents or any intimation, notice, questionnaire, calcification, correspondence or communication at any time before submission of tender, the following clauses shall apply for the purpose of Income Tax/ TDS/ Withholding Tax described herein below:

26.4.3 The bidder shall be exclusively responsible and liable to pay taxes on income comprised in all or any payments arising out of the contract; whether payable/paid in India or in any other jurisdiction and quoted price shall be inclusive of Income Tax.

26.4.4 All amounts in this tender for supply of equipments, machinery or any other supply of goods made from outside India is not liable for any withholding tax in India because title to goods are transferred in favour of OWNER outside India. However, in case it is applicable, all amounts in this tender for supply of shall be gross of withholding tax levied under Indian Income Tax or Double Taxation Avoidance Agreement. Owner shall deduct the withholding Tax payable to Government of India from the total amount payable for such supplies. All relevant documents for such payments shall be provided to the owner.

26.4.5 Withholding tax / tax deductible at source is applicable to all payments of services to be made to the BIDDER. Withholding /deduction at source are required to be made at the rates specified in the Indian Income Tax Act. However, in case of non resident BIDDERs, lower of the rate of withholding tax as available in the relevant Double Taxation Avoidance Convention Agreements(DTAA) as notified or amended from time to time as compared to the rate applicable as per relevant Income Tax Act will be applicable subject to certain specified documentary compliances. Therefore it is incumbent upon the BIDDER to decide and declare whether it intends to take benefits of lower rate of Withholding tax and commit to provide necessary documents. As per extant provisions of Income Tax Act and Rules made there under following documents are mandatory for this purpose (a) Tax Residency Certificate (TRC) issued by the competent authority of the country of residence of the BIDDER (b) From 10F as described in Indian Income Tax Rules, 1962 (c) PAN No as per Indian Income Tax Act or a declaration in specified format in lieu of Permanent Account Number(PAN) and (d) No Permanent Establishment certificate (if applicable).

26.4.6 The Indian Income Tax Act and Rules made there under contains provisions permitting deduction of tax at a lower rate if the BIDDER is able to justify to the income Tax Authorities such lower rate of deduction. However, a deduction once made has to be deposited by the OWNER with the Income Tax Authorities in India and will not be adjustable by OWNER. It is therefore in the interest of BIDDER that prior to release of any payment due to the BIDDER under the contract that the BIDDER obtains, from relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of Income tax at source, failing which, payment to the BIDDER shall be made by OWNER after withholding/deduction at the highest rate as may be applicable to the non-resident BIDDERs as per provisions of Income Tax Act, 1961.

26.5.0 **Goods and Services Tax:**

26.5.1 Bidders to note that the prices quoted for the subject work shall be **exclusive of the GST** as applicable under and subsequent amendments thereto. The Bidder shall indicate in its bid the GST Registration No. and in case the GST registration no. is not available, the Bidder shall give confirmation for obtaining registration with a copy of application for registration.

The Format for submission of GST Registration is attached as Annexure-L to the Tender Document and the same shall be submitted with the Techno-commercial bid.

26.5.2 Bidders to note that prices quoted for the subject work shall be exclusive of the applicable GST and their offer shall be evaluated in regard to their declaration of **GST rate** specified in **Annexure-K** . The **L1 bidder shall be based on the overall lowest bidder.**

26.5.2.1 Rates as quoted by the Bidder shall be considered for evaluation of the bids. The declaration regarding Goods and Services Tax submitted with the techno-commercial bid shall be treated as final and no communication/ correspondence shall be entertained from the Bidder after opening of the techno-commercial bids, except in following circumstances:

a) Where GST Tax rate quoted is more than maximum prevailing GST Rate.

b) Where non-zero GST Tax rate is quoted by the Bidder towards supplies and it is different from the GST rate quoted towards composite works.

26.5.2.2 The vendor will be under the obligation for invoicing correct rate of tax/duties as prescribed under the GST law to IOCL, including the tax invoices in the return, timely filling of the same and payment of Tax subject to matching of the tax on GST portal.

26.5.2.3 The GST rates are subject to change as per notification of Govt. of India issued from time to time.

26.5.2.4 Under GST, the bidder shall be responsible for timely updating of tax details in the GSTN so as to enable the owner to avail input tax credit. The bidder also shall inter alia comply with all requirements pertaining to “input tax credit” provided under applicable GST Acts. In the eventuality that the owner fails to avail “input tax credit” due to mismatch on account of the vendor or owning to any reason whatsoever on account of default of the vendor, Owner reserve the right to recover the shortfall/under recovery from the bills and /or Security Deposit (including recourse to Bank Guarantee (s)) of the vendor.

26.5.2.5 The contractor will be under obligation regarding tax incidence on the recoveries if any to be made by IOCL from contractor.

26.5.2.6 Payment of GST shall be made in accordance with the Invoice(s) raised by the Contractor, limited to the rate considered during evaluation, as above.

26.5.2.7 In case of Price Adjustment for delay in completion applicable as per GCC Clause 4.4.0.0, the supplier/Contractor shall issue a Credit Note for the Price reduction amount containing all the details as per GST law and rules, for lower incidence of GST.

26.5.2.8 It’s the obligation on the part of BIDDER/ Vendor/ Contractor/ Consultant to discharge his liability by payment of GST to Government of India in cash OR utilization of Input Tax credit in respect of such supply of services through GST Invoice under this contract, so that the OWNER can avail Input tax credit on such supply. In the event that the input tax credit of GST charged by the BIDDER/ Vendor/ Contractor/ Consultant is denied by the tax authorities to OWNER due to delay by BIDDER/ Vendor/ Contractor/ Consultant, in issue of Invoice, Debit notes or Credit notes, filing of return of Outward supplies, payment of taxes or filing of any others returns as required under GST Laws and Rules, or timely corrections, ratifications or modification in the detail of Return of Outward supplies or any other returns, etc. OWNER shall be entitled to recover such amount from the BIDDER/ Vendor/ Contractor/ Consultant by way of adjustment from next invoice or from Bank Guarantee. In addition to the amount of GST, OWNER shall also be entitled to recover interest and penalty, in case same is imposed by the tax authorities on OWNER.

26.5.2.9 As mentioned under Clause 21.5.1 above, the quoted prices shall be exclusive of GST. However, if the Bidder is found to have quoted prices inclusive of GST in the techno-commercial Bid, the Owner reserves the right to bifurcate the quoted prices into basic price and GST based on GST quoted by the Bidder in **Annexure-K**.

26.5.2.10 Upon award of work, GST shall be paid by the Owner to the Contractor at the rate mentioned in the invoice(s) raised by the Contractor, limited to the rate(s) considered during evaluation as per Clause 21.5.0 and its sub-clauses above in accordance with the provisions of **Rule 4A of the Service Tax Rules 1994** which state that the each invoice shall be serially numbered and shall contain the following details:

a) The name, address and registration number of the Service Provider

b) The name and address of the recipient of the taxable service

c) Description, classification and value of taxable service provided and

d) The Goods and service tax and cess payable on such services

The above details are required to enable the Owner to claim Input Tax Credit on GST paid.

26.5.3 ~~**Statutory variation on Service Tax** (as payable to the Bidder) as applicable for the category/ service shall be to the **Owner's account up to the contractual completion period**. Any statutory variation in service tax after expiry of the contractual completion period shall be to the Contractor's account. The ccontractual completion period mentioned above is "TIME SCHEDULE" indicated in the Letter of Acceptance which will be inclusive of time extension, if any, granted by the Owner in terms of Clause 4.3.5.0 and/or Clause 4.3.6.0 of General Condition of Contract (GCC) without imposition of any price discount under Clause 4.4.0.0 of GCC. Similarly, in case of any reduction in the rate(s) of the 'said taxes' between last date of submission of Price bid relevant to the Contract and the date of execution of activities under the contract, the Contractor shall pass on the benefit of such reduction to the Owner with a view that Owner shall pay the reduced duty/tax to the Government.~~

26.5.4 ~~The service tax payable by the Owner to the Contractor shall be limited to the rate(s) considered during evaluation as per Clause 22.5.3 and its sub-clauses above (except for condition mentioned in Clause 22.5.4) irrespective of the amount payable by the Contractor towards service tax to Statutory Authorities..~~

26.6.0 **The Building & Other Construction Worker's Cess:**

26.6.1 The Contractor shall, entirely & exclusively, be liable to pay applicable Building & Other Construction Worker's Cess as per the Building & Other Construction Workers' Welfare Cess Act 1996. The Contractor shall deposit, with the statutory authorities, Building & Other Construction Worker's Cess as applicable at the prevailing rate on the gross amount billed and submit the copies of Challan(s)/ Payment Receipts along with the RA/ Final Bill(s) to the Engineer-in-Charge.

26.6.2 **The Contractor to note that RA/ Final Bill(s) shall not be processed without documentary evidence that the Contractor has deposited the Building & Other Construction Worker's Cess with Statutory Authorities**.

27.0.0 LABOUR LAWS AND REGULATIONS

27.1.0 In addition to the provisions of Clause 8.3.0.0 of General Conditions of Contract, the Contractor shall ensure that local labour, unskilled as well as skilled to the extent possible and available from local resources, are preferentially employed on work with special priority being given to the person and/or dependants of persons whose lands have been acquired for any facilities in connection of with the work. For any infringement of these provisions, the Owner shall be at a liberty to rescind the Contract without any liability to pay any compensation whatsoever to the Contractor.

27.2.0 In addition to provisions of Clause 8.3.2.0 of General Conditions of Contract, within 15 (Fifteen) days of award of contract, the Contractor shall submit to Engineer-in-Charge a copy of valid Licence under the Contract Labour (Regulation & Abolition) Act, 1970.

27.3.0 In addition to provisions of Clause 8.3.6.0 of General Conditions of Contract, each Bidder shall furnish an undertaking in the prescribed format as per the **Annexure-G** annexed to the Form of Tender that he/it/they is/are not engaging child labour as per the applicable law in their work and undertake to comply with all various legislation, as may be applicable from time to time in case the work is awarded to them.

27.4.0 Without prejudice to the generality of Clause 8.3.7.0 of General Conditions of Contract, the Contractor shall adequately cover all its eligible employees under the provisions contained in Employees Provident Fund Act 1952 and subsequent amendment thereof, if any. The Contractor shall furnish a certificate and statement embodying therein all the relevant details in evidence of having complied with the provisions of the said act. It would be obligatory on the part of the Contractor to take necessary PF establishment code number and regularly deposit the PF amount (amount deducted from the employee's wages and employer's contribution) for all the eligible employees to the concerned statutory authority.

27.5.0 The Contractor shall along with his monthly bills specifically certify that he has fully complied with all the obligations and statutory compliances including Contract Labour (Regulation & Abolition) Act, Employees Provident Fund Act, Minimum Wages Act, Workmen Compensation Insurance, Leave Salary, etc. and all other obligations as enforced by the State/ Central Government from time to time.

27.6.0 The Contractor shall be directed in writing or orally specifically in this behalf of his obligations for compliance which he will be required to comply with. In case of default on part of the Contractor, he shall be liable to be penalised and other strict actions including termination of contract as may be deemed fit at the discretion of the Owner.

28.0.0 INDEMNITY AND INSURANCE

28.1.0 Without prejudice to the generality of Clause 8.5.0.0 of General Conditions of Contract and following sub-clauses thereof, the Contractor shall take the comprehensive insurance policy for the workmen engaged by him/ them at the Owner's site and shall submit the copy of the same to the Engineer-in-Charge/ Site Engineer within 15 (Fifteen) days of award of contract. It shall be noted that in no conditions, whatsoever, the Owner shall permit the Contractor to carry out the work as defined/ specified elsewhere with the workmen (including supervisors and work inspectors) not covered under such insurance policy. This may, however be noted that the Contractor shall have to take any other insurance policy/ policies for workmen as required by the Laws of the land, i.e. by the State Government and/or Central Government enforced from time to time in this regard and the Owner shall not take any responsibility whatsoever. The Contractor at his own risk and cost shall take all such insurance policy/ policies.

28.2.0 In addition to provisions of Clause 8.5.1.0 of General Conditions of Contract, within 15 (Fifteen) days of award of contract, the Contractor shall submit to Engineer-in-Charge a copy of valid Workmen's Compensation Insurance and Third Party Insurance.

28.3.0 The Contractor shall provide the following insurance through his regular agency to cover his men, machinery and equipment:

a) Workman compensation Insurance for the persons deployed for execution of the work.

b) Group Personnel Accident Policy.

c) All required Insurances

28.4.0 Regarding insurance following provisions are further incorporated over & above the provisions of General Conditions of Contract:

28.4.1 Any money received by the Owner under any policy or policies of insurance shall be held by the Owner for proportionate payment to the Contractor in respect of any appropriate repairs undertaken and/or replacement(s) made by the Contractor, with liberty to the Owner, should the Contractor fail to undertake in whole or part such repairs and/or replacement(s) and other works necessary consequent upon the occurrence of any contingency covered by such insurance, without prejudice to any other rights or remedies available to the Owner in whole or in part towards repair or restoration or the performance of the necessary work, as the case may be through any other agency(ies).

28.4.2 Insurance of all the equipment, machinery, plant, tools & tackles, vessels and any other equipment brought to site for completion of work and which are not meant for permanent incorporation in the work shall be to the Contractor's account and suitable insurance cover should be taken on their own.

28.5.0 For any infringement of these provisions, the Owner shall be at liberty to terminate the Contract without any liability to pay any compensation whatsoever to the Contractor.

29.0.0 PATENT AND ROYALTIES

29.1.0 Further to provisions of Clause 8.8.0.0 of General Condition of Contract, the Contractor shall indemnify the Owner against all losses, costs, damages and expenses arising from any claim asserted against the Owner that the work or part thereof, or any methods, designs or things furnished or specified by the Contractor or any Sub-Contractor or Supplier under this contract, or any use thereof in the reasonable contemplation of the parties at the time furnished, or any methods, processes or acts employed by the Contractor in connection with the performance of its obligations hereunder constitutes an infringement of any patent, trade secret, proprietary information, know-how copyright (statutory or non-statutory) un-patented invention or any unauthorised use of the work of others.

30.0.0 ENVIRONMENTAL PROTECTION & POLLUTION CONTROL

30.1.0 The Contractor shall take all reasonable precautions to avoid pollution or contamination of the air, land or water arising out of the performance of the work. Should there be a discharge or escape of appreciable quantity of pollutants or contaminants during performance of its obligations under this contract which occurs as a result of activities of the Contractor or its Sub-Contractor, the Contractor shall immediately take all necessary actions to contain, control, recover or disperse the substance and to eliminate the safety and environmental risks and correct the damage resulting there from.

31.0.0 SAFETY, FIRE AND SECURITY REGULATIONS

31.1.0 Safety, Fire and Security Regulations outlined below may be read in conjunction with Section-8 (Clause 8.4.0.0) and Section-10 of General Conditions of Contract as well as Safety Rules and Fire Prevention Regulations of the Owner given Safety manuals and other such documents. It will be the responsibility of the Contractor and its supervisors to make themselves fully conversant with all the Rules and Regulations regarding Safety and Fire Prevention and to issue necessary instructions to all persons deployed by the Contractor at the Construction Site(s).

31.2.0 **The Contractor shall, at his own cost & expenses, provide all Personal Protective Equipments (PPEs) like Safety Shoes, Helmet, Safety Belts, Hand Gloves, etc. to his workmen working at site as per site requirement.**

31.3.0 **General Provisions:**

31.3.1 Safety starts from the individual on the job. Experience and common sense shall be generously used. In case of doubt. "Ask somebody who knows" shall be the motive.

31.3.2 **Without prejudice to the generality of the provisions of Clause 27.1.0 hereof, the Contractor shall take necessary precautions to ensure that no damage, whatsoever is caused to the existing**

pipelines, roads, cables, drains, water mains, dykes, poles, pillars, fences, wires, supports, embankments and other underground works, structures, construction and other facilities and utilities of the village. In case the Contractor fails to adhere to this stipulation and if any damage to those facilities results due to negligence, the Contractor shall be held responsible and shall be liable to compensate the Owner for such damage caused as assessed by the Engineer-in-Charge. The Contractor at his own cost and initiative forthwith restore and repair any damage thereto to the satisfaction of the Owner.

31.4.0 **Lighting:**

31.4.1 The areas of working during nights shall be properly illuminated with flood-lights and hand-lamps as per the requirement of the job.

31.5.0 **Working at Heights:**

31.5.1 In line with OISD guidelines on "Safety Practices during Construction" (OISD-GDN-192), the Contractor shall ensure that additional safety measures like Fall Arrestor type safety belt, Safety Net, Full body Safety Harness, etc. are provided for all activities being done in line with tender requirements at a height of 2.5 meters and more depending upon site conditions and job requirements.

31.6.0 **Civil Works:**

31.6.1 During excavation, the excavated earth must be dumped at a safe distance from the edge of excavation. In no case this shall be less than 1.5 meters from the top edge of the excavation.

31.6.2 Necessary slopes and stepping shall be provided to the sides of the trenches. Shoring is to be provided in places where danger is expected due to side collapses resulting from seepage, over - burden soils, etc.

31.6.3 Safe cross walkways are to be provided at distances not more than 30 mtrs along a continuous trenching for pipelines etc.

31.6.4 Ladders, gangways are to be provided at convenient places for carrying excavated muck from deep trenches. Ladders shall be firmly secured to ground and rungs of the ladders shall be properly secured and safe.

31.6.5 Scaffolding for shuttering and gangways for concreting, etc. (all) be checked for safety to carry loads during construction. Necessary hand rails/rope guards and other protections are to be ensured. These shall be properly secured to ground or tied to any permanent structure nearby. The Contractor should arrange rigid double steel scaffolding for the working at the height of more than 3.0m. All the workers should wear certified safety belts & nets with secured ropes during working at heights.

31.6.6 All the water in the excavated pits shall be drained away from the area of working using pumps.

31.6.7 Excavated pits shall be barricaded and proper danger boards for day and night shall be exhibited.

31.7.0 **Hoisting & Rigging Works:**

31.7.1 All lifting tools, jacks, tackles and wires ropes, etc. shall be of tested quality for safe working loads. Wire ropes shall be of sound construction without any splaying.

31.7.2 Check to be exercised before using ropes with for broken wires. Manufacturer's guidelines/ standards instructions are to be followed for using wire ropes and slings with broken wires. Ropes having damage in the core shall be rejected. Experience and common sense is of immense help.

31.7.3 Usage of hoisting belts/ safety belts is must for personnel working at higher elevations. Such safety belts and hoisting belts are to be certified by safety personnel of the station/ EIC. Besides initial certification EIC/ Safety personnel can inspect/ assess the condition and reject any or all such belts at any point of time.

31.7.4 Only safe gangways/ walkways shall be used for movement of personnel.

31.7.5 Check shall be done for connections to headman anchors before hoisting.

31.7.6 All live wires to be crossed during hoisting shall be made dead near the vicinity of the area during hoisting/ rigging.

31.7.7 Keeping the loads supported by hoisting equipment for an unreasonable length of time must be avoided.

31.7.8 Ropes, cables, and slings must be protected with pads or wooden blocks at sharp edges.

31.8.0 **Electrical:**

The following safety aspects should be borne in mind by the Contractor and his men while working on electrical line or with electrical tools and they should take suitable precautions accordingly:

31.8.1 All temporary electrical connections shall conform to statutory regulations and a certificate obtained by the authorities. The connection and the wiring shall be maintained by competent and licensed supervisors and wiremen. As far as possible the cables are to be safely buried to ensure free access to equipment and machineries movements.

31.8.2 No person shall work on any live electric conductor or apparatus and no person shall assist any other person on such works unless he is authorised in this behalf.

31.8.3 No defective extension cord/ cable shall be used on portable hand tools.

31.8.4 Earthing of machineries, tools and equipment shall be ensured. No open/ bare connections are allowed. The arrangements should be checked periodically for damages to insulation and loose connections, etc. and rectified so that the wiring becomes non-hazardous.

31.8.5 Hard hats (safety helmets), Safety boots, necessary hand-gloves, etc. made out of insulating material shall be used by personnel working in 'live' areas like substations, etc.

31.8.6 Danger signals and safety tags in the live areas shall be demonstrated properly. All connections to be switched off after the working hours.

31.9.0 **Accident and Damage:**

The following requirements shall be complied with by the Contractor in the event of an injury being sustained by anybody on the works:

31.9.1 All injuries occurring on works whether minor or critical shall be reported in the prescribed Work Accident Forms to Engineer-in-Charge and Site Engineer immediately or within half an hour of occurrence of the event, as per rules of the Corporation and statutory requirements of Govt. of India. The Contractor shall indemnify & keep indemnified the Owner of the responsibility of all such accidents.

31.9.2 The Engineer-in-Charge shall be kept informed by the Contractor on daily basis regarding condition, recovery/ progress and date of joining on duty about the persons who after being inflicted by critical injuries were firstly examined and treated outside.

31.9.3 The compensation to the victims shall be paid by the Contractor as per legal requirements.

32.0.0 ADHERANCE TO SAFETY PROCEDURES AND PRACTICES

32.1.0 Without prejudice to generality of provisions of Clause 10.15.0.0 of General Conditions of Contract, in a view to improve the safety aspects of execution of the job based on the job requirements following penalties will be imposed for violation/ non-adherence of safety procedures:

S. N.	Nature of Violation	Penalty
a)	For non-use of PPE (Personal Protective	₹ 1,000/- per occasion

S. N.	Nature of Violation	Penalty
	Equipment)	
b)	Working without clearance	₹ 5,000/- per occasion
c)	Violation of applicable safety, health and environment related norms	₹ 5,000/- per occasion
d)	*Violation of applicable safety, health and environment related norms resulting in:	
	(i) Any physical injury	0.5% of the contract value (maximum of ₹ 2 Lakh) per injury + ₹ 5,000/-
	(ii) Fatal accident	1% of the contract value (maximum of ₹ 10 Lakh) per fatality + ₹ 5,000/-
e)	Hot work without proper clearance/ Permit	₹ 10,000/- per occasion
f)	Non Display of name board/ Permit etc.	₹ 500/- per occasion
g)	Non fencing of excavated area in operating station	₹ 1000/- per occasion
h)	Non-protection of deep excavation by way of shoring and strutting.	₹ 10,000/- per occasion
i)	Inadequate or non-availability of First Aid Box at site	₹ 500/- per occasion
j)	Working at height without safety harness	₹ 1,000/- per occasion
k)	Over speeding of vehicle in operating station	₹ 1,000/- per occasion

**Aforesaid penalty clause is over and above, the applicable statutory requirements.*

32.2.0 In case of accidents depending on the seriousness of injury etc. in addition to the hospitalization/ Treatment charges and Group insurance amount, compensation shall be paid by the Contractor to the affected person/ his family members in presence of Engineer-in-charge as per Workmen Compensation Act.

33.0.0 CLEARING OF SITE

33.1.0 After completion of entire works covered under the scope of this contract, the Contractor shall clear the work site as per the requirements of Site Engineer/ Engineer-in-Charge and the area of worksite shall be restored to original condition.

34.0.0 ARBITRATION & JURISDICTION

34.1.0 Further to Section-9 of General Conditions of Contract and Article 4.1 of the Form of Contract annexed to the General Conditions of Contract, Notwithstanding any other court or courts having jurisdiction to decide the question(s) forming the subject matter of the reference if the same had been the subject matter of a suit, any and all actions and proceedings arising out of or relative to the contract (Including any arbitration in terms thereof) shall lie only in the court of competent civil jurisdiction in this behalf at **Guwahati** and only the said court shall have jurisdiction to entertain and try any such actions (s) and/or proceeding (s) to the exclusion of all other courts.

35.0.0 CONCILIATION

"Clause 9.3.0.0 stands added to the Section-9 of the General Conditions of Contract as hereinbelow:

9.3.0.0 CONCILIATION

9.3.1.0 Notwithstanding any other mechanism for dispute resolution provided under the General Conditions of Contract, with a view to a speedy resolution, the Contractor and the Owner may at any time endeavour to settle through conciliation a dispute referable for settlement by Conciliation under and in accordance with the Indian Oil Corporation Limited Conciliations Rules, 2014 (hereinafter referred to the "Said Rules") as amended from time to time. The Said Rules may be downloaded from the Owner's website at www.iocl.com and if not available, a copy thereof may be obtained from the Owner on written request."

36.0.0 COMPLIANCE TO ISO-14001

36.1.0 GSPL is an ISO: 14001 certified unit. Its environmental management system requires that the Contractors working on behalf of GSPL are able to demonstrate that their employees have requiring training/ awareness. Moreover Contractors/ suppliers are required to adhere to safe handling/ transportation methods.

GENERAL CONDITIONS OF CONTRACT

INDIAN OIL CORPORATION LIMITED

(PIPELINES DIVISION)

REVISED ON 08.01.2003
Included Corrigendum to General Conditions of Contract dated 04.01.2005
Clauses incorporated as per circular IOM PLF/175 dated 01.5.2006

INDEX

Sl No	HEADING	PAGE NO.
1.	Section – 1 : Definition	1
2.	Section – 2 : General	5
3.	Section – 3 : Materials, Labour & Equipment	17
4.	Section – 4 : Performance of Work	26
5.	Section – 5 : Inspection, Testing & Quality Assurance	38
6.	Section – 6 : Measurements & Payments	47
7.	Section – 7 : Termination	57
8.	Section – 8 : Miscellaneous	61
9.	Section – 9 : Arbitration & Alterative Dispute Resolution Machinery	69
10.	Section – 10 : Safety Code	71
11.	Appendix – I to General Conditions of Contract: Contractors' Labour Regulations	76
12.	Appendix – II to General Conditions of Contract: Model Rules for Labour Welfare	82
13.	Appendix – III to General Conditions of Contract: Safety Code	86
14.	Instruction to Tenderers	114
15.	Performa of Declaration of Blacklisting / Holiday Listing	122
16.	Equipment Questionnaire	123
17.	Experience Questionnaire	124
18.	Form of Tender(For Price Bid)	125
19.	Form of Tender(For Commercial Bid)	127
20.	Information about Tenderer	129
21.	Form of Contract	130
22.	Form of Bank Guarantee in Lieu of EMD	133
23.	Form of Bank Guarantee in Lieu of Security Deposit / Initial Security Deposit.	135
24.	Form of Bank Guarantee to cover Lumpsum Advance (Mobilisation)	137

SECTION 1

DEFINITIONS

1.0.0.0 The following expressions hereunder and elsewhere in the Contract Documents used, unless repugnant to the subject or context thereof, shall have the following meanings hereunder respectively assigned to them, namely:

1.1.0.0 "Acceptance of Tender" shall mean the Acceptance of Tender issued by the OWNER to the CONTRACTOR, and shall include a letter, telegram or fax of acceptance or other notification of award of work, and a detailed Letter of Acceptance.

1.2.0.0 "Approval" shall mean the written and signed approval of the OWNER or of Engineer-in-Charge or Consultant authorised in this behalf by the OWNER, and with respect to a plan or drawing shall include an approval in Code 2, subject to the limitation(s) specified in such approval.

1.3.0.0 "Approval in Code 2" shall mean an approval to proceed with the work covered by plans or drawings subject to certain limitation(s) as specified in such approval.

1.4.0.0 The "Contract" shall mean the agreement between the parties as derived from the Contract Documents.

1.5.0.0 The "CONTRACTOR" shall mean Individual, Agency, Firm or Company (whether incorporated or not) selected by the OWNER for the performance of the Contract and shall include its legal representatives, successors and permitted assigns.

1.6.0.0 The "Contract Documents" shall mean the contract documents as defined in Article 1 in the Form of Contract.

1.7.0.0 "Completion" or "Final Completion" shall mean the successful provision of all materials and inputs and the successful completion and conclusion of all activities required in all respects to complete the contractual works in accordance with the contract, but shall not include the obligation to rectify defects during the Defect Liability Period.

1.8.0.0 "Completion Certificate" shall mean the Completion Certificate issued by the Engineer-in-Charge in accordance with the provisions hereof.

1.9.0.0 "Commissioning" of a Plant or Unit shall mean pressing into service the unit(s), equipment(s), vessels, pipeline(s), machinery and systems and sub-systems comprising the Plant, in accordance with the approved Operation Manual and as per procedures recommended by the Designer/Process Licensor or Supplier thereof, and approved by the OWNER, after successful trial runs of the Plant/Unit.

1.10.0.0 "Consultant" shall mean the Consultant appointed by the OWNER for the Project or the Works.

1.11.0.0 "Consumables" shall mean all items which are consumed in the execution of the Work, without being directly incorporated in the Work, such as fuel, electricity, water, POL, welding rods, electrodes and utilities.

1.12.0.0 "Defect Liability Period" shall mean the defect liability period as specified in the Contract.

1.13.0.0 The "Engineer-in-Charge" shall mean the Engineer or other officer of the OWNER, Consultant or other organisation for the time being nominated by the OWNER in writing to act as Engineer-in-Charge for the purpose of the Contract or any specific works.

1.14.0.0 "Final Certificate" shall mean the final certificate issued by the Engineer-in-Charge in accordance with the provisions hereof.

1.15.0.0 "General Manager" shall mean the Executive Director, General Manager or other Chief Executive (howsoever designated) of the Project to which the Contract relates, and if there is no such separate Chief Executive, shall mean the Executive Director (if any) or the General Manager, as the case may be, of the Refinery, Unit or Department of the OWNER to which the Project relates.

1.16.0.0 "Guarantee tests" shall mean all tests, undertaken after the Plant goes into operation and has stabilized, for ensuring that the functioning of the Plant meets all guarantees, as regards throughput, quality and magnitude/quantity of output, at the final stage as well as at the stipulated interim stages of operation/process, as well as in respect of consumption of utilities, chemicals and catalysts, etc.

1.17.0.0 "Job Site" shall mean any site at which the work is to be performed by the CONTRACTOR, and shall include a part or portion of the job site.

1.18.0.0 "Manuals" shall mean the Erection and Installation Manual of the various equipment and machinery forming part of the Work(s) or Plant(s)/Unit(s) as well as the Operation and Maintenance Manuals thereof.

1.19.0.0 "Materials" shall mean all materials, plant, machinery, instruments, components, equipments, sub-assemblies and assemblies, parts, spares and other items or things required for permanent incorporation in the works.

1.20.0.0 "Mechanical Completion", as applied to a Plant or Unit, shall mean the completion of civil works, erection, aligning and grouting of all mechanical and electrical equipment and piping, hydrostatic and other testing of all storage tanks, vessels, piping etc., all electrical and all utility connections to the equipment, mounting and fixing of all instruments, control systems and connecting them as required, testing and trial runs of all equipment on "no-load" and bringing the Plant to a state of readiness for pre-commissioning.

1.21.0.0 "Notified Claim" shall mean a claim of the CONTRACTOR notified in accordance with the provisions of Clause 6.6.1.0 hereof.

1.22.0.0 "Order" and "Instruction" shall respectively mean any written Order or Instruction given by the Engineer-in-Charge or Site Engineer within the scope of their respective powers in terms of the Contract.

1.23.0.0 The "OWNER" shall mean Indian Oil Corporation Limited, a company incorporated in India and having its registered office at G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai-400 051 and shall include its successors and assigns.

1.24.0.0 "Plans" and "Drawings" shall mean and include all technical documentation such as maps, sketches, designs, drawings, plans, details, charts, schedules, tracings, prints, computer outputs, printouts, and manuals, relating to the work forming the subject matter of the contract, including but not limited to those forming part of the Tender Documents, Offer Documents, and working drawings and details, together with amendments/alterations/revisions/modifications thereto, as may have been approved by and/or furnished by the OWNER, the Engineer-in-Charge and/or the Consultant, as well as "As-Built" drawings to be submitted by the CONTRACTOR, as required under the contract.

1.25.0.0 "Pre-commissioning" shall mean the activities to be taken up before the taking up of Start-up, Commissioning and trial runs of the Plant/Unit, and shall include, without being limited to, all operations such as checking of all systems, subsystems, piping and vessels, flushing with air, water and steam, air-blowing and steam-blowing, system pressure and leak tests, purging with inert gas as required, checking all electrical equipment for earthing, resistances, operability tests and cold run on all operating equipment, vessels and systems individually and in combination, integration of all control systems with one another and with the main control system, and

completion of all operations detailed under the head, “COMPLETION OF CONSTRUCTION” in API-700.

1.26.0.0 “Progress Schedule” shall mean the Progress Schedule established by the CONTRACTOR and approved by the Engineer-in-Charge for completion of the work(s) within the time schedule in accordance with the provisions hereof and failing such Progress Schedule, shall mean the Progress Schedule established by the Engineer-in-Charge in accordance with the provisions hereof.

1.27.0.0 “Performance Test(s)” shall mean all tests meant to ensure that the Plant(s)/Unit(s) is/are in all respects in accordance with the requirements of the Contract and that the Plant functions properly and smoothly, in all respects as per the approved design parameters, within the permissible tolerances, and satisfies all the stipulated operating parameters, and will include the Guarantee Tests.

1.28.0.0 “Project” shall mean the project embracing the work(s) forming the subject matter of the Contract.

1.29.0.0 The “Site Engineer” shall mean the Engineer(s)/Officer(s) for the time being designated by the Engineer-in-Charge as his representative(s) in writing, and authorized by him to assist him in performing his duties and functions for the purpose of the Contract.

1.30.0.0 “Plant” or “Unit” shall mean the grouping of and assembly of systems, subsystems, machinery, equipment, piping and associated facilities, designed to function as a cognizable part of the Project Facility whether alone or in conjunction with other Plants/Units and Facilities. (Examples: Distillation Unit, Reformer Unit or Desulphurisation Unit.).

1.31.0.0 “Schedule of Rates” or “Price Schedule” shall mean the Schedule of Rates or Price Schedule annexed to the Acceptance of Tender, and shall also include a lump sum price.

1.32.0.0 The “Specification(s)” shall mean the various specifications as set out in the Specifications forming part of the Tender Documents and as referred to and derived from the Contract and any order(s) or instruction(s) thereunder, and in the absence of any specifications as aforesaid covering any particular work or part or portion thereof, shall mean the Specifications and Codes of the Bureau of Indian Standards and other Organizations, including but not limited to British Standards Institution, ASTM, ASME, ANSI, API, AWS, AWWA, NACE, HEI, IEC, IBR, IEEE, EIL, CPWD, etc, with such modifications as may be applicable for the particular part(s) of the Contract, as decided by the Engineer-in-Charge and as per Standard Engineering and Industry Practice and/or as directed by the Engineer-in-Charge.

1.33.0.0 “Security Deposit” shall mean the Security Deposit as specified in Clause 2.1.0.0 hereof and associated clauses thereunder.

1.34.0.0 “Subsystems” shall mean the further breakdown of a System into its subsections and sub-components, each designed to fulfill a precisely demarcated function or role in the working of the system. (Example: Demineralistion of boiler feedwater and fuel injection for boilers for the Steam Generation system).

1.35.0.0 “Start-up” shall mean all activities required to be performed after pre-commissioning and prior to trial operation and shall include final pre-commissioning inspection and check out of equipment, vessels and system(s) and supporting sub-system(s), initial operation of complete equipment and systems within the Plant/Unit to obtain necessary pre-trial operation data, confirmation and correction of calibration, shutdown inspection and adjustment and other steps required to be taken prior to and enable commissioning/trial operation.

1.36.0.0 “System” shall mean the breakdown of the Plant or Unit into specific sections and components; each designed to fulfil a precisely demarcated function or role in the working of the Plant/Unit (Examples: Fresh water system, circulating water system, steam and power generation and distribution systems, fuel system, effluent system in a Power Plant.)

1.37.0.0 “Time Schedule” shall mean the Time Schedule for final completion of the Works or Mechanical Completion of the Plant(s)/Unit(s), as the case may be, incorporated in the Contract or as may be extended by the OWNER or Engineer-in-Charge pursuant to the provisions hereof and shall include interim time schedules set up for achieving interim/phase-wise/stage-wise progress/completion/testing/commissioning/handing over, as may be prescribed by the OWNER/Engineer-in-Charge, within the overall Time Schedule as originally envisaged or as extended.

1.38.0.0 The “Total Contract Value” shall, upto calculation of the entire remuneration due to the CONTRACTOR in terms of the contract on successful completion of the work, mean the Total Contract Value as specified in the Acceptance of Tender, and after calculation of the entire remuneration due to CONTRACTOR under the contract on successful completion of the contract, shall mean the totality of such remuneration.

1.39.0.0 “Utilities” shall mean power, electricity, gas and other sources of energy, water, earth and other things whatsoever (other than materials and consumable(s)) required for or in the performance of the work(s).

1.40.0.0 “Work”, “Scope of Work”, “Service”, and “Scope of Services” shall mean the totality of the work, services and activities to be performed or undertaken and the totality of the responsibilities to be discharged, as envisaged by expression or implication in the contract and shall include all inputs required for such performance and discharge including (but not limited to) know-how, design/engineering inputs, preparation and supply of drawings and details, project management (including pre-construction activities, tendering, procurement, inspection and expediting), construction supervision, pre-commissioning, start-up and commissioning and supply of consumables, labour, construction and other requisite machinery and equipment, utilities and inputs required for, relative or incidental to and/or in connection with the performance of the contract upto completion (including testing, commissioning, handing over, troubleshooting, rectification, maintenance and defect liabilities).

SECTION – 2

GENERAL

2.0.0.0 INTERPRETATION OF CONTRACT DOCUMENTS:

2.0.1.0 Singular and Plural: Where the context so requires, words imparting the singular also include the plural and vice versa.

2.0.2.0 Masculine and feminine: Where the context so requires, words imparting the masculine gender shall also include the feminine gender and the neuter gender and vice versa.

2.0.3.0 Meanings: Unless expressly stipulated to the contrary in this contract: (i) the words **"**direction(s)/directed**"**, **"**instruction(s), /instructed**," "**order(s) /ordered,**"** "requirement(s)/ required**", "**permission(s) /permitted**", "**approval(s) /approved**"**, shall mean the written directions, instructions, orders, requirements, permissions or approvals**,** as the case may be**,** of the **OWNER** or of the Engineer-in-charge. (ii) The words **"**as felt**", "**considered necessary**"**, **"**acceptable**"**, **"**desirable**"** or "satisfactory**"**, shall mean that the **OWNER** or Engineer-in charge feels or considers that the particular thing is necessary, acceptable, desirable, or satisfactory, as the case may be.

2.0.4.0 Language: All documents pertaining to the contract, including drawings, manuals and any other writings shall be in the English Language. The translations, if any, in Hindi or any other language, as may be furnished by the **OWNER** of any of the documents forming the contract, shall not anywise operate as the contract between the parties or regulate upon the terms and conditions of the Contract Documents with the intention that all rights and obligations of the parties in terms of Contract Documents and any reference to the Contract or Contract Documents or any of them shall be deemed the rights and obligations arising out of the Contract Documents as written in English and / or Contract or Contract Documents or any of them as written in English; and no claim, dispute, difference or other objection will lie or will be entertained by the **OWNER** on account of any difference in the import or interpretation between any provision in the Hindi ***or*** any other language translation of the Contract Documents or any of them and the Contract Documents in English.

2.0.5.0 Measurement Units: The metric system of measurement units shall be used in the contract, unless otherwise expressly stipulated.

2.0.6.0 The several Contract Documents forming the contract are to be read together as a whole and are to be taken as mutually explanatory.

2.0.7.0 Should there be any doubt or ambiguity in the interpretation of the Contract Documents or error, omission or contradiction therein or in any of them, the **CONTRACTOR** shall, prior to commencing the relative work, apply in writing to the Engineer-in-Charge for his decision in resolution of the doubt, ambiguity or contradiction or correction of the error or omission, as the case may be. Should the **CONTRACTOR** fail to apply to the Engineer-in-Charge for his decision, as aforesaid, prior to commencing the relative work, the **CONTRACTOR** shall perform the said work at his own risks, and the provisions of Clause 2.0.10.0 hereof shall apply to any such work performed by the **CONTRACTOR**

2.0.8.0 Notwithstanding anything provided in Clause 2.0.7.0 hereof above, either the **CONTRACTOR** or the Site Engineer may at any time prior to, during or after the execution of the work or any part thereof (if the **CONTRACTOR** has failed to make an application as provided for in Clause 2.0.7.0) apply to the Engineer-in-Charge in writing for his decision in resolution of any doubt,

ambiguity or contradiction, in the Contract Documents or any of them of the correction of any error or omission therein, as the case may be.

2.0.9.0 The decision of the Engineer-in-charge or any application under Clause 2.0.7.0 or Clause 2.0.8.0 hereof shall be in writing and shall be final and binding upon the **CONTRACTOR** and shall form part of the Contract Documents, with the intent that the Contract Documents shall be read as though the said decision is and was at all times incorporated therein.

2.0.10.0 In the event of the **CONTRACTOR** having already performed or executed any work at variance with the decision of the Engineer-in-Charge as aforesaid, then, notwithstanding payment in respect of such work having been made to the **CONTRACTOR**, such work shall be deemed to be a defective work and the provisions of Clause 5.1.4.0 hereof and associated clauses thereunder shall apply thereto.

2.0.11.0 Any work shown, indicated or included in the job Description, Plan(s), Drawing(s), Specifications and / or Schedule of Rates shall be deemed to form part of the work, notwithstanding failure to show, indicate or include such work in any other or others among the Documents aforesaid with the intent that the indication or inclusion of the work within any one of the said documents shall be deemed to be a sufficient indication or inclusion of the work within the work covered by the contract.

2.0.12.0 No verbal agreement, assurances, representations or understanding given by any employee or officer of the **OWNER** or so understood by the **CONTRACTOR**, whether given or understood before or after the execution of the contract, shall anywise bind the **OWNER** or alter the Contract Documents unless specifically given in writing and signed by the a person specifically authorised by the **OWNER** and given as an Agreed Variation to the relative term(s) in the Contract Documents.

2.0.13.0 Clause headings given in this or any other Contract Document are intended only as, a general guide for convenience in reading and segregating the general subject of the various clauses, but do not form part of the Contract Documents, with the intent that the clause headings shall not govern the meaning or importance of the clauses thereunder appearing or confine or otherwise affect the interpretation thereof.

2.0.14.1 In case of irreconcilable conflict in non technical matters between the provisions in the separate contract documents concerning or governing the same aspect precedence shall be given to the provisions contained in the documents mentioned below in the order in which they are set out below:

1. Formal Contract
2. Acceptance of Tender
3. Price Schedule annexed to Letter of Acceptance
4. Agreed Variations annexed to the Letter of Acceptance
5. Addenda to the Tender documents
6. Special Conditions of Contract
7. Special Instructions to Tenderers
8. General Conditions of Contract
9. Instructions to Tenderers

A variation or amendment issued after the execution of the formal contract shall take precedence over the formal contract and all other Contract Documents.

2.0.15.0 In case of irreconcilable conflict in technical matters between the provisions in two separate contract documents concerning or governing the same aspect, clauses 2.0.7.0 and 2.0.8.0 shall be applied.

2.1.0.0 SECURITY DEPOSIT:

2.1.1.0 The **CONTRACTOR** shall furnish Security Deposit in the amount equivalent to 10% (ten percent) of the total contract value. Such Security Deposit is to be held by the **OWNER** as security for the due performance of the **CONTRACTOR**'s obligations under the contract.

2.1.1.1 The Security Deposit shall be made up of the Initial Security Deposit, and the Retention Monies, of a sum equal to 10% (ten percent) of the total (gross) value of each bill, up to and until the recovery of full Security Deposit to the extent specified in Clause 2.1.1.0 hereof is achieved. The deductions for the retention money(ies) will be stopped after the Security Deposit limit of 10% (ten percent) of the Total Contract Value is reached, unless otherwise required in terms of Clause 2.1.1.6 hereof.

2.1.1.2 The **CONTRACTOR** shall, within 10 (ten) days of the receipt of Acceptance of Tender issued by the **OWNER**, deposit Initial Security Deposit in an amount equal to 2.5% (Two and one half percent) of the total contract value as aforesaid, in one or more of the following modes, subject to the stipulation(s) contained in the said Acceptance by the **OWNER**:

a) by Demand draft/Pay Order drawn on a Banking Branch of a Nationalised/Scheduled Bank payable to the **OWNER** at the location where the Office of the **OWNER** is situated. (cheques shall not be accepted).

b) If the Earnest Money Deposit has been made in cash or by Demand Draft, the **CONTRACTOR** may be permitted to adjust the same towards part of the Initial Security Deposit and pay the balance in the manner stipulated at (a) above.

c) By Bank Guarantee(s) in the prescribed form as included in the Tender Documents, from a Scheduled Bank in India acceptable to the **OWNER**, provided the amount covered by such Bank Guarantee is not less than Rs.1,00,000/- (Rupees One Lakh only). This Bank Guarantee shall be valid upto a period of 3 (three) months beyond the end of the Defects Liability period.

2.1.1.3 The **CONTRACTOR** will be permitted to furnish a Bank Guarantee for the full Security Deposit of 10% (ten percent) of the Total Contract Value, in advance, in which case, no Initial Security Deposit will be required to be furnished and no deductions shall be made from his running bills towards Retention Money, except as may be required in terms of clauses 2.1.1.1 and 2.1.1.6 hereof.

2.1.1.4 The **CONTRACTOR** may, at any time and from time to time, during the course of or after completion of the work, with the permission of the **OWNER**, substitute his cash security deposit, including retention money(ies) deducted from his bills and lying with the **OWNER**, by Bank Guarantee(s) in the prescribed proforma from a Scheduled Bank in India acceptable to the **OWNER** and withdraw the equivalent cash amount(s), provided the amount covered by any such Bank Guarantee is not less than Rs.1 lakh (Rupees One lakh only).

2.1.1.5 The Earnest Money deposited by the **CONTRACTOR** along with his Tender shall, unless it has been adjusted in accordance with clause 2.1.1.2(b) above, be refunded by the **OWNER**, after the Initial Security Deposit or the full Security Deposit, as the case may be, has been deposited by the **CONTRACTOR**.

2.1.1.6 If at any time during the course of the work, the gross value of the work, as reflected by the Running Bills submitted by the **CONTRACTOR** has in the opinion of the **OWNER** (which

shall be final and binding on the **CONTRACTOR**), exceeded or is likely to exceed the Total Contract Value indicated in the acceptance of Tender, the **CONTRACTOR** shall be bound to pay further Security Deposit as will make up the total Security Deposit to 10%(ten percent) of the then anticipated Contract Value, failing which the **OWNER** shall be at liberty to make such deductions towards Retention Money(ies) from the **CONTRACTOR**'s Running Bills, and will, at all times, ensure that the Security Deposit does not fall below 10% (ten percent) of the gross value of the work, as reflected by the gross payments made to the **CONTRACTOR**, without taking into account any deductions. If the shortfall in Security Deposit is discovered after completion of the work, the shortfall shall be made good by the **CONTRACTOR** on demand from the **OWNER**, failing which, it will be recovered from any money(ies) due to the **CONTRACTOR** from the **OWNER** under this contract and/or any other contract with the **OWNER**.

2.1.1.7 If after completion of the work, the Total Contract Value falls below the Total Contract Value as indicated in the Acceptance of tender, such that the total Security Deposit (made up of initial Security Deposit and Retention Money(ies) or otherwise) in the hands of the **OWNER** is in excess of the Total Security Deposit calculated at 10% (ten percent) of the reduced contract value, such excess amount, as is in the form of cash in the hands of the **OWNER**, shall be refunded to the **CONTRACTOR** alongwith the Final Bill. If the Security Deposit furnished by the **CONTRACTOR** to the **OWNER** in the form of Bank Guarantees is in excess of the full Security Deposit calculated on the contract value, by over Rs.1 lakh, the **CONTRACTOR** shall be permitted to replace the Bank Guarantee(s) already submitted, by Bank Guarantee(s) to cover the reduced value of Security Deposit.

2.1.1.8 The Security Deposit shall be held by the **OWNER** as security for the due performance of the **CONTRACTOR**'s obligations under the Contract, PROVIDED that nothing herein stated shall make it incumbent upon the **OWNER** to utilize the Security Deposit in preference to any other remedy which the **OWNER** may have, nor shall be construed as confining the claims of the **OWNER** against the **CONTRACTOR** to the quantum of the Security Deposit.

2.1.1.9 The Security deposit including the Earnest Money / Retention money(ies), and other withheld amounts from the Running Account Bill(s), if any, at any time remaining in the hands of the **OWNER**, shall be free of any liability for payment of any interest to the **CONTRACTOR**.

2.1.1.10 Upon determination of the contract prior to completion of work(s) for any cause, the **OWNER** shall in so far as the Security Deposit constitutes cash refund and in so far as the Security Deposit is in any other form, release/discharge/return, as the case may be, to **CONTRACTOR**, the unutilized balance of the Security Deposits, if any, for the time being remaining in the hands of the OWNER after settlement of accounts and discharge of all amounts due from the **CONTRACTOR** to the OWNER and fulfillment of all obligations of the **CONTRACTOR**.

2.1.2.0 In case Mobilisation Advance is paid to the **CONTRACTOR** under the provisions of Clause 6.4.6.0 hereof, it shall be permissible for the **CONTRACTOR** to furnish a Composite Bank Guarantee to cover both Mobilisation Advance as well as Retention Monies forming part of the Security Deposit, which shall be subject to the following conditions:

a) The Composite Bank Guarantee will be for a value equivalent to the advance or 10% (ten percent) of the Total Contract Value, whichever is greater, and shall be kept valid upto 3 (three) months beyond the expiry of the Defect Liability Period;

b) In addition, Initial Security Deposit shall be payable as laid down in Clause 2.1.1.2 hereof;

c) Recoveries will be effected from each Running Account Bill at the rate of 10% (ten percent) of the gross bill value, till the entire Mobilisation Advance (together with interest accrued thereon) is fully recovered;

d) Initially, the composite Bank Guarantee will be entirely reckoned towards Mobilisation Advance and progressively, the portions of Composite Bank Guarantee, vacated by the recoveries effected towards Mobilisation Advance, shall be reckoned towards Security Deposit, such that after the Mobilisation advance stands fully recovered with interest accrued thereon, the entire composite Bank Guarantee shall be reckoned to cover the Security Deposit for the Work. The Initial Security Deposit furnished by the Contractor under (b) above shall be refunded / returned after recovery of Mobilisation Advance is effected from the R.A. Bills upto an aggregate amount equivalent to the Initial Security Deposit.

e) All the other stipulations hereof in respect of Security Deposit shall apply.

2.1.3.0 The **CONTRACTOR** shall from time to time at the request of the OWNER suitably extend the validity of any Bank Guarantee (whether furnished by way of initial Security Deposit, Security Deposit or composite Bank Guarantee) or to secure any advance for such period(s) as may from time to time be required by the OWNER failing which, without prejudice to any other right or remedy available to the OWNER, the OWNER shall be entitled to encash the Bank Guarantee.

2.2.0.0 PLANS, DRAWINGS, SPECIFICATIONS AND APPROVALS TO BE FURNISHED BY THE OWNER

2.2.1.0 Plan(s) and drawing(s) and other information forming part of the Tender Documents shall constitute only a general guidance to enable the **CONTRACTOR** to visualise the work and/or supplies contemplated under the Contract. These have been prepared and released in good faith on the basis of information available to the OWNER. The OWNER assumes no responsibility as to the correctness thereof, and the **CONTRACTOR** is expected prior to tendering to have undertaken a complete and independent survey and to have made his own study of all factors relevant to the performance of the work or making the supplies.

2.2.2.0 Detailed working plan(s), drawing(s), any specification(s) and approval(s) required to be furnished by the OWNER for the actual execution of the work, shall be furnished from time to time as and when required during the execution of the work.

2.2.3.0 It shall be the exclusive responsibility of the **CONTRACTOR** to call upon the Engineer-in-charge (in respect of approvals to be furnished by the OWNER) for and to pursue and obtain from the Engineer-in-Charge any plan(s), drawings(s), specification(s) or approval(s) required to be furnished to the **CONTRACTOR** under the contract for the proper execution of the work or any particular item or job therein or the making of any supply, as the case may be, as and when required, sufficiently in advance of the stage of delivery of the materials or of the commencement or progress of the work for the performance or continuance of which the same shall be required. Any failure by the **CONTRACTOR** to do so shall be entirely at the risks and costs of the **CONTRACTOR** and shall not constitute a ground for the extension of time, unless the Engineer-in-Charge shall fail to provide the **CONTRACTOR** plan(s), drawing(s), specification(s) or approval(s) or disapproval(s)as the case may be within 15 (fifteen) days of notice by the CONTRACTOR to the Engineer-in-charge specifically stating the drawing(s), specification(s) or approval(s) which is/are pending, the period for which it/they are pending, the reason(s) for which they are pending, and that the notice is being given pursuant to the provisions of this clause on the clear understanding that if the plan(s), drawing(s), specification(s), or approval(s) or disapproval(s), is/are not granted within 15 (fifteen) days, the **CONTRACTOR** will be making claim for deemed approval pursuant hereto. If thereafter, said notice notwithstanding, the approval or disapproval, as the case may be, is not granted within 15 (fifteen) days, the relative approval(s) in Code 2 shall be deemed to have been granted, and the relative approval shall at the request of the **CONTRACTOR** be certified thereon by the General

Manager, and the **CONTRACTOR** shall proceed with the work accordingly, without entitlement to any extension of time on this account.

2.2.4.0 The **CONTRACTOR** shall carefully study the plans/drawings furnished to him, in conjunction with all other connected plans/drawings and other Contract documents and shall bring to the notice of the Engineer-in-Charge for clarification/correction any ambiguity, error, discrepancy, contradiction or omission therein prior to the execution of the related work (s) or undertaking the related supply (ies) as the case may be, and the provisions of Clause 2.0.9.0 hereof shall mutatis mutandis apply to such clarification or correction.

2.2.4.1 Any work performed by the **CONTRACTOR** in absence of or contrary to such clarification/ correction, shall be at the **CONTRACTOR**'s risks and responsibilities and the provisions of Clauses 2.0.10.0 and 5.1.4.0 hereof and associated clauses thereunder with respect to defective works shall apply thereto.

2.2.5.0 Notwithstanding anything to the contrary in the Contract Documents expressed or implied, and notwithstanding the absence of any ambiguity, error, discrepancy, contradiction or omission in the plans / drawings as aforesaid, the **OWNER** shall be entitled at any time before or during execution of the related work(s) to amend / modify or alter any plan(s), drawing(s) or specifications furnished to the **CONTRACTOR** by the **OWNER** and the **CONTRACTOR** shall thereafter perform and / or continue to perform the related work(s) according to the amended / modified / altered plans / drawings/ specifications without entitlement to any extra remuneration and should the **CONTRACTOR** execute any relative work(s) at variance therewith (notwithstanding that the **CONTRACTOR** shall have already been made any payment in respect thereof), the provisions of Clause 5.1.4.0 hereof and associated clauses thereunder relating to defective works shall apply thereto, provided that:

(i) If any such amendment / modification / alteration shall in the opinion of the **CONTRACTOR**, necessitate an extension of time for completion, the provisions of Clause 4.3.5.0 hereof and clauses, related thereto shall apply.

(ii) If such amendment or modification shall in the opinion of the Engineer-in-Charge (whose opinion in this behalf shall be final and binding upon the CONTRACTOR) necessitate the performance of any work not covered by the Schedule of Rates or the lump sum price, as the case may be, the remuneration for such work or portion or item thereof, as the case may be, shall be determined in accordance with the provisions of Clause 2.4.1.2 hereof.

2.2.6.0 Copies of all plans and drawings relating to work(s) shall be kept and maintained at the **CONTRACTOR**'s office at the site and shall be made available to the Engineer-in-Charge and Site Engineer for inspection and reference at any time during the execution of work.

2.2.7.0 All plans and drawings furnished by the **OWNER** to the **CONTRACTOR** shall be and remain the property of the **OWNER** and shall be returned by the **CONTRACTOR** to the **OWNER** on completion of the works or prior determination of the contract.

2.3.0.0 PLANS, DESIGNS, DRAWINGS & SPECIFICATIONS TO BE FURNISHED BY THE CONTRACTOR

2.3.1.0 Where the **CONTRACTOR** shall, within the scope of work, be required to prepare or furnish any plan(s), drawing(s), design(s) or specifications in respect of the work or any particular work, the **CONTRACTOR** shall within 15 (fifteen) days (or such other period as the **OWNER** may prescribe in this behalf) of receipt of notification of Acceptance of Tender or within 15 (fifteen) days before the proposed date of commencement of the relative work, whichever shall be earlier, submit to the **OWNER** for approval the relative plan(s), drawing(s), design(s) or

specification(s). The **OWNER** shall be entitled at any time to suggest any amendment(s) / modification(s) in the plans, designs, drawings or specifications and the **CONTRACTOR** shall thereupon either convince the **OWNER** of the unnecessity in whole or portion of such amendment / modification or shall implement the same and shall cause the plans, drawings, designs or specifications to be accordingly amended, provided that no such approval of or amendments or modifications in the plans, drawings, designs or specifications by or suggested by the **OWNER** shall anywise absolve the **CONTRACTOR** of any of his obligations, responsibilities or liabilities under the Contract inclusive of and relative to the utility and suitability of the **CONTRACTOR**'s plans, drawings, designs or specifications for the relative work(s) and the fulfillment of all specifications and performance guarantees of the consequent works, any such approval is intended only to satisfy the **OWNER** of the prima facie suitability of plan, drawing, design or specification and any such suggestion by the **OWNER** as aforesaid or otherwise is intended only by way of suggestion to the **CONTRACTOR** to meet the contractual requirements, without any attendant liability upon the **OWNER**.

2.3.2.0 The **CONTRACTOR** shall not permit any work to be done or any installation, material or equipment to be supplied or fabricated or erected at variance with plans, drawings, designs or specifications approved by the **OWNER** and / or amended or modified as aforesaid.

2.3.3.0 Unless otherwise required, at least 3 (three) sets of all approved plans, drawings, designs and specifications prepared by the **CONTRACTOR**, together with similar set of all revisions, amendments, and modifications therein shall be lodged with the **OWNER** for the record of the **OWNER**. Such sets of plans, drawings, designs and specifications shall be signed by the **CONTRACTOR** and shall indicate thereon the number and date of each revision, amendment and/or modification of communication by the **OWNER** or any consultant appointed by the **OWNER** for or relative to the approval thereof.

2.4.0.0 ALTERATIONS IN DESIGNS, PLANS, DRAWINGS, SPECIFICATIONS, ORDERS AND INSTRUCTIONS

2.4.1.0 In addition to the provisions of Clause 2.2.0.0 and associated clauses thereunder, the Engineer-in-Charge and / or Site Engineer shall have the power by written notice to the **CONTRACTOR** at any time prior to or in the course of the execution of works or any part thereof to alter or amend the specifications, orders and / or instructions or any of them by addition, omission, substitution or otherwise howsoever with or without altering or amending the plans, drawings and / or designs and the **CONTRACTOR** shall carry out the related work in accordance with such altered specifications, orders, instructions, plans, drawings and / or designs as the case may be, on the same terms and conditions in all respects, subject to the provisions of Clause 2.4.1.2 hereof.

2.4.1.1 If such alteration or amendment shall, in the opinion of the **CONTRACTOR**, necessitate an extension in the time for completion, the provision of Clause 4.3.5.0 hereof and related clauses with regard to the extension of time, shall apply.

2.4.1.2(a) If such alteration or amendment shall, in the opinion of the Engineer-in-Charge (whose opinion in this behalf shall be final and binding upon the **CONTRACTOR**), necessitate the performance of any work not covered by the Schedule of Rates, the remuneration for such work or portion or item thereof not covered by the Schedule of Rates shall be determined in the following manner:

(i) If it is possible to derive the rate(s) for such work or items of work from any of the items of material and / or work covered in the Schedule of Rate(s), the rate(s) for the relative works / items shall be the rate(s) arrived at on the basis of such derivation. The opinion of the Engineer-in-Charge as to whether or not the relative rates can be derived from the rates for

the items of material and / or work included in the Schedule of Rates and the consequent derivation of rate(s) on basis thereof shall be final and binding upon the **CONTRACTOR**.

(ii) If, in the opinion of the Engineer-in-Charge, the relative rate(s) shall not be derivable within the provisions of paragraph(i) hereof above, the relative rate(s) shall be the rate(s) for the work or items of work settled as follows:

An analysis of the rate for the completed work or items shall be prepared by taking (if and so far as applicable):

A) Issue rate(s) for materials supplied by the **OWNER**, if applicable;

B) Materials supplied by the **CONTRACTOR** and incorporated in the permanent works at the rate(s) (if any) for material specified in the relevant Schedule forming part of the Contract; and

C) Labour cost at rate(s) for labour, if any, specified in the relevant Schedule forming part of the Contract.

(iii) The opinion of the Engineer-in-Charge as to the quantity of material and / or labour involved shall be final and binding on the **CONTRACTOR**.

(iv) In the event of any item of material or labour involved not being covered by the relevant schedule forming part of the Contract for the purpose of determining the rates in terms of items (B) and / or (C) of paragraph (ii) above, market rates shall be taken into account for such items of materials and labour as are not covered by the relevant schedules forming part of the contract and there shall be added thereto 15% (fifteen percent) to cover **CONTRACTOR**'s supervision, overheads and profits. For the purpose of clarification, it is stated that 15% (fifteen percent) addition shall apply only for any item not covered by the relevant schedule of the Contract.

(v) The opinion of the Engineer-in-Charge as to whether or not any particular item(s) of material(s) or labour involved is covered by the relevant Schedule(s) and if not as to the market rate(s) thereof shall be final and binding upon the CONTRACTOR.

(b) If any alteration, amendment or modification shall, in the opinion of the Engineer-in-charge (whose opinion in this behalf shall be final and binding upon the **CONTRACTOR**) result in a reduction or increase or change in the work or supply covered by the lump sum Price so as to render unreasonable the lump sum Price, the **OWNER** and the **CONTRACTOR** shall negotiate a suitable increase or reduction, as the case may be, in the lump sum Price, and failing agreement on a negotiated rate for the item by appropriate reduction/increase, as the case may be, the Engineer-in-Charge shall fix the reduction or increase as he considers reasonable in the circumstances to the lump sum Price, and the lump sum Price shall be deemed to be accordingly amended to the extent applicable to the work covered by the alteration or amendment.

2.4.1.3 Pending finalization in respect of the revised rate of any item in the Price Schedule or increase/reduction in the lump sum Price pursuant to the provisions of clause 2.4.1.2 hereof, the **CONTRACTOR** shall continue and be bound to continue and perform the works and/or make the supply to completion in all respects according to the contract (unless the contract or works be determined by the **OWNER**) and the **CONTRACTOR** shall be liable and bound in all respects under the contract.

2.4.2.0 The rate(s) for any work determined in accordance with the provisions of Clause 2.4.1.2 above shall for the purpose of the Contract with respect of the work or items of work or supply affected by such amendment, alteration or modification be deemed to be rate(s) for such work or item(s) of work within the Schedule of Rates, or the lump sum Price, as the case may be.

2.4.3.0 The **CONTRACTOR** shall not be entitled to any compensation in addition to the payment for the work actually performed by the **CONTRACTOR** calculated on the basis of the Schedule of Rate(s) or lump sum Price or as provided for in Clause 2.4.1.2 hereof, as the case may be, as a result of any amendment or variation in the specification, orders, instructions, plans, designs or drawings notwithstanding that such alteration(s) / variation(s) may have resulted in a reduction of the total quantum or value of the work involved under the Contract, except as provided for in clause 2.6.2.0 hereunder.

2.5.0.0 ALTERATION IN THE SCOPE OF WORK

2.5.1.0 The OWNER may, at any time(s) before or after the commencement of the work, by notice in writing issued to the CONTRACTOR, alter the scope of work by increasing or reducing the works or the jobs required to be done by the CONTRACTOR or by adding thereto or omitting therefrom any specific works or jobs or operations or by substituting any existing works or jobs or operations with other works or jobs and / or operations, or by requiring the CONTRACTOR to perform any additional works in or about the job site, and upon receipt of such notice, the CONTRACTOR shall execute the job(s) as required within the altered scope of work.

2.5.2.0 If any alteration in the scope of work shall, in the opinion of the CONTRACTOR, necessitate any extension in the time for completion, the provisions of Clause 4.3.5.0 hereof and associated clauses with regard to the extension of time shall apply.

2.5.3.0(a) If such alteration shall, in the opinion of the Engineer-in-Charge (whose opinion in this behalf shall be final and binding upon the **CONTRACTOR**), necessitate the performance of any work not covered by the Schedule of Rates, the remuneration for such work or portion or item thereof not covered by Schedule of Rates shall be determined in accordance with the provisions of Clause 2.4.1.2 hereof.

(b) If in the opinion of the Engineer-in-Charge (whose opinion in this behalf shall be final and binding upon the **CONTRACTOR**) any alteration in the scope of the work shall result in any reduction or increase or change in the work or supply covered by the lump sum price so as to render unreasonable the lumpsum price, the lump sum Price shall be increased or reduced, as the case may be, in accordance with Clause 2.4.1.2 hereof.

2.5.3.1 Pending determination of the rates aforesaid, the provisions of clause 2.4.2.0 shall mutatis mutandis apply.

2.5.4.0 The **CONTRACTOR** shall not be entitled to any compensation in addition to the payment for the work actually performed by the **CONTRACTOR** calculated on the basis of the Schedule of Rates or lumpsum Price or as provided in Clause 2.4.1.2 hereof, as the case may be, as a result of any alteration in the scope of work notwithstanding that such alteration may have resulted in a reduction in the total quantities or value of work involved, except as provided for in clause 2.6.2.0 hereunder.

2.6.0.0 QUANTITIES OF WORK

2.6.1.0 Subject to the provisions of Clause 2.6.2.0 hereof, the quantities of work stated in the Form of Schedule of Rates do not form part of the Contract and the **OWNER** shall not be liable for any increase or decrease in the actual quantities of work performed (notwithstanding the percentage of such increase or decrease), nor shall such increase or decrease in the actual quantities form the basis of any alteration of rates quoted and accepted or in the lump sum price or for any claim for additional compensation, damages or loss or profits or otherwise, with the intent that the

CONTRACTOR shall notwithstanding the quantities mentioned in the Form of Schedule of Rates only be entitled to payment in respect of actual quantities of work performed in terms of the contract and measured in the Final Measurements, notwithstanding the percentage of increase or shortfall in such quantities and notwithstanding that the total contract value for the completed works on finalization of all dues to the **CONTRACTOR** under the contract shall be less than the total contract value as specified for the purpose of Security Deposit in the Acceptance of Tender.

2.6.2.0 If, as a consequence of such amendments/variations/alterations/modifications/reductions, as envisaged in clauses 2.4.0.0 and/or 2.5.0.0 hereof and associated sub clauses thereunder, or pursuant to Clause 2.6.1.0 hereof, the gross value of work actually performed by the **CONTRACTOR**, as valued on finalization of all dues to the **CONTRACTOR** under the contract, shall be less than 80% (eighty percent) of the Total contract value, then the **CONTRACTOR** shall be entitled to 10% (ten percent) of the amount by which the reduced contract value as aforesaid falls short of 80% (eighty percent) of the total contract value by way of allowance for the advantage (including profit) which the **CONTRACTOR** may have anticipated on the execution of the work up to the total contract value. And the **CONTRACTOR** shall not be entitled to any compensation in addition to the payments specifically provided for above, and the **CONTRACTOR** hereby specifically waives any and all contrary rights and claims whatsoever.

2.7.0.0 CANCELLATION OF CONTRACT

2.7.1.0 The **OWNER** shall be entitled at any time at his discretion to cancel the contract, if, in the opinion of the **OWNER**, the cessation of the work becomes necessary owing to any cause whatsoever, and a notice in writing from the **OWNER** to the **CONTRACTOR** of such cancellation and the reason(s) therefor shall be conclusive proof of such cancellation and the reasons therefor.

2.7.2.0 Upon cancellation of the Contract, the Engineer-in-Charge may require the **CONTRACTOR**:

i) To perform to completion or to any other intermediary stage of completion to the satisfaction of the Engineer-in-Charge any work(s) already commenced by the **CONTRACTOR**: and

ii) To take such steps as are considered necessary by the Engineer-in-Charge for properly protecting and securing the works performed by the **CONTRACTOR**, to the satisfaction of the Engineer-in-Charge:

And the **CONTRACTOR** shall act accordingly and the same shall be deemed to be included within the **CONTRACTOR**'s scope of work.

2.7.3.0 Upon receipt of a notice as specified in Clause 2.7.1.0 hereof the **CONTRACTOR** shall, unless the notice otherwise requires:

i) Immediately discontinue work and/or supply from the date and to the extent specified in the notice;

ii) Not place any further orders or sub-Contracts for materials, services or facilities other than as may be necessary or required for completing or performing such portion of the work (s) or supplies which the **CONTRACTOR** is required to complete or perform;

iii) Promptly make every reasonable effort to obtain cancellation or fulfillment, as the case may be, at the option of the Engineer-in-Charge/**OWNER** of all orders and sub-

CONTRACTORS to the extent they relate to the performance of the work(s) or supplies cancelled.

iv) Assist the Engineer-in-Charge/**OWNER** as specifically requested in writing by the Engineer-in-Charge/**OWNER** in the maintenance, protection and disposition of property/works acquired by the **OWNER** pursuant to the Contract.

2.7.4.0 Upon cancellation of the Contract, the **OWNER** shall take over from the **CONTRACTOR** the approved surplus materials supplied by the **CONTRACTOR** for permanent incorporation in the work and lying at the job site on the date of receipt of notice of cancellation by the **CONTRACTOR**, and the decision of the Site Engineer as to the approved materials lying at site on the date of cancellation and the quantities thereof shall be final and binding upon the **CONTRACTOR**.

2.7.5.0 Upon cancellation of the Contract, the **CONTRACTOR** agrees to waive any claim for damages, including loss of anticipated profits on account thereof, and as the sole right and remedy of the **CONTRACTOR** against the **OWNER** resultant upon such cancellation, the **CONTRACTOR** agrees to accept from the **OWNER** the following, namely:

i) The cost of settling and paying claims for cancellation or completion of pending orders and/or sub contracts as provided for in sub-clause (iii) of Clause 2.7.3.0 hereof;

ii) The cost of protecting, securing and/or maintaining the works pursuant to the provisions of sub-clause (ii) of Clause 2.7.2.0 hereof and/or sub-clause (iv) of Clause 2.7.3.0 hereof;

iii) Payment for the supplies actually made determined in accordance with the provisions of Clause 2.4.1.2 hereof.

iv) Payment for the work actually performed by the **CONTRACTOR** calculated on the basis of Unit Rates or lump sum rates wherever applicable. Where Unit Rates or lump sum rates are not applicable and/or the relative works are incomplete, the provisions of Clause 2.4.1.2 shall apply for calculating remuneration.

v) The cost of materials taken over by the **OWNER** pursuant to the provisions of clause 2.7.4.0 hereof.

vi) An allowance, if any due, as determined by the Engineer-in-Charge (whose decision shall be final) to cover the cost of **CONTRACTOR'**s actual mobilization and demobilization at job site for the work to the extent uncovered by payments under items (i) to (iv) above.

And the **CONTRACTOR** shall not be entitled to any compensation in addition to the payments specifically provided for above, and the **CONTRACTOR** hereby specifically waives any and all contrary rights and claims whatsoever.

2.8.0.0 SUSPENSION OF WORK

2.8.1.0 The Engineer-in-Charge may at any time(s) at his discretion, should he consider that the circumstances so warrant (the decision of the Engineer-in-Charge as to existence of circumstances warranting such suspension shall be final and binding upon the CONTRACTOR), by notice in writing to the CONTRACTOR temporarily suspend the work or supply or any part thereof for such period(s) as Engineer-in-Chief shall deem necessary and the CONTRACTOR shall upon receipt of the order of suspension forthwith suspend the work(s) or supply (ies) or such part thereof as shall have been suspended until he has received a written order from the Engineer-in-Charge to proceed with the work suspended or any part thereof.

2.8.1.1 During the period of any suspension under Clause 2.8.1.0 the **CONTRACTOR** shall at his own cost within the scope of the relative work properly protect and secure the work and materials so far as is necessary in the opinion of the Engineer-in-Charge.

2.8.2.0 If the suspension under Clause 2.8.1.0 is for reasons of force majeure as defined in Clause 4.3.8.0 or by reason(s) of default or failure on the part of the **CONTRACTOR** or is for the purpose of ensuring safety of the work(s) or any part thereof or is necessary for the proper execution of the work(s) or is for reason(s) of weather affecting the safety or quality of the work(s) or materials (the reasons for the suspension stated by the Engineer-in-Charge in any notice of Suspension as aforesaid, inclusive as to existence of default or failure on the part of the **CONTRACTOR**, if so stated in the notice, shall be final and binding upon the **CONTRACTOR**), the **CONTRACTOR** shall not be entitled to claim compensation for any loss or damage sustained by the **CONTRACTOR** by virtue of any suspension as aforesaid notwithstanding that consequent upon such suspension the machinery, equipment and/or labour of the **CONTRACTOR** or any part thereof shall be or become or be rendered idle and notwithstanding that the **CONTRACTOR** shall be liable to pay salary, wages or hire charges or bear other charges and expenses thereof.

2.8.2.1 Unless the suspension is by reason of default or failure on the part of the **CONTRACTOR** (and the reasons for the suspension stated by the Engineer-in-Charge in any notice of suspension as aforesaid inclusive as to the existence of default or failure on the part of the **CONTRACTOR** if so stated in the notice, shall be final and binding upon the **CONTRACTOR**), if in the opinion of the **CONTRACTOR** such suspension shall necessitate any extension in the time of completion, the provisions of Clause 4.3.5.0 hereof and related clauses in respect of extension of time shall apply.

2.8.2.2 In the event of a suspension affecting the entire works remaining in operation in respect of the entire works for a period in excess of 4 (four) months from the date of commencement of the suspension, the **CONTRACTOR** shall have the option at any time before the issue of an order by the **OWNER** or the Engineer-in-Charge removing the suspension, to terminate the Contract by giving written notice thereof to the **OWNER**. Unless the suspension be by reason of default or failure on the part of the **CONTRACTOR**, as specified in Clause 2.8.2.0 hereof, such termination shall be deemed to operate as a cancellation of Contract within the provisions of Clause 2.7.1.0 hereof and the provisions of Clause 2.7.2.0 to 2.7.5.0 hereof shall mutatis mutandis apply thereto.

2.8.2.3 In the event of such termination being upon a suspension consequent to a default or failure by the **CONTRACTOR**, the **CONTRACTOR** shall not be entitled to any damage, compensation, loss of profit or other compensation whatsoever in addition to payment for the completed supplies made and completed works done in terms of the Contract in accordance with the provisions of sub-clauses (iii), (iv) & (v) of clause 2.7.5.0 hereof.

2.8.2.4 Notwithstanding anything provided in Clause 2.7.0.0 and/or Clause 2.8.0.0 and related Clauses thereunder, upon a cancellation of the contract under the provisions of Clause 2.7.1.0 hereof or termination of the contract under provisions of Clause 2.8.2.2 hereof, the provisions of Clauses 7.0.3.0 to 7.0.7.0 hereof consequent upon termination of Contract, shall apply. Should the termination be one to which the provisions of Clause 2.8.2.3 hereof apply, then the provision of Clauses 7.0.2.0, 7.0.8.0, 7.0.9.0, 7.1.0.0 and 7.2.0.0 consequent upon termination of Contract shall also mutatis mutandis apply.

2.8.2.5 Except for a suspension by a written order of the Engineer-in-Charge under clause 2.8.1.0 hereof, the **CONTRACTOR** shall not suspend the work for any cause and any such suspension if occur, shall be likely to be attended by consequences under clause 7.0.1.0 (i)(g) hereof.

SECTION - 3

MATERIALS, LABOUR AND EQUIPMENT

3.0.0.0 **CONTRACTOR'S RESPONSIBILITY**

3.0.1.0 Notwithstanding anything to the contrary in the Contract Documents express or implied, the CONTRACTOR shall be and remain at all times exclusively responsible to provide all material, labour, equipment, machinery, facilities, utilities and consumables and temporary works and other items and things whatsoever required for or in connection with the work, including, but not limited to those indicated by expression or implication in the Job Description, Schedule of Rates, the Specification, Plans, Drawings, and/or other Contract Documents or howsoever otherwise as shall or may from time to time and at any time be necessary for or in connection with the work, either for incorporation in or within the permanent works or in or relative to the execution and performance of the work.

3.1.0.0 **MATERIALS SUPPLIED BY THE CONTRACTOR**

3.1.1.0 Materials supplied by the CONTRACTOR shall conform to the specifications and shall be suitable for the purpose for which they are required.

3.1.2.0 Unless otherwise specified by the OWNER, all materials supplied by the CONTRACTOR shall bear the ISI stamp and shall be supplied by reputed manufacturers or suppliers approved by the OWNER or listed for the relative materials with the DGS&D and/or borne on the approved list of suppliers maintained for relative items by such organizations as are approved by the Engineer-in-Charge. If in respect of any materials, including but not limited to sand, stone, aggregate, bricks, earth, lime, steel and cement neither ISI marking/approval nor any approved list of suppliers is available, such materials shall be obtained from sources/ suppliers/ manufacturers approved by the Engineer-in-Charge provided that no approval by the Engineer-in-Charge or any other representative of the OWNER for the supply of ISI stamped materials or of materials supplied by DGS&D listed suppliers or other approved suppliers shall relieve the CONTRACTOR of his full responsibility in respect of the suitability and quality of the material or any defects therein or in any works or construction in or relative to which the same has been utilized.

3.1.3.0 Notwithstanding that any area(s) or source(s) has/have been allotted or suggested by the OWNER to the CONTRACTOR from which any materials for incorporation in the works can be obtained, the CONTRACTOR shall independently satisfy himself of the suitability, accessibility and sufficiency of the source(s) of supply suggested or allocated by the OWNER and suitability of materials available from such source(s), with the intent that any allotment or suggestion as aforesaid shall not anywise relieve the CONTRACTOR of his full liability in respect of the suitability and quality of material(s) therefrom and incorporate the same within the permanent works entirely at his own risks and costs in all respects, with the intent that any such allocation or suggestion by the OWNER shall only be by way of assistance to the CONTRACTOR and shall not entail any legal or financial responsibility or liability upon the OWNER.

3.1.4.0 Notwithstanding any other provisions in the Contract Documents for analysis or tests of materials and in addition thereto, the CONTRACTOR, shall, if so required for reasonable cause by the Engineer-in-Charge or Site Engineer in writing, at his own risks and costs, analyze, test, prove and weigh all materials (including materials incorporated in the work(s) required to be analyzed, tested, proved and/or weighed by the Engineer-in-Charge or Site Engineer and shall have such analysis test conducted by the agency(ies), if any, specified by the Engineer-in-Charge or Site Engineer. The CONTRACTOR shall provide all equipment, labour, materials and other things whatsoever required for testing, preparation of the samples, measurement of work and/or proof or weighment of the materials as directed by the Engineer-in-Charge or Site Engineer.

3.1.5.0 The OWNER does not warrant or undertake the provision of any material(s) and the CONTRACTOR shall not imply by conduct, expression or assurance or by any other means any promise or obligation on the part of the OWNER in this respect understood by the CONTRACTOR, unless made by specific written instrument forming part of the CONTRACT or appropriately entitled as an amendment to the Contract.

3.2.0.0 MATERIAL AND EQUIPMENT SUPPLIED BY THE OWNER:

3.2.1.0 In the case of contracts (including for equipment erection and/or piping), for which the OWNER undertakes the procurement and supply of equipment and materials, the supply of equipment and materials to the CONTRACTOR shall be on the following terms and conditions:

(a) Deliveries shall be either from the storage of the OWNER or from the factory/storage of supplier or from nearest suitable railhead or other point(s) of collection as may be determined by the OWNER taking into account the source(s) of supply of the material.

(b) It shall be the responsibility of the CONTRACTOR at his own risks and costs to take delivery of the materials from the stores, factory, railhead or other collection point, as the case may be, and to arrange for its loading, transportation to job site and unloading at the job site or other place of storage. The CONTRACTOR shall in taking delivery ensure compliance of any conditions for delivery applicable to deliveries from OWNER's or supplier's factory/stores or railways or other transporters concerned, and shall be exclusively responsible to pay and bear any demurrage or penalty or other charges payable by virtue of any failure or delay by the CONTRACTOR in lifting the supplies and/or any failure by the CONTRACTOR to observe the conditions of supply as aforesaid, and shall keep the OWNER indemnified from and against all consequences thereof.

(c) The CONTRACTOR shall inspect the equipment and materials supplied to him at the time of taking delivery thereof and satisfy himself of the quality, quantity and condition thereof prior to taking delivery and the OWNER shall not be liable for any claims or complaints whatsoever in respect of quality, quantity or conditions of the equipment or materials once the CONTRACTOR has taken delivery thereof.

(d) The CONTRACTOR shall on receiving and opening the packing cases or other packaging of equipment and material on behalf of the OWNER, verify and tally the actual contents with the packing list and bring any discrepancies to the notice of the Engineer-in-charge and the Site Engineer. The CONTRACTOR shall also sort out and segregate and hand over to the OWNER’s stores, the Instruction Manuals, Operation and Maintenance Manuals, Special Maintenance Tools, Erection Spares, Commissioning Spares, and Maintenance Spares and other extras, if received with the main equipment. The Erection Spares may be got issued from the OWNER’s stores if required, after getting authorisation from the Engineer-in-charge. The Commissioning Spares may be got issued from the OWNER’s Stores, if commissioning is included in the CONTRACTOR’s scope.

(e) The equipment and/or material(s) supplied or procured by the OWNER shall be utilized by the CONTRACTOR only for incorporation in the permanent works and even so shall not (unless specifically authorized by the OWNER in this behalf) be utilized for manufacturing any item(s) which can be obtained in finished form from standard manufactures.

(f) The CONTRACTOR shall furnish to the Engineer-in-Charge sufficiently in advance a detailed statement showing his requirement of the types and quantities of equipment and materials agreed to be supplied by the OWNER, indication of the time when relative types and quantities thereof shall be required by him for the works so as to enable the OWNER to verify the quantities of materials specified by the CONTRACTOR and to enable the OWNER to make arrangements for the supply thereof.

g) The OWNER shall not be responsible for any delay in the supply of any equipment and/or materials supplied or procured or agreed to be supplied or procured by the OWNER, and no such delay or failure shall anyway render the OWNER liable for any claim for damages or compensation by the CONTRACTOR notwithstanding that an increase in the time of performance of the contract be involved by virtue of such delay and notwithstanding any labour, machinery or equipment brought upon to the job site by the CONTRACTOR for the performance of the work being rendered idle by such delay or failure, PROVIDED that if such delay shall in the opinion of the CONTRACTOR, necessitate an extension of time for completion, the provisions of Clause 4.3.5.0 hereof relating to extension of time and associated provisions thereof shall apply.

h) The CONTRACTOR shall maintain a day to day account of all equipment and materials supplied to him by the OWNER indicating the daily receipt(s), consumption and balance(s) in hand of each material and category thereof. Such account shall be maintained in such form (if any) as shall be prescribed by the Engineer-in-Charge and shall be supported by all documents necessary to verify the correctness of the entries in the account. Such account shall be maintained at the CONTRACTOR's office at the site, and shall be open for inspection and verification (by verification of documents in support of the entry as also by physical verification of the stocks) at all times by the Engineer-in-charge and Site Engineer without notice, and for the purpose the Engineer-in-Charge and Site Engineer shall be permitted and enabled without obstruction to enter into any godown or other place or premises where the equipment or materials or any part thereof shall be stored and to inspect the same and to take by himself and/or through his representative(s) an inventory thereof.

i) All equipment and materials supplied by the OWNER shall be taken delivery of, held, stored and utilised by the CONTRACTOR as trustee of the OWNER, and delivery of material to the CONTRACTOR shall constitute an entrustment thereof by the OWNER to the CONTRACTOR, with the intent that any utilization, application or disposal thereof by the CONTRACTOR otherwise than for permanent incorporation in contractual works in terms hereof shall constitute a breach of trust by the CONTRACTOR.

j) The CONTRACTOR shall hold and store any equipment or material(s) supplied by the OWNER only at such place and/or premises as may be approved by the Engineer-in-Charge, provided that no such approval shall absolve the CONTRACTOR in whole or part of his full liabilities in respect of such material, and the CONTRACTOR shall be and remain responsible at all times at his own risk and cost to ensure that the material(s) supplied by the OWNER is/are retained at all times in premises that are air and water tight and otherwise suitable for the storage of the concerned equipment or materials so as to prevent damage or deterioration for any cause whatsoever or theft or other loss, and shall arrange such watch and ward therefor as shall be necessary to ensure the safety thereof.

k) The Engineer-in-Charge may at his discretion require that all premises in which any equipment or materials supplied by the OWNER are stored, shall be double-locked with the keys to one lock retained by the Site Engineer or his representative and the other with the CONTRACTOR with the intent that all issues of OWNER supplied equipment and materials shall be with concurrence of the Site Engineer or his representative, as the case may be, provided that any such double-locking and/or concurrence as aforesaid shall be an additional precaution and shall not anywise absolve the CONTRACTOR of his full liabilities or responsibilities in respect of such equipment or materials.

l) The equipment supplied by the OWNER shall be insured by the OWNER against normal risks during transit, storage and erection. The CONTRACTOR shall, however, be responsible forthwith to make and pursue on behalf of the OWNER any and all claims under the policy(ies) and to fulfill all formalities required to obtain payment thereunder and/or to assist the OWNER in making or pursuing any such claim(s) and/or in obtaining payment thereunder.

m) The CONTRACTOR shall be required to take out at his own cost and initiative and keep in force at all times during the pendency of the contractual work, policy(ies) of insurance against the risks of fire, lightning and theft and against any other damage or loss, for the full value of the OWNER supplied materials lying in the CONTRACTOR's custody and/or storage pending utilization/ incorporation in the work and during incorporation in the work. The insurance shall be kept valid till the completion of the work and till the materials are duly accounted for to the satisfaction of the OWNER.

n) Such insurance policy(ies) shall be in the joint names of OWNER and the CONTRACTOR with exclusive right in the OWNER **t**o receive all money(ies) due in respect of such policy(ies), and with right in the OWNER (but without obligation to do so) to take out and/or pay the premia for any such policy(ies) and deduct the premia and any other costs and expenses in this behalf from the money(ies) for the time being due to the CONTRACTOR.

o) Notwithstanding anything stated above, it shall be the responsibility of the CONTRACTOR to lodge with insurers and follow up claim(s), if any, under any policy(ies) of insurance aforesaid, and nothing herein provided shall absolve the CONTRACTOR from his full liabilities under the provisions of this clause and associated provisions hereof.

p) Where the OWNER issued materials are being stored within the battery area under the security and gate-pass control of the OWNER and are covered by the Overall Storage-cum insurance Policy taken by the OWNER for the works, the OWNER may, at his sole discretion, permit the CONTRACTOR to furnish an Indemnity Bond in the proforma prescribed by the OWNER, for the entire value of the OWNER supplied materials and for the entire duration during which the materials shall be lying in the storage and custody of the CONTRACTOR.

q) No such Insurance(s), as aforesaid, shall anywise absolve the CONTRACTOR from his full liabilities hereunder, with the intent that the same shall be held merely by way of additional security and not by way of substitution of liability. The CONTRACTOR shall at all times be exclusively responsible for any and all loss(es), damage(s), deterioration, misuse, theft or other application or disposal of the equipment or material(s), supplied by the OWNER or any of them contrary to the provisions hereof and shall keep the OWNER indemnified from and against the same and shall forthwith at his own cost and expense replace any such equipment and material(s) lost, damaged, deteriorated, misused, stolen, applied and/or disposed as aforesaid, with other equipment or material of equivalent quality and quantity to the extent that the same is not covered by any insurance as above, and if covered, payment under the relative policy(ies) is for any reason not available to the OWNER.

r) The CONTRACTOR shall use the equipment and materials supplied by the OWNER for incorporation in the Permanent works, carefully and judiciously with no wastage or the minimum possible wastage, wherever some wastage is inevitable or unavoidable, in any case within the wastage limit, if any, specified by the OWNER in respect of any such materials. For any excess wastage or scrap, due to misuse or injudicious, careless or wrong use of OWNER supplied materials, or in case of loss, damage or deterioration of the materials during storage with the CONTRACTOR, as to all of which the decision of the Engineer-in-charge shall be final and binding on the CONTRACTOR, the CONTRACTOR shall be bound to replace the material of equivalent quantity and grade, acceptable to the OWNER within the time limit specified by the OWNER, and where this is not possible, practicable or advisable, in the opinion of the OWNER, which shall be final and binding on the CONTRACTOR, the OWNER shall be compensated by the CONTRACTOR for the loss caused, for the replacement costs, which shall be worked out by the OWNER based on the assessed landed cost plus the costs of procurement at 15% (fifteen percent) of the assessed landed costs for the OWNER. This amount shall forthwith be remitted by the CONTRACTOR within a week of demand made by the OWNER, failing which the

OWNER shall be entitled to recover / adjust the amount demanded from any money(ies) due from the OWNER to the CONTRACTOR and/or from any Security or any other deposits of the CONTRACTOR lying with the OWNER, under this and/or any other contract, without any further notice to the CONTRACTOR. The decisions of the OWNER in respect of the actions contemplated in this clause shall be final and binding on the CONTRACTOR.

s) Notwithstanding anything herein provided and notwithstanding the transfer of all risks in respect of such equipment and materials to the CONTRACTOR, the Ownership in respect of all OWNER supplied equipment and materials shall at all times be and remain in the OWNER.

t) The excess equipment and material and the scrap material generated from the work, in so far as the OWNER supplied materials are concerned, shall be returned to the OWNER's Stores. On completion of the work, the CONTRACTOR shall duly render accounts for the materials and equipment issued by the OWNER, to the satisfaction of the OWNER. Any shortages, losses and/or damages shall be to the CONTRACTOR's account and all the conditions stipulated under sub-clause (r) above shall apply in this case also.

3.3.0.0 POWER, WATER & OTHER FACILITIES

3.3.1.0 The CONTRACTOR shall be responsible to provide within the scope of work all facilities, consumables and utilities necessary for performance of the work including (but not limited to) water, power, transportation, labour, tools, construction and testing equipment, machinery and land at or about the job site(s) for the CONTRACTOR's field offices, godowns, workshop; residential accommodation for CONTRACTOR's staff; quarry rights and borrow areas, access roads and right(s) of way to or about the job site(s) and CONTRACTOR's offices, godowns, workshop accommodation, quarries and / or borrow areas.

3.3.2.0 The OWNER does not warranty or undertake the provision of any facility, consumable or utility whatsoever to the CONTRACTOR, or assistance in obtaining / procuring the same or other assistance whatsoever for or in the performance or testing of the work and the CONTRACTOR shall not imply by conduct, expression or assurance or by any other means, any promise or obligation on the part of the OWNER contrary to the provisions hereof and any such promise or obligation understood by the CONTRACTOR shall not be binding upon the OWNER.

3.3.3.0 Any assistance which the OWNER renders to the CONTRACTOR in terms hereof or otherwise relative to the work by provision of any facility, utility, consumables, water, power, transportation, labour, tools, construction and / or testing equipment, and machinery, provision of land for quarries or borrow areas or for CONTRACTOR's office, godowns, workshops or accommodations or provisions of right of way, access road(s) and / or railway siding facilities, or other facility, utility, or consumables for or in the performance of the work shall not for any cause afford a basis or defence to the CONTRACTOR for the performance of any of his obligations under the Contract, nor a ground for extension of time for completion or other claim whatsoever.

3.4.0.0 POWER SUPPLY:

3.4.1.0 Without prejudice to the provisions of Clause 3.3.0.0 hereof and following clauses thereunder, as and when adequate power supply becomes available for the site, the OWNER may at its discretion provide supply of power to the CONTRACTOR for the work from the nearest sub-station, from which source the CONTRACTOR shall at his own cost and initiative make arrangement for temporary distribution of power to CONTRACTOR's work(s) at the site.

3.4.1.1 All arrangements for the distribution of power from sources aforesaid and the work relative thereto shall be made/performed/ installed in conformity with Indian Electricity Regulations, and shall be subject to prior approval of the Site Engineer.

3.4.1.2 The CONTRACTOR shall, at his own costs and initiative on completion or prior determination of the work or otherwise during execution of the work, if required by the Site Engineer because of hindrance caused thereby or for any other cause, forthwith remove or re-route the distribution lines/installations or other work(s) in respect thereof as the case may be, required to be removed/ re-routed.

3.4.2.0 The OWNER shall recover from the CONTRACTOR for power consumed by the CONTRACTOR from OWNER's source(s) of supply at the rate prescribed by the OWNER in this behalf from time to time. The amount due to the OWNER in respect of such power supplied shall without prejudice to any other mode of recovery to the OWNER, be deductible from the Running Account / Final Bill(s) of the CONTRACTOR and / or any monies due to the CONTRACTOR under this or any other Contract from time to time.

3.4.2.1 The CONTRACTOR shall provide at his own cost suitable electric meters approved by the Site Engineer for measurement of Power units consumed by the CONTRACTOR for determination of the payment due thereon to the OWNER. Such meters shall be under the control and custody of the OWNER.

3.4.2.2 In the event of failure or defect of meter(s), power charges shall be calculated on the consumption determined by the Engineer-in-Charge (whose decision shall be final both as regards the existence of a defect or failure, and as regard the power consumed).

3.4.3.0 The OWNER may at any time without notice or specifying any cause suspend or discontinue power supply to the CONTRACTOR, and such suspension or discontinuance shall not entitle the CONTRACTOR to any compensation or damages nor shall constitute a basis for extension of time for completion.

3.4.4.0 Power supplied by the OWNER to the CONTRACTOR shall be entirely at the risk of CONTRACTOR as to the continuity and regularity of supply, maintenance of voltage and adequacy of load without any warranty by or liability to the OWNER in respect thereof and without entitlement to the CONTRACTOR on grounds of discontinuance, fluctuation of voltage or inadequacy of load or any other cause whatsoever to claim from OWNER in respect thereof or consequences thereof.

3.5.0.0 **WATER SUPPLY**

3.5.1.0 Without prejudice to the provisions of Clause 3.3.0.0 hereof and the following clauses thereunder, in the event of the OWNER having adequate source of water supply at the site available for distribution, the OWNER may at its discretion provide water to the CONTRACTOR for the work from the OWNER's source of supply upon the CONTRACTOR at his own cost and initiative providing suitable pumping installations and pipe network for the conduct of water to and distribution to the CONTRACTOR's place of work.

3.5.1.1 Such installation, pipes and other equipment shall be laid out / installed by the CONTRACTOR only with the prior approval of the Site Engineer so as not to interfere with the layout and progress of the other construction work at the site and access to or about the job site.

3.5.1.2 The CONTRACTOR shall forthwith on completion of the work or earlier determination of the contract or during the execution of the work(s), if so required by the Site Engineer, on ground of hindrance or obstruction caused thereby or other causes whatsoever at his own cost and initiative remove or re-route, as the case may be, any installations, pipes and / or other equipment or any part or portion thereof installed or erected by the CONTRACTOR for the conduction and / or distribution of water, and fill any trenches, ditches or other excavations made by the CONTRACTOR for the purpose thereof and restore the site to the same condition in which it was prior to the installation.

3.5.2.0 The OWNER shall recover from the CONTRACTOR for water consumed by the CONTRACTOR from OWNER's source of supply at the rate prescribed by the OWNER in this behalf from time to time. The amount due to the OWNER in respect thereof shall (without prejudice to any other mode of recovery available to the OWNER) be deductible from the Running Account / Final Bill of the CONTRACTOR and / or payments due to the CONTRACTOR from time to time under this or any other contract.

3.5.2.1 The CONTRACTOR shall provide at his own cost and initiative suitable water meters approved by the Site Engineer for measurement of water units consumed by the CONTRACTOR for determination of the payment due in this behalf to the OWNER. Such meters shall be under the custody and control of the OWNER.

3.5.2.2 In the event of failure or defect of meters, water charges shall be calculated on the consumption determined by the Engineer-in-Charge (whose decision shall be final both as regards the existence of a defect or failure and as regards the water consumed).

3.5.3.0 The OWNER may without notice or specifying any cause suspend or discontinue water supply to the CONTRACTOR and such suspension or discontinuation shall not entitle the CONTRACTOR any compensation or damages or constitute a basis for extension of time for completion or other claim whatsoever.

3.5.4.0 Water supplied by the OWNER to the CONTRACTOR shall be entirely at the risk of the CONTRACTOR as to the continuity and regularity of supply and maintenance and adequacy of pressure without any warrant by or liability to the OWNER in respect thereof and without entitlement to the CONTRACTOR on grounds of discontinuance, irregularity, drop or rise in pressure or other cause whatsoever to claim from OWNER in respect thereof or the consequences thereof.

3.6.0.0 **LAND:**

3.6.1.0 Without prejudice to the provision of Clause 3.3.0.0 hereof and following clauses thereunder, the OWNER may at his discretion and convenience, if it has sufficient available land at its disposal, provide land to the CONTRACTOR near or about the job site, for the construction of the CONTRACTOR's field office(s), godowns, workshops, assembly yard and residential accommodation required for or in connection with the execution of the work(s). Such land shall be utilised by the CONTRACTOR only for the purpose of the contract and for the duration of the contract.

3.6.2.0 The CONTRACTOR shall at his own cost and initiative construct temporary buildings or other accommodation necessary for the purpose and make suitable arrangements for water and power supply thereto and for provision of sanitary, drainage and dewatering arrangements thereof in accordance with plans / designs / layouts previously approved by the Site Engineer in this behalf.

3.6.3.0 Any land provided by the OWNER to the CONTRACTOR within the provisions hereof shall be strictly on a licence basis, and shall not create any right, title or interest whatsoever in the CONTRACTOR herein or in respect thereof.

3.6.4.0 The CONTRACTOR shall pay the licence fee @ Rs.20/- (Rupees Twenty only) per 100 (One hundred) square meters or part thereof**,** per month or part thereof, for any land made available to the CONTRACTOR within the provisions hereof, and the OWNER shall be entitled (without prejudice to any other mode of recovery), to recover licence fee from the Running / Final Bill(s) of the CONTRACTOR and / or any other payments due to the CONTRACTOR from time to time under this or any other contract.

3.6.5.1 Notwithstanding anything herein provided, the OWNER reserves the right at any time during the pendency of the work to ask the CONTRACTOR to vacate the land or any part thereof on giving 7 (seven) days written notice to the CONTRACTOR in this behalf.

3.6.5.1 Forthwith on or before the expiry of such notice or within two weeks of the completion of the works or the earlier determination of the Contract, the CONTRACTOR shall remove all constructions, works, piping and other installations, whatsoever, not forming part of the contractual works put up or erected by the CONTRACTOR upon the land, and shall have the land cleared, levelled and dressed to the satisfaction of the Engineer-in-Charge.

3.6.5.2 The CONTRACTOR shall not be entitled upon any vacation or notice within the provisions of Clause 3.6.5.0 hereof to claim any resultant compensation or damage from the OWNER, nor shall such notice or vacation constitute a ground or basis for any extension of time for completion.

3.6.5.2 Likewise, the OWNER may at its discretion and convenience upon such terms and conditions as the OWNER may prescribe in this behalf, arrange or allocate or provide to the CONTRACTOR, borrow area(s) or quarry or mining rights and / or any right(s) of way or other access to or about the job site and unless specifically excluded, the provisions of Clause 3.1.3.0 hereof above, shall apply in respect of any borrow area, quarry, mining right and / or right of way or other access allocated, arranged, provided or permitted by the OWNER to the CONTRACTOR.

3.6.6.1 The OWNER shall be entitled, at any time without notice to the CONTRACTOR, to suspend or withdraw use by the CONTRACTOR of any such area, right or access as aforesaid and no suspension or withdrawal of such facility, or disruption or inadequacy thereof by virtue of flood, disrepair or other cause whatsoever, shall form the basis of any claim by the CONTRACTOR, for compensation or damages or ground for extension of time for completion. Upon such notice or within two weeks of the completion of the works or the earlier determination of the Contract the provisions of Clause 3.6.5.1 hereof shall mutatis mutandis apply.

3.7.0.0 Notwithstanding anything herein provided, the provisions of Clause 7.0.5.0 to 7.0.7.0 hereof and related clauses applicable consequent upon termination of contract shall apply to any breach by the CONTRACTOR of his obligations within the provisions of Clause 3.4.1.2, 3.5.1.2, 3.6.5.1 and 3.6.6.1 hereof as to a breach of Clause 7.0.5.0 hereof.

3.8.0.0 ACCESS TO SITE

3.8.1.0 The CONTRACTOR shall construct, if necessary at his own cost and initiative, temporary access road to the site from the main public feeder road(s) and from borrow areas and mines and quarries, and shall so align such roads or ways so as not to interfere with the construction of the site or hamper construction of pavement roads by or on behalf of the OWNER or other CONTRACTORS operating at or about the job site.

3.8.2.0 The CONTRACTOR shall, if so required or relative to the performance of any other work at the site or construction of permanent roads, suspend, discontinue use of and / or re-route any access road constructed by him. No suspension, discontinuance or re-routing as aforesaid shall form the basis of any claims by the CONTRACTOR against the OWNER for compensation of damages or ground for extension of time for completion or other claim whatsoever.

3.9.0.0 LABOUR, MACHINERY & EQUIPMENT

3.9.1.0 If, during the execution of the works, the OWNER shall for any cause find it necessary to do so, the OWNER may, at its discretion and convenience provide labour, machinery and / or equipment to the CONTRACTOR for the performance of the work and / or testing of the works. The terms and conditions for provisions and / or hiring of such labour, equipment, machinery shall, in addition to any other condition relative thereto as may be specified by the OWNER, unless expressly excluded, be deemed to include the following:

(i) Charges: The labour, equipment and / or machinery shall be supplied at the rate(s) in this behalf prescribed by the OWNER from time to time.

(ii) Recoveries: The amount(s) recoverable by the OWNER from the CONTRACTOR in respect of labour, equipment and / or machinery procured or supplied by the OWNER shall (without prejudice to any other mode of recovery) be debited to the CONTRACTOR's account and deducted from the Running Account / Final Bill(s) of the CONTRACTOR and / or any monies from time to time becoming due to the CONTRACTOR.

(iii) Any labour, equipment and / or machinery supplied or procured by the OWNER shall be utilized by the CONTRACTOR only for use in the contractual work.

(iv) The CONTRACTOR shall be responsible to ensure utilization of the equipment and / or machinery only within the capacity of such equipment and / or machinery, to ensure the proper utilization thereof in all respects without any manner of abuse or excess, and shall follow and obey all instructions or directions as shall or may be given by the Site Engineer in respect thereof, and if so required by the Site Engineer, shall provide at cost (to be determined by the Engineer-in-Charge in the event of dispute) labour for the operation, maintenance and repair of the equipment / machinery and / or shall operate, maintain and/or repair the same at his own costs and expenses, and provide all the inputs necessary for the operation, repair and maintenance thereof, including spare parts, fuel and lubricants. The CONTRACTOR shall keep the OWNER indemnified from and against all losses, damages and / or costs, charges and expenses resultant from any breach or failure to observe the provisions hereof.

(v) The CONTRACTOR shall ensure the safe-keeping and custody of the equipment and machinery at the site and shall be exclusively responsible and accountable for any loss, damage, theft or misuse thereof (and shall make proper arrangement for the storage and watch and ward thereof) and shall keep the OWNER indemnified from and against the same.

(vi) The CONTRACTOR shall ensure return of the equipment / machinery to the OWNER upon the Completion of the works or earlier determination of the Contract or as and when called upon by the OWNER to return the same during the execution of the work in the same condition in which the equipment / machinery was at the time of bringing the same to job site or delivery to the CONTRACTOR, as the case may be.

(vii) The provisions of Clause 3.2.1.0 hereof shall mutatis mutandis apply to equipment and machinery supplied by the OWNER to the CONTRACTOR.

3.10.0.0 **GOVERNMENT CONTROLLED MATERIALS**

3.10.1.0 In respect of all Government controlled or other scarce/imported materials in respect of which licenses, release orders, permits or authorisations have been granted in the name of the OWNER, the CONTRACTOR shall be deemed to be acting on behalf of the OWNER and as agent of OWNER in respect of deliveries taken by the CONTRACTOR against any licences, release orders, permits, or authorisations issued in the name of OWNER for Government controlled materials. The ownership in such materials shall (without prejudice to the responsibility/liability of the CONTRACTOR in respect thereof as set out in the various conditions hereof) vest in the OWNER from the point of time when it would have ordinarily vested in the OWNER on a direct delivery to the OWNER.

SECTION – 4

PERFORMANCE OF WORK

4.0.0.0 GENERAL.

4.0.1.0 All works shall be performed and executed by the CONTRACTOR in strict conformity with the Job Description, Specifications, Plans, Drawings, Designs and other Contract Documents applicable to the specific work(s) and any relative orders or instructions as may be issued to the CONTRACTOR by the Engineer-in-Charge or Site Engineer from time to time.

4.0.2.0 The Engineer-in-Charge and Site Engineer shall be entitled from time to time or at any time at their discretion in order to procure the proper performance of the work and/or the proper compliance with the specifications or other contractual requirements to issue written orders or instructions to the CONTRACTOR relative to the performance and / or execution of the work(s) by the CONTRACTOR or otherwise relative to any matter touching or affecting the Contract or arising therefrom, and to revise or revoke any orders or instructions previously issued, and the CONTRACTOR shall, subject to provisions of the following clause, obey and/or abide thereby.

4.0.2.1 Without prejudice to the provisions of Clause 4.0.2.0 hereof and associated clauses thereto, should the CONTRACTOR require any clarification in respect of any orders or instructions issued by the Engineer-in-Charge or Site Engineer, or should there appear to the CONTRACTOR to be any contradiction between any orders or instructions issued by the Engineer-in-Charge or Site Engineer and / or between any order(s), instruction(s) and the Contract Document or any of them, the CONTRACTOR shall refer the matter immediately in writing to the Engineer-in-Charge for his decision before proceeding further with the work, and the decision of the Engineer-in-Charge on any such matter shall be final and binding upon the CONTRACTOR, who shall perform the work accordingly without entitlement to any claim against or compensation from the OWNER resultant upon such order, instruction or decision.

4.0.3.0 The CONTRACTOR shall, within 10 (ten) days of receipt of notification of Acceptance of Tender, name at each job site at which the CONTRACTOR shall be awarded any work under the Contract, an engineer responsible for the work at the job site on behalf of the CONTRACTOR. The said Engineer of CONTRACTOR shall be the representative of the CONTRACTOR at the job site for and relative to all actions and transactions and dealings on behalf of the CONTRACTOR and to whom labour, materials, equipment and / or machinery procured or supplied by the OWNER may be given and to whom all Plans, Designs, Drawings, Orders and Instructions or other documents or communications for or relative to the job site may be given, with the intent that all transactions and dealings had with the said engineer shall be deemed to have been had with the CONTRACTOR, and any and all Plans, Drawings, Designs, Orders, Instructions, Documents or Communications and / or labour, material, equipment or machinery delivered to said engineer shall be deemed to have been delivered to the CONTRACTOR.

4.0.3.1 The Engineer(s) / supervisors appointed by the CONTRACTOR or his Sub-Contractors / other agencies, for the work shall be duly and adequately qualified with relevant experience to handle the work of the contract to the satisfaction of the Engineer-in-Charge. For this purpose, the CONTRACTOR shall furnish the bio-data of the Engineer(s) / supervisors proposed to be appointed by him for the work to the Engineer-in-Charge for his approval. The CONTRACTOR shall be bound to appoint only such technical personnel as are approved by the Engineer-in-Charge for handling the work from time to time.

4.0.4.0 The CONTRACTOR shall provide and maintain, at or about each job site, an office for the working accommodation of the CONTRACTOR's engineer(s) and staff. Such office shall remain open and attended at all hours during which work is being performed at the job site, for the receipt of orders, instructions, notices, and other communications.

4.0.5.0 The CONTRACTOR shall co-operate with and afford the OWNER / Engineer-in-Charge and other CONTRACTORS engaged at the site, access to the work and supply at cost determined by the Engineer-in-Charge (whose decision shall be final) of power and water for the performance of the work entrusted to them and / or for the carriage and storage of materials by them and whenever any work is contingent or dependent upon the performance of any work by the CONTRACTOR or is being done in association, collaboration or in proximity with any other CONTRACTORs, the CONTRACTOR shall co-operate with the OWNER or other CONTRACTOR(s) / agency(ies) involved in such work to ensure the harmonious working between the CONTRACTOR and the OWNER / CONTRACTOR(s), agency(ies) involved, and shall comply with any instructions issued by the Engineer-in-Charge for the purpose.

4.0.6.0 The OWNER/Engineer-in-Charge shall be entitled at its/his discretion, to appoint one or more Site Engineers and / or other personnel at or about each job site on behalf of the OWNER to do such acts, deeds, matters and things as may be necessary to safeguard the OWNER's interest including (but not limited to), at the discretion of the OWNER, supervision and testing of the works being conducted by the CONTRACTOR at the job site and/or for rendering such assistance to the CONTRACTOR relative thereto as the OWNER or such engineer(s) or personnel shall or may deem fit, it being understood, however, that the presence of any engineer(s) or personnel of the OWNER at or about each job site or any supervision, inspection or test performed or conducted by any such engineer(s) and / or personnel of the OWNER in respect of any work(s) or any other assistance rendered by such engineer(s) and / or personnel to the CONTRACTOR relative thereto, shall be without any attendant obligation or liability of the OWNER vis-à-vis the CONTRACTOR, nor shall relieve the CONTRACTOR of his full responsibility in respect of the work(s) under the Contract or bind the OWNER or accept as satisfactory or complete and / or in accordance with the Contract any work(s) performed by the CONTRACTOR which has / have been supervised, inspected, tested or assisted by the said engineer(s) and / or personnel of OWNER.

4.0.7.0 If the CONTRACTOR's work or any part thereof shall be consequent or resultant upon any works performed by any other person or shall be in continuance thereof or otherwise based or founded or dependent thereon, the CONTRACTOR shall before commencing with its/his work, bring to the notice of the Engineer-in-Charge and the Site Engineer, in writing, any defects existing in said prior works, failing which the CONTRACTOR shall be deemed to have accepted as complete and proper the said prior works and to have waived any and all rights to complaint of or in respect of any defect(s) as may exist therein.

4.1.0.0 THE JOB SITE

4.1.1.0 The Engineer-in-Charge shall furnish the CONTRACTOR with only four corners of the job site and a level bench mark, and the CONTRACTOR shall at his own cost and initiative set out the work to the satisfaction of the Site Engineer, but shall be solely responsible for the accuracy of such setting up notwithstanding the satisfaction as aforesaid of the Site Engineer or any other assistance rendered by the Site Engineer for the purpose.

4.1.2.0 The CONTRACTOR shall provide, fix and be responsible for the maintenance of all stakes, templates, contour and level marks, profiles and the like and shall take all precautions necessary to prevent their removal or disturbance, and shall be responsible for the consequence of such removal or disturbance and for their efficient and timely reinstatement. The CONTRACTOR shall also be responsible for the maintenance of all survey marks, boundary marks, distance marks, and centre line marks, whether existing or supplied / fixed by the CONTRACTOR.

4.1.3.0 Before commencing the work, the CONTRACTOR shall at his own cost and initiative, provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the work in accordance with scheme for benchmarks acceptable to the Site Engineer. The centre, longitudinal or face line and cross line shall be marked by means of small masonary pillars. Each pillar shall have a distinct mark at the centre to enable a theodolite to be set over it. No work shall be started until all these points are approved by the Site Engineer but, such approval shall not relieve the CONTRACTOR of any of his responsibilities in respect of adequacy or accuracy thereof. The CONTRACTOR shall also provide all labour, material and other facilities necessary for the proper checking of layout and inspection of the points during construction.

4.1.4.0 Pillars bearing geodetic marks located at the sites of works under construction should be protected and fenced by the CONTRACTOR.

4.1.4.1 On completion of works, the CONTRACTOR must submit to the Engineer-in-Charge the geodetic documents according to which the work was carried out.

4.1.5.0 The CONTRACTOR shall be exclusively responsible for provision and maintenance of horizontal and vertical alignments and levels and for the correctness of every part of the work in accordance therewith and shall at his own cost rectify any errors or imperfectness therein.

4.2.0.0 CONDITIONS OF WORK

4.2.1.0 Work shall be carried on for a minimum of 48 (forty-eight) hours a week and 8 (eight) hours on any working day. If necessary, the CONTRACTOR shall work overtime or in two or more shifts in a day. Except as herein specifically provided to the contrary, the CONTRACTOR shall not be entitled to any extra compensation or remuneration for overtime or double or triple shift working, nor shall the OWNER anywise be responsible for any idle time payments to CONTRACTOR's staff or for labour, equipment or machinery, howsoever occasioned, and the CONTRACTOR waives any and all contrary rights and claims.

4.2.1.1 Should it be necessary to work on Sunday and / or holiday, the CONTRACTOR shall so work without extra compensation, after obtaining prior approval from the Site Engineer or the Engineer-in-Charge.

4.2.2.0 The execution of the work(s) shall entail working in all seasons including the monsoons. In so far as necessary, the CONTRACTOR shall maintain at each job site at all times such material, labour, pumps, equipment and machinery as may be required for the performance of the work during the monsoon or other rains and shall plan well in advance for the collection of material and equipment and the erection of such tarpaulins, sheds, wind breakers and / or other protection as shall or may be necessary for the work during the monsoon or other rains so that the rains or monsoon shall not hamper working.

4.2.2.1 The CONTRACTOR shall also arrange and bring to each job site such special equipment and machinery as may be necessary to enable work during the monsoon, and shall, at his own cost and initiative, arrange at all times for dewatering the job sites so as to keep the construction site and areas to be worked upon, free of water.

4.2.2.2 The CONTRACTOR shall not be entitled to any extra compensation or remuneration for or relative to any work to be done in any season including during the monsoon, or for or relative to any special arrangements to be made and / or equipment or machinery to be brought to the job site(s) to enable such working.

4.3.0.0 TIME FOR COMPLETION

4.3.1.0 The CONTRACTOR shall complete in all respects in accordance with the Contract, the entire work at each job site within the time specified in this behalf in the Time Schedule.

4.3.2.0 If the OWNER so requires, the Progress Schedule in the form of PERT chart, giving the latest dates of starting and the latest dates of finishing of various operations comprising the work as also the activities in the critical path and the latest dates for achievement of specific milestones in respect of the work so as to complete in all respects the works (including testing and consequential operations) within the time provided in the Time Schedule. This Progress Schedule should also indicate the interlinking of the various activities and bring to light the specific/critical items on which the inputs from the OWNER / Engineer-in-Charge /Consultant or other agencies, if any, would be required, to ensure adherence to the schedule.

4.3.3.0 If the CONTRACTOR shall fail to submit to the OWNER/Engineer-in-Charge a Progress Schedule as envisaged above or if the OWNER/Engineer-in-Charge and CONTRACTOR fail to agree upon the Progress Schedule as envisaged above, then the Engineer-in-Charge shall prepare the Progress Schedule (the dates of progress as fixed by the Engineer-in-Charge being final and binding upon the CONTRACTOR except as herein otherwise expressly provided), and shall issue the Progress Schedule so prepared to the CONTRACTOR, which shall then be the Approved Progress Schedule and all the provisions of Clause 4.3.2.0 shall apply relative thereto.

4.3.4.0 Any reference in the Contract Documents to the "Approved Progress Schedule" or to the "Progress Schedule" shall mean the "Approved Progress Schedule" specified in Clause 4.3.2.0 above or the "Progress Schedule" prepared and issued by the Engineer-in-Charge as specified in Clause 4.3.3.0 above, whichever shall be in existence. In the absence of such approved Progress Schedule or such Progress Schedule prepared by the Engineer-in-Charge, the Progress Schedule first prepared by the CONTRACTOR (with the incorporation of the OWNER's/Engineer-in-Charge's comments thereon, if any), shall until such approved Progress Schedule or such Progress Schedule prepared by the Engineer-in-Charge comes into existence, be deemed to be the Progress Schedule for the purpose of the Contract.

4.3.5.0 Within 7 (seven) days of the occurrence of any act, event or omission which, in the opinion of the CONTRACTOR, is likely to lead to delay in the commencement or completion of any particular work(s) or operation(s) or the entire work at any job site(s) and is such as would entitle the CONTRACTOR to an extension of the time specified in this behalf in the Progress Schedule(s), the CONTRACTOR shall inform the Site Engineer and the Engineer-in-Charge in writing of the occurrence of the act, event or omission and the date of commencement of such occurrence. Thereafter, if even upon the cessation of such act or event or the fulfillment of the omission, the CONTRACTOR is of opinion that an extension of the time specified in the Progress Schedule relative to particular operation(s) or item(s) or work or the entire work at the job site(s) is necessary, the CONTRACTOR shall within 7 (seven) days after the cessation or fulfillment as aforesaid make a written request to the Engineer-in-Charge for extension of the relative time specified in the Progress Schedule and the Engineer-in–Charge may at any time prior to completion of the work extend the relative time of completion in the Progress Schedule for such period(s) as he considers necessary, if he is of opinion that such act, event or omission constitutes a ground for extension of time in terms of the Contract and that such act, event or omission has in fact resulted in insurmountable delay to the CONTRACTOR.

4.3.5.1 The application for extension of time made by the CONTRACTOR to the Engineer-in-Charge should contain full details of:

(a) The notice under Clause 4.3.5.0 with a copy each of the notice sent to the Engineer-in-Charge and Site Engineer,

(b) The activity for the Progress schedule affected,

(c) The bottleneck(s) or obstruction(s) perceived/experienced, and the reason(s) therefor,

(d) Extension required/ necessitated on account of (c) above,

(e) Extension required /necessitated on account of reasons attributable to the OWNER,

(f) Extension required/ necessitated on account of force majeure reasons, and

(g) The total extension of time (if any) required/ necessitated for completion, taking the above into account and after eliminating all overlaps.

4.3.5.2 The opinion/ decision of the Engineer-in-Charge in this behalf and as to the extension of time necessary shall, subject to the provisions of clause 4.3.6.0 hereof, be final and binding upon the CONTRACTOR.

4.3.6.0 Notwithstanding the provisions of clause 4.3.5.0 hereof, the OWNER may at any time at the request of the CONTRACTOR made by way of appeal either against the decision of the Engineer-in-Charge taken under clause 4.3.5.0 or against the Engineer-in-Charge's refusal to take a decision under the said clause, if satisfied of the existence of any ground(s) justifying the delay, extend the date for completion of the work or any item or operation thereof for such period(s) as the OWNER may consider necessary, and the decision of the OWNER as to the existence or otherwise of any grounds justifying the extension and as to the period(s) of extension necessary shall be final and binding upon the CONTRACTOR.

4.3.7.0 Subject as elsewhere herein or in the contract documents expressly provided, only the existence of force majeure circumstances as defined in clause 4.3.8.0 hereof shall afford the CONTRACTOR a ground for extension of time for completion of the work or any part of the work or any operation(s) involved therein, and specifically without prejudice to the generality of the foregoing, inclement weather, strike, shutdown, third party breach, delay in supply of material(s) or commercial hardship shall not afford the CONTRACTOR a ground for extension of time or relieve the CONTRACTOR of his/its full obligations under the Contract, nor will any forced shutdown or idleness or other impediment in progress or completion of the work due to any reason whatsoever afford the CONTRACTOR a ground for extension of time or relieve the CONTRACTOR of his/its full obligations under the Contract except and to the extent otherwise elsewhere herein specifically provided, nor shall any shut down or idle time charges be payable by the OWNER to the CONTRACTOR for delay in the commencement, progress or completion of the work due to any reason whatsoever, including due to the existence of force majeure circumstances.

4.3.8.0 The term "**FORCE MAJEURE"** as employed in this contract shall mean wars (declared or undeclared) or revolutions, civil wars, tidal waves, fires, major floods, earthquakes, epidemics, quarantine restrictions and freight embargoes and transporters strikes affecting the country as a whole.

4.3.9.0 Upon an extension of the time for completion of the work or any part of the work or any operation(s) involved therein pursuant to Clause 4.3.5.0 or Clause 4.3.6.0 hereof, the extended date/time of completion shall be deemed to be the relative date of completion in the Progress Schedule, and such extension shall constitute the sole remedy of the CONTRACTOR for and/or arising out of such delays, and the CONTRACTOR hereby waives any and all contrary rights.

4.3.10.0 The mere fact that the OWNER shall not have terminated the contract or that the OWNER or Engineer-in-Charge has permitted the CONTRACTOR, for the time being, to continue with the work for its completion shall not prejudice the full rights and remedies available to the OWNER under the contract arising out of the delayed completion, including the right of Price discount, damages and/or termination. Such permission(s) shall unless specifically stated to be an extension of time under Clause 4.3.5.0 or Clause 4.3.6.0, as the case may be, not be construed as extension(s) of time under Clause 4.3.5.0 or 4.3.6.0 hereof, and shall merely constitute an indication or intimation, as the case may be, of the OWNER's willingness, for the time being, to accept the delayed completion, subject to its rights under the Contract.

4.3.11.0 No assurance, representation, promise or other statement by any personnel, engineer or representative of the OWNER in relation to extension of time for commencement or completion of any work(s) or operation thereof or of the entire works under the Contract shall be binding upon the OWNER or shall constitute an extension of time for commencement or completion of the entire work(s) or any part or operation thereof within the provisions of Clause 4.3.5.0 or Clause 4.3.6.0 hereof, unless the same has been communicated to the CONTRACTOR in writing by the Engineer-in-Charge under Clause 4.3.5.0 or by the General Manager under Clause 4.3.6.0 and the writing specifically states that it embodies an extension of time within the provisions of Clause 4.3.5.0 or Clause 4.3.6.0 as the case may be, and without prejudice to the aforegoing, the mere agreement or prescription or signing of a Progress Schedule by the Site Engineer or any site representative of the OWNER at variance with the Progress Schedule, as the case may be, referred to in Clauses 4.3.2.0, 4.3.3.0 and/or 4.3.4.0 hereof or containing an extended time of commencement or completion in respect of the entire work(s) or any part or operation thereof shall not anywise constitute an extension on time in the terms of the Contract so as to bind the OWNER or relieve the CONTRACTOR of all or any of his liabilities under the Contract, nor shall constitute a promise on behalf of the OWNER or a waiver by the OWNER of any of its rights in terms of the Contract relative to the performance of the Contract within the time specified or otherwise, but shall be deemed only (at the most) as a guidance to the CONTRACTOR for better organising his work on a recognition that the CONTRACTOR has failed to organise his work and/or perform the same within the time specified in the Progress Schedule established within the provisions of Clause 4.3.2.0 or Clause 4.3.3.0 or Clause 4.3.4.0 hereof, as the case may be.

4.4.0.0 **PRICE ADJUSTMENT FOR DELAY IN COMPLETION**

4.4.1.0 The contractual price payable shall be subject to adjustment by way of discount as hereinafter specified, if the Unit(s) are mechanically completed or the contractual works are finally completed, subsequent to the date of Mechanical Completion/final completion specified in the Progress Schedule.

4.4.2.0 If Mechanical Completion of the Unit(s)/final completion of the works is not achieved by the last date of Mechanical Completion of the Unit(s)/final completion of the works specified in the Progress Schedule (hereinafter referred to as the "starting date for discount calculation"), the OWNER shall be entitled to adjustment by way of discount in the price of the works and services in a sum equivalent to the percent of the total contract value as specified below namely:

(i) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 1 (one) week of the starting date for discount calculation - ½ % of the total contract value.

(ii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 2 (two) weeks of the starting date for discount calculation - 1 % of the total contract value.

(iii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 3 (three) weeks of the starting date for discount calculation - 1½ % of the total contract value.

(iv) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 4 (four) weeks of the starting date for discount calculation - 2 % of the total contract value.

(v) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 5 (five) weeks of the starting date for discount calculation - 2½ % of the total contract value.

(vi) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 6 (six) weeks of the starting date for discount calculation – 3 % of the total contract value.

(vii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 7 (seven) weeks of the starting date for discount calculation – 3½ % of the total contract value.

(viii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 8 (eight) weeks of the starting date for discount calculation – 4 % of the total contract value.

(ix) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 9 (nine) weeks of the starting date for discount calculation – 4½ % of the total contract value.

(x) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 10 (ten) weeks of the starting date for discount calculation - 5 % of the total contract value.

(xi) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 11 (eleven) weeks of the starting date for discount calculation – 5 ½ % of the total contract value.

(xii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 12 (twelve) weeks of the starting date for discount calculation – 6 % of the total contract value.

(xiii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 13 (thirteen) weeks of the starting date for discount calculation – 6 ½ % of the total contract value.

(xiv) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 14 (fourteen) weeks of the starting date for discount calculation - 7 % of the total contract value.

(xv) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 15 (fifteen) weeks of the starting date for discount calculation - 7 ½ % of the total contract value.

(xvi) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 16 (sixteen) weeks of the starting date for discount calculation – 8 % of the total contract value.

(xvii)For Mechanical Completion of the Unit(s)/final completion of the works achieved within 17 (seventeen) weeks of the starting date for discount calculation – 8 ½% of the total contract value.

(xviii) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 18 (eighteen) weeks of the starting date for discount calculation - 9 % of the total contract value.

(xix) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 19 (nineteen) weeks of the starting date for discount calculation – 9 ½% of the total contract value.

(xx) For Mechanical Completion of the Unit(s)/final completion of the works achieved within 20 (twenty) weeks of the starting date for discount calculation – 10 % of the total contract value.

(xxi) The reduction in the contract price hereunder by way of price discount shall in no event exceed 10% (ten percent) of the total contract value.

4.4.2.1 The starting date for discount calculation shall be subject to variation upon extension of the date for Mechanical Completion of the Unit(s)/final completion of the works with a view that upon any such extension there shall be an equivalent extension in the starting date for discount calculation under Clause 4.4.2.0 hereof.

4.4.2.2 It is specifically acknowledged that the provisions of Clause 4.4.2.0 constitute purely a provision for price adjustment and/or fixation and are not to be understood or construed as a provision for liquidated damages or penalty under Section 74 of the Indian Contract Act or otherwise.

4.4.3.0 Application of price adjustment under clause 4.4.2.0 above shall be without prejudice to any other right of the OWNER, including the right of termination under Clause 7.0.1.0 and associated clauses thereunder.

4.4.4.0 Nothing in Clause 4.4.2.0 above shall prevent the OWNER from exercising its right of termination of Contract under Clause 7.0.1.0 hereof and associated clauses thereunder, and OWNER shall be entitled, in the event of exercising its said right of termination after the last date for Mechanical Completion of the Unit(s) and/or final completion of the works as stipulated in the relative Progress Schedule without prejudice to any other right or remedy available to the OWNER, to discount as aforesaid in the contractual price of services in addition to any amount as may be due consequent to a termination under Clause 7.0.1.0 hereof and associated clauses thereunder.

4.5.0.0 SCHEDULE OF ACTIVITIES

4.5.1.0 The provisions of this Clause 4.5.0.0 and associated Clauses thereunder shall apply only to a contract in which the Schedule of Rates specifies a lumpsum price payable for the whole or any part of the work(s) or activities covered by the Contract. If only part(s) of the work(s) or activities under the Contract are the subject of a lumpsum price then the provisions of this clause shall apply only to such part.

4.5.1.1 The CONTRACTOR shall within 30 (thirty) days from the date of issue of the Letter of Acceptance, furnish to the OWNER a detailed schedule of Activities specifying in detail the various activities which the CONTRACTOR would be required to perform and the milestones with respect to each which the CONTRACTOR would have to achieve in order to set up and establish the Unit.

4.5.2.0 Each activity entered in the schedule of Activities and each milestone therein shall be priced so as to break-up so far as possible, the lumpsum price of services into various priced milestones of achievements and priced activities required to achieve those milestones. The Schedule of Activities and the said priced break-up of activities therein are intended only to provide a basis for the purpose of calculating on account payments for services and for calculating the payments due to the CONTRACTOR under Clause 2.7.5.0 hereof upon cancellation of Contract, and for no other purpose.

4.5.3.0 The OWNER shall review or cause to be reviewed the prima facie adequacy, sufficiency, validity and/or suitability of the activities listed in the Schedule of Activities for the works they are intended, and of the prices indicated in the Schedule of Activities in respect thereof. Such review shall be performed in conjunction with the design, engineering, specification and other technical reviews to be done by the OWNER and all provisions applicable thereto shall be applicable to the review of the Schedule of Activities.

4.5.4.0 No such review shall in any manner absolve the CONTRACTOR of his full responsibility under the contract to perform within the lump-sum price of services specified in the Price-Schedule, all services and to perform and undertake the work(s) required to set up and establish the Unit in accordance with the Contract and the specifications, complete in all respects, whether or not any particular work or activity required is included within the schedule of activities and whether or not the price thereof is included in the price indicated in the Schedule of Activities and whether

or not the price thereof is in conformity with the price thereof indicated in the Schedule of Activities. The review and approval of the Schedule of Activities and the prices therein are intended only for the satisfaction of the OWNER that the priced Schedule of Activities prima facie covers the activities required to be performed by the CONTRACTOR within the scope of services.

4.5.5.0 The Schedule of Activities shall be subject to amendment in both items and prices in so far as necessary consequent upon any amendment in any relevant related technical particulars, and upon any amendment, the amended Schedule of Activities as approved by the OWNER shall thereafter constitute the Schedule of Activities as envisaged in the Contract Documents.

4.6.0.0 REPORTS AND RECORDS

4.6.1.0 The CONTRACTOR shall, from time to time, maintain at each job site (in addition to any records or registers required to be maintained by the CONTRACTOR under any law, rule or regulation having the force of law) such records and registers as the Engineer-in-Charge or Site Engineer shall or may require the CONTRACTOR to keep and / or maintain from time to time.

4.6.2.0 In addition to any other records or registers required to be maintained by the CONTRACTOR from time to time and / or to the reports required to be furnished by the CONTRACTOR, the CONTRACTOR shall daily or otherwise as may be prescribed by Engineer-in-Charge or Site Engineer, submit to the Site Engineer a Progress Report of all work done and / or progress achieved by the CONTRACTOR at each job site within the preceding day or the period of last report, as the case may be.

4.6.2.1 The receipt and / or acceptance of any such report by the Site Engineer shall be without prejudice to the full rights and remedies of OWNER and obligations / liabilities of the CONTRACTOR under the Contract, and shall not anywise operate as an estoppel against the OWNER by reason of the fact that no notice or objection was taken of or to any information contained in any such report; nor shall any statement in any such report be deemed to be correct merely by virtue of the existence of such statement, and its being uncontroverted by any officer of the OWNER.

4.6.3.1 The CONTRACTOR shall also maintain at each job site a Site Order / Site Instructions Book, in which the day to day instructions of the Site engineer / Engineer-in-Charge / other Inspecting Officers of the OWNER shall be recorded. Each such Order / Instruction shall be duly acknowledged and compliance with the same shall also be recorded in the appropriate columns of the Site Order / Site Instructions Book.. This book shall be kept available for inspection by the Officers of the OWNER. The Site Order / Site Instruction Book shall be lodged with the Engineer-in-Charge on completion of the Work or sooner determination of the contract for any cause.

4.7.0.0 **EXECUTION OF THE WORK**

4.7.1.0 The CONTRACTOR shall provide sufficient labour, staff (qualified and unqualified), machinery, tools and equipment, material, consumables, utilities and things whatsoever necessary for the proper performance of the work and to ensure the rate of progress as envisaged in the Progress Schedule.

4.7.1.1 All the skilled persons employed by the CONTRACTOR (directly or through his sub-contractors and/or other agencies) on the work shall be duly and adequately skilled in their respective trades, to the satisfaction of the Engineer-in-Charge. Any person employed on the work found to be inadequately skilled or otherwise incompetent, may be directed by the Engineer-in-Charge to be removed from the site and replaced by adequately skilled and competent persons and the CONTRACTOR shall forthwith comply with such directions of the Engineer-in-Charge.

4.7.2.0 If, in the opinion of the Engineer-in-Charge or Site Engineer (the opinion of either of whom in this behalf shall be final), the work(s), operation(s) at any job site as a whole is/are not meeting the progress necessary to achieve the relative date of commencement or completion in the Progress Schedule, the Engineer-in-Charge or Site Engineer may instruct the CONTRACTOR to employ/provide additional labour, staff, machinery, tools, equipment or material or things necessary to achieve the required progress and CONTRACTOR shall forthwith comply with instruction(s).

4.7.3.0 Should the CONTRACTOR fail to comply with such instruction(s) or fail to comply therewith to the satisfaction of the Engineer-in-Charge (whose opinion in this behalf shall be final and binding upon the CONTRACTOR) the Engineer-in-Charge may, at his discretion, at the risk and cost of the CONTRACTOR, appoint, procure or provide the additional labour, staff, machinery, equipment, tools and materials as the Engineer-in-Charge (whose decision in this behalf shall be final and binding upon the CONTRACTOR), considers necessary to achieve the necessary progress in relation to any particular work or operation or the work as a whole. In so doing, Engineer-in-Charge/Site Engineer shall be deemed to be acting for and on behalf of and as agent of the CONTRACTOR and all such appointments, procurement and/or provision shall be deemed to have been made by the CONTRACTOR and paid for by the CONTRACTOR. In addition to the other amounts payable to OWNER in respect of any labour, staff, machinery, equipment and/or material, as aforesaid procured or provided by the OWNER, the OWNER shall be entitled in this event to recover from the CONTRACTOR 15% (fifteen per cent) as supervision charges on the total expenditure incurred by the OWNER under this clause, on behalf of the CONTRACTOR.

4.7.4.0 Without prejudice to the OWNER's rights under Clause 4.7.3.0 and in addition or as an alternative thereto, should the Engineer-in-Charge at any stage (notwithstanding that the time for completion of the relative work or item of work as specified in the Progress Schedule has not expired) be of opinion (the opinion of the Engineer-in-Charge in this behalf being final) that the performance of any work or item of work by the CONTRACTOR is unsatisfactory (whether in the rate of progress, the manner, quality or workmanship of the performance, or in the adherence to specifications, or in the omission, neglect or failure to do, perform, complete or finish any work or item, or for any other cause whatsoever), the Engineer-in-Charge shall be entitled (without prejudice to any other rights of the OWNER and/or obligations of the CONTRACTOR under the Contract) at his discretion and the risk and cost of the CONTRACTOR to appoint one or more sub-contractors for the satisfactory performance thereof or any part thereof, or may undertake the performance thereof or any part thereof departmentally, and the provisions of Clause 4.7.3.0 hereof shall mutatis mutandis apply to any action taken by the Engineer-in-Charge pursuant to this clause in the same manner as applicable to an action taken under the said clause.

4.7.5.0 If the amount incurred by the OWNER /Engineer-in-Charge, on account of carrying out works under Clause 4.7.3.0 and 4.7.4.0 above, is in excess of the amount due to the CONTRACTOR the OWNER shall be entitled to recover the same, at the OWNER's discretion from any amount due to the CONTRACTOR from the OWNER under this or under any other contract, and any Security Deposit(s) or Bank Guarantee(s) of the CONTRACTOR.

4.7.6.0 Any action taken by the Engineer-in-Charge or Site Engineer under Clauses 4.7.3.0 and / or 4.7.4.0 shall be without prejudice to the full rights of the OWNER and full liability of the CONTRACTOR under the Contract, including but not limited to the OWNER's full rights under Clause 4.4.0.0 and associated clauses thereunder, and under Clauses 7.0.7.0 and 7.0.8.0 hereof.

4.8.0.0 SUB CONTRACTS

4.8.1.0 The CONTRACTOR shall not assign, sub-contract or sublet the whole or any part of the work in any manner, provided the CONTRACTOR may with the prior written approval of the

Engineer-in-Charge, sub-contract any particular work or part of the work to a Sub- Contractor approved by the Engineer-in-Charge.

4.8.2.0 Notwithstanding approval of the sub-contract as aforesaid and notwithstanding that the OWNER /Engineer-in-Charge shall have received a copy of the Contract between the CONTRACTOR and Sub-Contractor, the CONTRACTOR shall be and shall remain exclusively responsible to the OWNER for the due and proper performance of the Contract, and the Sub-Contractor shall for all purposes vis-à-vis the OWNER be deemed to be the servant / agent of CONTRACTOR employed for the performance of the particular work with full responsibility on CONTRACTOR for all acts, omissions and defaults of the sub-contractor.

4.8.3.0 Subject as hereinabove in this behalf specifically permitted and provided, the CONTRACTOR shall not sub-contract any work under the Contract and any sub-contract in breach hereof shall be deemed to be an unauthorized sub-contracting of the Contract or part or portion thereof sub-contracted, as the case may be.

4.8.4.0 If any sub-contractor engaged upon the work at the site executes any work which in the opinion of the Engineer-in-Charge is not of the requisite standard (the opinion of the Engineer-in-Charge being final in this behalf), then without prejudice to any other right or remedy available to the OWNER, the Engineer-in-Charge may, by written notice to the CONTRACTOR, require the CONTRACTOR to terminate such sub-contract, and the CONTRACTOR shall upon receipt of such notice, forthwith terminate such sub-contract at the risk and cost of the CONTRACTOR, and shall keep the OWNER indeminified from and against the consequences.

4.8.5.0 Notwithstanding such sub-contract being approved by Engineer-in-Charge as herein envisaged, the CONTRACTOR shall at the commencement of every month furnish Engineer-in-Charge with a list of all sub-contractors engaged and working at the site during the previous month, with particulars of the general nature of the works performed by them.

4.9.0.0 MISCONDUCT

4.9.1.0 If and whenever any of CONTRACTOR's or sub-contractor's agent(s) / sub-agent(s), consultant(s) or employee(s) shall in the opinion of the Engineer-in-Charge or Site Engineer (whose opinion in this behalf shall be final) be guilty of misconduct or be incompetent or insufficiently qualified or negligent in the performance of his / their duties, or if in the opinion of the Engineer-in-Charge (which shall be final) it is undesirable for any reason (which need not be disclosed to the CONTRACTOR) for such person(s) to be employed in the work, the CONTRACTOR, if so directed by the Site Engineer, shall forthwith remove or cause to be removed such person(s) from employment thereon, and any person(s) so removed shall not be re-employed in the work except with the prior permission in writing of the Engineer-in-Charge. Any person(s) so removed from the works shall be immediately replaced at the expense of the CONTRACTOR by a qualified and competent substitute.

4.9.2.0 If, at any time, in the course of execution of the contract, the OWNER / Engineer-in-Charge finds that any person employed by the CONTRACTOR or his sub-contractor(s) or other agency(ies) employed by the CONTRACTOR is not observing and/or is willfully flouting the operating security and safety precautions of the area in which he is working and / or are found to be indulging in activities prejudicial to the interest of the OWNER, the CONTRACTOR shall forthwith, on being directed by the OWNER/ Engineer-in-Charge in this behalf remove or cause to be removed such person(s), as may be named by the OWNER / Engineer-in-Charge in this behalf, from the site, within 24 hours of such intimation and such person(s) shall not be re-employed in this work or any other work under the OWNER, without the prior written permission of the OWNER. All repatriations of any person(s) removed from the site shall be done by the CONTRACTOR at his own cost and the vacancy(ies) so caused shall be filled by the CONTRACTOR at his own expenses by competent substitutes.

4.9.3.0 If any activities of any such person are considered by the OWNER or Engineer-in-Charge to be criminal in character and/or prejudicial to the public or national interest, the CONTRACTOR shall, in addition to removing such person(s) as stipulated in 4.9.2.0 above, also co-operate with the OWNER/ Engineer-in-Charge in lodging such complaints with the police or other authorities as the OWNER or Engineer-in-Charge considers necessary, and shall co-operate with the OWNER, in handing over such person(s) to the concerned authorities as decided by the OWNER.

4.9.4.0 The CONTRACTOR shall keep the OWNER indemnified from and against all personnel and third party claims whatsoever (inclusive of all costs incurred between attorney and client) arising out of any act or omission or intermission on part of any sub-contractor or agent, sub-agent, consultant, or employee of the CONTRACTOR or any sub-contractor, whether committed, omitted or arising with or without the scope of the contract, sub-contract, agency or employment, or otherwise.

4.10.0.0 CHANGE IN CONSTITUTION OF THE CONTRACTOR:

4.10.1.0 The CONTRACTOR, whether an individual, Proprietary concern, Partnership firm, Private limited Company or Public Limited Company, shall not make any change(s) in its constitution, by transfer of substantial shareholding or of management (in the case of a company) or by addition or deletion of Partners, change in the terms of Partnership, or make any other material change(s) without prior intimation to and approval of the OWNER. Any such unauthorised change shall attract the provisions of Clause 7.0.1.0 hereof.

4.11.0.0 DEVIATIONS AND VARIATIONS IN SPECIFICATIONS

4.11.1.0 The Engineer-in-Charge may at his discretion, and without prejudice to any other right or remedy available to the OWNER in this behalf permit a deviation or variation from the Specifications or accept any work or items of work performed by the CONTRACTOR at variance with the Specifications and any such permission, deviation or variation shall ipso facto be subject to the condition that the monetary benefit of the deviation or variation, as determined by the Engineer-in-Charge (whose decision shall be final and binding upon the CONTRACTOR) shall be passed on to the OWNER. In such event the CONTRACTOR shall be entitled only to such remuneration in respect of such works or item(s) of work as may be determined by the Engineer-in-Charge after reduction of the monetary benefit arising from the deviation or variation as determined by the Engineer-in-Charge after reduction of the monetary benefit arising from the deviation or variation as determined by the Engineer-in-Charge which determination shall not be disputable by nor can otherwise form the subject matter of a notified claim by the CONTRACTOR.

4.11.2.0 Any permission or acceptance for any deviation or variation in specification as envisaged in Clause 4.11.1.0 hereof shall not be understood by the CONTRACTOR unless specifically given in writing by the Engineer-in-Charge to the CONTRACTOR in the absence of which any deviation taken or variation done in any work performed by the CONTRACTOR at variance with contractual specifications, shall be deemed to be defective works attracting consequences elsewhere herein specified with respect to defective work(s).

SECTION – 5

INSPECTION, TESTING AND QUALITY ASSURANCE

5.0.0.0 QUALITY ASSURANCE

5.0.1.0 Within two weeks of the receipt of the Letter of Acceptance from the OWNER, the CONTRACTOR shall submit to the Engineer-in-charge, a detailed Quality Assurance Plan envisaged by him for ensuring due and proper adherence to Quality as required by the Specifications for the work. This Quality Assurance Plan (QAP) shall give in detail the Organization and Methodology, Checks and controls, as well as the Correction mechanisms built into the QAP system as envisaged by the CONTRACTOR at the Site and elsewhere, for ensuring quality inputs into the work and for ensuring quality output on the Job.

5.0.2.0 The Engineer-in-charge shall be entitled, from time to time and at any time to make or cause to be made such addition(s), modification(s) or alterations(s) in the QAP as he considers necessary to improve the QAP (the decision of the Engineer-in-Charge in this behalf shall be final and binding on the CONTRACTOR), and the CONTRACTOR shall thereafter follow the QAP as added, modified or altered by the Engineer-in-charge.

5.1.0.0 INSPECTION AND TESTING OF MATERIALS

5.1.1.0 The Engineer-in-Charge shall be entitled at all times, at the risk of the CONTRACTOR, to inspect and/or test by itself or through an independent person(s) or agency(ies) appointed by the OWNER or Engineer-in-Charge and / or to direct the CONTRACTOR to inspect and/or test or to get inspected and/or tested**,** all materials, items and components, whatsoever supplied or proposed for supply for incorporation in the works, inclusive during the course of manufacture or fabrication by the CONTRACTOR and / or at the CONTRACTOR 's or his sub-vendors' works or otherwise, of such material, item or component. The inspection and / or tests shall be conducted at the expense of the CONTRACTOR, and may be directed by the OWNER or Engineer-in-charge to be conducted by authorized representatives of the OWNER/Engineer-in-charge or third party inspection agency(ies) appointed by the OWNER. The OWNER may also require that all the inspections and tests conducted by the CONTRACTOR at his works or his sub-vendors' works be carried out in the presence of authorized representatives of the OWNER/Engineer-in-Charge/ third party inspection agency(ies) appointed by the OWNER. The CONTRACTOR shall provide the OWNER/ Engineer-in-charge and/or their representatives/Agents every facility or assistance necessary for carrying out or witnessing, as the case may be, the Test(s)/Inspection(s).

5.1.2.0 The CONTRACTOR shall also on receipt of intimation of any communication of any inspection or tests by the OWNER/Engineer-in-Charge or any of their representative(s)/agency(ies) nominated by the OWNER or Engineer-in-Charge in this behalf, present himself or his authorized representative at the place of inspection and/or testing to receive any orders or instructions consequent thereto, as shall be necessary.

5.1.3.0 The CONTRACTOR shall furnish to the Site Engineer for approval when requested, or as required by the specifications or other contract documents, adequate samples of all materials and finishes intended for incorporation in the works, such samples are to be submitted before the work is commenced permitting sufficient time for test(s)/examination(s) thereof of the OWNER. All materials furnished and finishes incorporated in the work shall conform to the approved sample(s) in all respects.

5.1.4.0 The Engineer-in-Charge and/or Site Engineer shall be entitled to reject at any time any defective material, item or component (including specially manufactured or fabricated items and

components) supplied by the CONTRACTOR for incorporation in the works, notwithstanding previous inspection and/or testing thereof by or on behalf of the OWNER without rejection and notwithstanding previous approval thereto by or on behalf of the OWNER (the decision of the Engineer-in-Charge as to any defect as aforesaid being final and binding upon the CONTRACTOR), and upon such rejection, the CONTRACTOR shall either perform such work or improvement thereon or in respect thereof, as shall be necessary to bring the material item/component to the requisite standard, or shall, if so required by the Engineer-in-Charge (whose decision in this behalf shall be final), remove the rejected material/item/component from the job site within the time specified by the Engineer-in-Charge or the Site Engineer and replace it at his own cost and expense (without additional remuneration or compensation in respect thereof) with material(s)/item(s)/component(s) approved by the Site Engineer. The provisions of clause 5.2.7.0 hereof shall mutatis mutandis apply to any failure of default by the CONTRACTOR to do so.

5.2.0.0 **INSPECTION AND TESTING OF WORKS**

5.2.1.0 The CONTRACTOR shall at all times ensure the highest standards of workmanship relative to the work, to the satisfaction of the Site Engineer or any Inspector(s) or Inspecting Agency(ies) nominated by the OWNER/Engineer-in-Charge in this behalf. The Site Engineer/ Inspector(s)/ Inspecting Agency(ies) shall have the power to inspect the work in all respects, at any and all times up to completion of the work as also to test or instruct the CONTRACTOR to test the works or any structure, material or component thereof at the risk and cost of the CONTRACTOR, either by the CONTRACTOR or by any agency(ies) nominated by the OWNER/Engineer-in-Charge or Site Engineer in this behalf.

5.2.1.1 The CONTRACTOR shall provide all facilities, instruments, material, labour and accommodation required for inspecting and testing the works (including checking the setting out of the works) and shall afford the Site Engineer/Inspector(s)/Inspecting Agency(ies) all assistance necessary to conduct the tests.

5.2.1.2 The CONTRACTOR shall also provide and keep at all times during the progress of the work and maintenance period, proper means of access to the works and every part thereof by means of ladders, gangways, etc., and necessary attendance to move and set up the same as directed by the Site Engineer/Inspector(s)/Inspecting Agency(ies) for inspection or measurement of the works.

5.2.2.0 On no account shall the CONTRACTOR proceed with concreting or other work such as (but not limited to) foundations, superstructure or edge preparation of pipes for welding) by covering up or otherwise placing beyond the reach of inspection or measurement any works before necessary inspection entries are filled in the Site Inspection Register by the Site Engineer or the Inspector(s) or Inspecting Agency(ies).

5.2.3.0 Should the CONTRACTOR fail to comply with any of the provisions aforegoing relative to inspection and / or testing of the works, the Engineer-in-Charge or Site Engineer shall in his absolute discretion be entitled to remove / dismantle and / or uncover, as the case may be, at the risk and cost of the CONTRACTOR for test and examination any works, structure or component thereof installed, erected or put up by the CONTRACTOR and to conduct or have conducted the test(s) and / or examination at the risk and cost of the CONTRACTOR. In such event, the CONTRACTOR shall also bear the risk and costs of replacement, reinstallation or re-erection of the concerned works, structure, or component, as the case may be.

5.2.4.0 Notwithstanding anything provided in the aforegoing clauses hereof, the CONTRACTOR shall be and remain liable at his own cost and initiative to conduct all tests at all relevant times during supply, erection and installation of any works, structure, material or component as shall be required in terms of the Contract Documents or by any codes or specifications referred to therein or approved by the OWNER or the Engineer-in-Charge. Where the Contract Documents or codes or specifications do not state or nominate the agency or laboratory where such test shall be conducted, the same shall be conducted at the cost of the CONTRACTOR through an agency(ies) or laboratory(ies) nominated by the OWNER or the Engineer-in-Charge for the purpose.

5.2.5.0 Should the Engineer-in-Charge or Site Engineer on inspection or testing be not satisfied with the quality or workmanship of any works, structure, item or component (the decision of the Engineer-in-Charge being final in this behalf), the CONTRACTOR shall forthwith re-perform, replace, reinstall or re-erect, as the case may be, such works, structure, item or component, and no such rejected works structure, item or component shall be reused with reference to the work except with the prior permission of the Engineer-in-Charge or Site Engineer, and the provisions of Clause 5.2.7.0 hereof shall apply to default by the CONTRACTOR of the provisions of this Clause.

5.2.6.0 Notwithstanding anything provided in foregoing clauses hereof and notwithstanding that the Site Engineer and/or Inspector(s) or Inspecting Agency(ies) has/have inspected, tested and/or approved any particular work, structure, item or component, such inspection, test or approval shall not absolve the CONTRACTOR of his full responsibility under the Contract (inclusive of and relative to specification fulfillment and performance guarantees) the said inspection and test procedure being intended basically for the satisfaction of the OWNER that prima facie the erection done and/or materials and components supplied for incorporation in the works is in order.

5.2.7.0 Should the CONTRACTOR fail to remove and/or re-perform replace, reinstall, re erect, as the case may be, any work, structure, material, item or component rejected or found defective in terms of Clause 5.1.4.0 or Clause 5.2.5.0 hereof within such period as the Engineer-in-Charge may specify by written notice to the CONTRACTOR in this behalf, the CONTRACTOR shall be deemed to be in breach of contract within the provisions of Clause 7.0.1.0 hereof with regard to termination of Contract and associated provisions thereunder and the OWNER and Engineer-in-Charge shall be entitled (without prejudice to any other right or remedy of the OWNER) to remove the rejected / defective works, structure, material, item or component and to re-perform, replace reinstall and / or re-erect, as the case may be, the same by itself or through other agency(ies) or contractor(s) at the risks and costs of the CONTRACTOR in all respects, and recover the costs incurred by the OWNER in this behalf together with a supervision charge of 15% (fifteen percent) thereon admissible to the OWNER, and the OWNER shall be entitled (without prejudice to any other mode of recovery) to deduct the same from the Running Account / Final Bill(s) of the CONTRACTOR or any monies becoming due to the CONTRACTOR from time to time under this or any other Contract.

5.2.7.1 For the purposes of Clause 5.2.7.0 hereof, the decision of the Engineer-in-Charge on whether the works, structure, material, item or component is/are defective and/or is/are required to be removed and/or re-performed replaced, re-installed and/or re-erected, as the case may be, and as the costs incurred by the OWNER in this behalf, shall be final and binding upon the CONTRACTOR.

5.2.8.0 Without prejudice to and in addition to any other right of inspection, test or examination by the OWNER, before or after the passing and payment of the Final Bill , but before the expiry of the defect liability period, external agencies such as the Chief Technical Examiner of the Central Vigilance Commission shall have the right to technically audit the works. Any defects in the works pointed out by this technical audit group/agency shall be final and binding on the CONTRACTOR, notwithstanding that the Final Bill had been passed and/or paid to the CONTRACTOR and notwithstanding that the findings and report of this agency is released after the expiry of the defect liability period. The CONTRACTOR shall be bound to remove the defects pointed out by the technical audit group/agency and to repair / replace the defective works to the satisfaction of the OWNER, and the OWNER shall be entitled to retain in whole or part the CONTRACTOR's dues (if the Final Bill has not been paid), or the Security Deposit (if any) remaining in the hands of the OWNER, or to encash in whole or part the Bank Guarantee(s) (if any) remaining in the hands of the OWNER to ensure the fulfilment of the CONTRACTOR 's obligations in this regard. The Provisions of Clauses 5.2.7.0 and 5.2.7.1 hereof shall mutatis mutandis apply to such defect(s).

5.2.8.1 Should the CONTRACTOR fail to comply with the provisions of Clause 5.2.8.0 hereof, the provisions of Clauses 5.2.7.0 and 5.2.7.1 hereof shall mutatis mutandis apply.

5.2.8.2 In case the defects or any of them are such as not to require replacement, the OWNER shall have the right to accept the defective work with suitable reduction in rates/price, as may be determined

by the General Manager, for the determination of which the provisions of Clause 2.4.1.2 hereof shall mutatis mutandis apply, for which purpose any reference in Clause 2.4.1.2 to the Engineer-in-Charge shall be deemed to be a reference to the General Manager, and the defective works shall be deemed to be works not covered by the Schedule of Rates/lumpsum price as the case may be. The reduction as determined by the Engineer-in-charge shall be final and binding on the CONTRACTOR.

5.2.8.3 Should the money retained by the OWNER pursuant to the provisions of Clause 5.2.8.0 hereof be insufficient to meet the CONTRACTOR's liabilities, the CONTRACTOR shall forthwith on demand by the OWNER pay the shortfall, failing which the CONTRACTOR shall be liable to pay the OWNER interest on the outstanding at the rate of interest applied by the State Bank of India on overdrafts, and the OWNER shall, without prejudice to any other right or remedy available to the OWNER, be entitled to recover the shortfall from any amount(s) payable or becoming due and payable under any other contract(s).

5.3.0.0 **FINAL TESTS & POSSESSION OF WORKS**

5.3.1.0 As soon as the works have been completed in all respects to the satisfaction of the Engineer-in-charge or Site Engineer, Final Tests of the works shall be undertaken by the CONTRACTOR at the risks and costs of the CONTRACTOR , in the presence of the Site Engineer or his authorized representative(s). The OWNER may at its discretion permit final test(s) piecemeal in respect of particular part(s) or group(s) of the works or in respect of particular job site(s) involved.

5.3.1.1. The CONTRACTOR and the Site Engineer shall maintain a joint record of all final tests conducted, together with the results thereof, indicating the dates on which each of the said final tests was completed part-wise, component-wise, section-wise, group-wise, plant-wise, system-wise and sub-system wise, as well as on the entire works or Unit as a whole.

5.3.2.0 The OWNER shall be entitled to take over for operation, any of the various parts, components, sections, groups, plants, systems or sub-systems of the work, on which the respective final tests are completed. The date, on which the final tests on the entire work have been completed, shall be reckoned as the date of completion of the entire work covered by the contract.

5.3.2.1 Unless commissioning is included within the scope of work of the CONTRACTOR, in a contract in which the scope of work of the CONTRACTOR includes erection and/or installation of a Plant or Unit or of any equipment, the date of Mechanical Completion thereof recorded by the Engineer-in-charge pursuant to successful final tests under Clause 5.3.1.1 hereof shall be reckoned as date of completion of the work.

5.3.3.0 If during Final Tests or prior there to any defects(s) in the design (insofar far as the work may involve any designing on the part of the CONTRACTOR) or in any work performed or structure or component in-stalled or erected or re-installed or re-erected or in any installation or erection or material or other items incorporated in the works, is/are noticed, the CONTRACTOR shall forthwith repair (if it can be repaired) and/or remove and/or demolish the same (if it cannot be repaired) and replace, re-install and re-erect the same and otherwise do and provide whatever is necessary to be done or provided to correct, repair, and/ or rectify the defect(s) to the satisfaction of the Engineer-in-charge, and if the defect (s) be discovered during the Final Tests, the CONTRACTOR shall thereafter repeat the Final Tests or such of them as may be required to be repeated and so on, until the successful conclusion of Final Tests as aforesaid, without any defects in respect of the entire works or Plant or Unit, as the case may be.

5.3.3.1 Should the CONTRACTOR fail to correct, repair or rectify any defects as aforesaid, the provisions of Clauses 5.2.7.0 and 5.2.7.1 hereof shall mutatis mutandis apply.

5.3.4.0 If, by reason of any default on the part of the CONTRACTOR, final tests cannot be conducted in respect of the entire works or for the Plant or Unit (in the case of a Contract which includes within its scope the erection or installation thereof) or for any of the separate part(s), component(s),

section(s), group(s), system(s) or sub-system(s) comprised therein, within 30 (thirty) days after the dates fixed for the completion of the entire works covered by the contract under the Progress Schedule or Mechanical Completion of the Plant/Unit, as the case may be, the OWNER shall be entitled, notwithstanding anything provided in Clause 5.3.2.0 hereof and without prejudice to any other rights or remedies of the OWNER and/or the liabilities of the CONTRACTOR under the Contract including (but not limited to) the rights of the OWNER under clauses 4.4.0.0, 7.0.1.0 and associated clauses thereunder, to take over and use the incomplete works or Plant or Unit, as the case may be, with or without affording the CONTRACTOR any further opportunity for completing the works and/or satisfying the requirements of final tests. The taking over and possession or use of the works or Plant or Unit or any part or portion or component, section or group or system or sub-system thereof by the OWNER, under the above provisions shall not be deemed to be an acceptance of the works or Plant or Unit or the relative part, portion, component, section, group, plant, system or sub-system, as the case may be, nor shall relieve the CONTRACTOR of his full obligations in respect thereof under the contract.

5.3.5.0 If the CONTRACTOR is permitted to complete and/or conduct final tests for the works or Plant or Unit, or any part of the works or Plant or Unit, as the case may be, after it is taken over under the provisions hereof, this shall be without prejudice to the rights of the OWNER under the contract, including (but not limited to) clauses 4.4.0.0 and 7.0.1.0 and associated clauses thereunder.

5.3.5.1 If the CONTRACTOR is permitted to complete and/or conduct final tests for the works or Plant or Unit or any part of the works or Plant or Unit, as the case may be, and the CONTRACTOR is of opinion that such taking over and/or use shall require an extension of time for completion and/or for conducting final tests, the provisions of Clause 4.3.5.0 and associated Clauses thereunder relating to extension of time shall apply.

5.3.5.2 If pursuant to action under Clause 5.3.4.0 the CONTRACTOR is not permitted by the OWNER to complete and/or to conduct final tests for the works or Plant or Unit or any part thereof, the incomplete works/Plant/Unit shall be deemed to be a defective work. If the OWNER decides not to exercise its rights under Clause 4.7.4.0 or Clause 7.0.1.0 in respect thereof, then the OWNER shall (without prejudice to any other right which it may have) be deemed to have agreed to accept the defective works subject to a reduction in the applicable rate(s)/lumpsum price(s) as determined by the General Manager, and the provisions of Clause 5.2.8.2 hereof shall mutatis mutandis apply.

5.3.6.0 If the Final Tests cannot be completed in respect of the entire work or the Plant/ Unit or any part/ component/ section/ group/system/ subsystem thereof, for reasons solely attributable to the OWNER, within 30 (thirty) days after the date fixed for completion of the entire Works or Mechanical Completion of the Plant/ Unit, as the case may be, under the Progress Schedule, the OWNER shall be entitled to take over and use the works/Plant/Unit pending the completion of the Final Tests by the CONTRACTOR at a later date. If, however, the Final Tests cannot be completed within 6 (six) months of taking over the works/Plant/Unit for reasons solely attributable to the OWNER, the CONTRACTOR 's progressive/ stagewise payment, if any, held back specifically for non-completion of the said Final Tests, shall be released to the CONTRACTOR by the OWNER, against a Bank Guarantee for an equivalent amount issued in a form and by a Scheduled Bank in India acceptable to the OWNER. This Bank Guarantee shall be kept valid for a period of 6 (six) months from the date of release of payment as aforesaid. If, however, it is still not possible to conduct the Final Tests, within the validity period of the aforesaid Bank Guarantee for reasons solely attributable to the OWNER, the requirement of Final Tests for the concerned works or Plant/Unit or part/ component/section/ group/ plant system/ subsystem thereof, shall stand waived and the said Bank Guarantee will be released to the CONTRACTOR, duly discharged, by the OWNER.

5.3.7.0 The OWNER may, in addition to any other right(s) or power(s) to take over and/or use incomplete or defective works, at any time during the progress of the works, notwithstanding that time for the completion of the entire works or concerned part, system(s), portion or section thereof according to the Progress Schedule(s) shall not have expired, take over and/or use for any purpose the

incomplete or partially completed works or any part, system(s), portion or section thereof, as the case may be, and give the CONTRACTOR an opportunity for completing the work or relative part, system(s) or portion or section thereof, as the case may be, within the time for completion permitted therefor under the Progress Schedule. If in the opinion of the CONTRACTOR, such taking over and/or use require an extension of time for completion, the provision of Clause 4.3.5.0 hereof and associated clauses thereunder relating to extension of time shall apply. Provided Always that such taking over, possession or use of the works or any part, system(s), portion or section thereof by the OWNER within the provisions hereof shall not be deemed to be an acceptance of work or relative part, system(s), portion or section thereof by the OWNER or relieve the CONTRACTOR of his full obligations in respect thereof under the CONTRACT.

5.4.0.0 COMMISSIONING AND PERFORMANCE TESTS

5.4.1.0 If commissioning is within the scope of work of a CONTRACTOR engaged inter alia for erection and/or installation of a Plant or Unit, the work shall be deemed not to be complete unless the Plant/Unit is successfully commissioned and handed over to the OWNER for operation.

5.4.2.1 Prior to commissioning the Plant or Unit, the CONTRACTOR shall undertake all operations necessary for start-up of the Plant/Unit to the satisfaction of the Engineer-in-Charge.

5.4.3.0 While the OWNER shall provide the utilities required for start-up and commissioning the Plant/Unit and the raw material or feed stock to be processed in the Plant or Unit, the CONTRACTOR shall provide all other inputs and consumables required for start-up and commissioning the Plant/Unit including grease and lubricants and first fill of fuels and oils for the equipment and Machinery

5.4.4.0 The CONTRACTOR shall provide all personnel required for start-up and supervisory and technical personnel required for commissioning, while the OWNER shall provide operating personnel for commissioning, and shall make and undertake modifications in the Plant/Unit required for successfully commissioning the Plant/Unit. The CONTRACTOR shall not, however, within the scope of the work of erecting and/or installing or commissioning the Plant/Unit be required to supply any material (other than utilities and consumables) required to be incorporated in such modification.

5.4.5.0 The Plant/Unit shall be understood to have been successfully commissioned by continuous and stabilised operation upto full capacity for a continuous period of not less than 7 (seven) days. On successful commissioning of Plant/Unit, the Engineer-in-Charge shall issue a Commission Certificate which shall state the date of completion of commissioning.

5.4.6.0 If conduct of Performance Tests falls within the scope of work of a CONTRACTOR engaged inter alia for erection and/or installation of a Plant or Unit, the work shall be deemed not to be complete until successful completion of the Performance Tests.

5.4.6.1 Performance tests shall be started when the Unit is stabilized under design conditions. The plant shall be operated and controlled in accordance with procedures set up before hand. The performance shall be measured on the basis of the average of data obtained during 72 (Seventy two) hours of performance tested under continuous operation of the Unit/Plant in performance test conditions after the Unit/Plant has been stabilized.

5.4.7.0 The CONTRACTOR shall provide technical and supervisory personnel required to conduct the Performance Tests, while the OWNER shall provide all other inputs required for the purpose. The CONTRACTOR shall make and undertake all modifications required to be made in the Plant/Unit to meet the Performance parameters and/or to successfully complete the Performance Tests for the Plant/Unit. The CONTRACTOR shall not, however, within the scope of work of erecting and/or installing or conducting Performance Tests for the Plant/Unit be required to supply any materials (other than utilities and consumables) required to undertake the modifications. The Performance Tests shall be repeated, if necessary, until successful completion of the Performance Tests. On

successful completion of the Performance Tests, the Engineer-in-Charge shall issue the CONTRACTOR a Performance Test Certificate which shall indicate the dates on which the Performance Tests were conducted and the date(s) of successful completion of the Performance Tests. The provisions of Clause 5.2.6.0 hereof shall mutatis mutandis apply to Performance Tests in the same manner as they apply to Final Tests.

5.4.8.0 If during commissioning and/or Performance Tests any defects are discovered in any work performed by the CONTRACTOR or in any erection or installation undertaken by the CONTRACTOR, the CONTRACTOR shall forthwith within the scope of work do and provide all that is necessary to be done or provided to correct, repair and/or rectify the defect(s) to the satisfaction of the Engineer-in-Charge and shall remove or demolish and re-erect or re-install the defective works, if necessary, and shall thereafter continue with the commissioning or repeat the Performance Tests, as the case may be, or such of them as are required to be performed, and so on until successful completion of the Commissioning and/or Performance Tests. Should the CONTRACTOR fail to correct, repair or rectify any defects as aforesaid, the provisions of Clauses 5.2.7.0 and 5.2.7.1 hereof shall mutatis mutandis apply.

5.4.8.1(a) If on any testing any material or equipment or the Unit does not meet the design, rated or guaranteed performance relative thereto, the CONTRACTOR shall forthwith within the CONTRACTOR's scope of work and at no additional cost to the OWNER undertake such additional tests and/or operations as are necessary to identify the cause of such failure. Such tests and/or operations shall be conducted in conjunction with the Process Licensor, if the Unit as a whole fails to meet the Process Licensor's Guarantees.

(b) If as a result of such tests and/or operations it is determined that the design, rated and/or guaranteed outputs or capacities have not been met because of a defect or deficiency or unsuitability or inadequacy in or of any material(s) (including machines and equipments) supplied by the CONTRACTOR, the CONTRACTOR shall forthwith in consultation with the Engineer-in-Charge take steps necessary to cause the defect/ deficiency/ unsuitability/ inadequacy to be identified and rectified, either by re-placement of the defective material or part thereof or by repair thereof.

(c) If under any of the provisions hereof, the CONTRACTOR is required to undertake any modification, rectification or replacement, the CONTRACTOR shall for this purpose forthwith establish a Time Schedule acceptable to the Engineer-in-Charge for such modification/ replacement/ rectification bearing in mind the time exigencies and the Project requirements. Should the CONTRACTOR fail to establish the Time Schedule, the Engineer-in-Charge shall establish the Time Schedule, and the Time Schedule so established shall be binding on the CONTRACTOR.

(d) Should the CONTRACTOR thereafter fail to adhere to a Time Schedule so established for the replacement/rectification, the OWNER may (but without obligation to do so) take over in whole or part such replacement/rectification at the risk and cost of and as agent of the CONTRACTOR. In so doing, the OWNER shall be entitled to identify and employ through private negotiations the quickest available resources of supply and/or work without resorting to the tender process or any other form of competitive bidding and shall be entitled to recover from the CONTRACTOR, the costs incurred by the OWNER in respect thereof, plus 15% (fifteen percent) supervision charges.

5.4.9.1 The procedure for commissioning the Plant/Unit and/or for conducting Performance Tests shall be as prescribed by the Engineer-in-Charge taking into account the requirements of the manufacturers/Vendors of plant and equipment and the Licensors of the process(es) involved. The CONTRACTOR shall strictly comply with the procedure to ensure strict adherence with the said requirements.

5.4.9.1 Although the CONTRACTOR is not responsible for process guarantees, he shall carry out all activities for collecting the required data during Performance Test runs to identify problems of

non-performance for further analysis and modifications required to meet process performance parameters.

5.5.0.0 **COMPLETION CERTIFICATE**

5.5.1.0 After the final tests have been successfully completed in respect of all the works envisaged in the contract**,** or after the Plant/Unit has been Mechanically completed, as the case may be, the CONTRACTOR shall clear the job site of all scaffolding, wiring, pipes, surplus materials, CONTRACTOR 's labour, equipment and machinery and shall demolish, dismantle and remove all CONTRACTOR 's site offices and quarters and other temporary works, structures and constructions and other items and things whatsoever brought upon or erected at the job site or any land allotted to the CONTRACTOR by the OWNER and not incorporated in the permanent works and shall remove all rubbish from the job site and the land allotted to the CONTRACTOR and shall clear, level and dress the job site and said land to the satisfaction of the Site Engineer and shall put the OWNER in undisputed custody and possession of the job site and all land allotted by the OWNER to the CONTRACTOR , and unless the CONTRACTOR shall have fulfilled the provisions of the clause, the works shall not be deemed to have been completed, and failing compliance by the CONTRACTOR of the provisions of this clause, the provisions of Clauses 7.0.6.0 and 7.0.7.0 hereof and associated provision thereunder shall mutatis mutandis apply.

5.5.2.0 Upon the satisfactory fulfillment by the CONTRACTOR of the provisions of Clause 5.5.1.0 hereof, the CONTRACTOR shall be entitled to apply to the Engineer-in-Charge, for a Completion Certificate in respect of the entire work or work at any job site, as the case may be, upon submission of the following documents:

(i) The Technical Documents according to which the work was carried out;

(ii) Complete set of working drawings showing therein corrections and modifications (if any) made during the course of execution of the works, signed by the Engineer-in-Charge;

(iii) Certificates of final levels as set for various works, signed by the Site Engineer;

(iv) Records of the final test as maintained jointly and signed by the representative of the CONTRACTOR and the Site Engineer or Mechanical Completion Certificate (if commissioning is not within the CONTRACTOR's scope of work) and Commissioning Certificate (if Performance Tests are not within the CONTRACTOR's scope of work) and Performance Test Certificate (if Performance Tests are within the CONTRACTOR'S scope of work).

(v) Certificate of Site Engineer of satisfactory fulfillment of the provisions of Clause 5.5.1.0 hereof;

(vi) List of surplus/scrap materials, (out of the materials issued by the OWNER) returned to the OWNER's Store or otherwise disposed of, duly signed by the Site Engineer;

(vii) Materials-at-site accounting for OWNER-supplied materials, signed by the Site Engineer;

(viii) Discharge Certificate in respect of OWNER-supplied equipment and machinery, signed by the Site Engineer; and

(ix) Declaration by the CONTRACTOR that he has duly cleared any and all of the dues payable by him to his Labour/ Piece rate workers (PRWs), Sub-Contractors, Suppliers, Vendors, Income Tax, Sales Tax, Octroi and Service Tax, Excise and Customs, Provident fund, ESI and royalties, if any.

5.5.3.0 If Engineer-in-Charge is satisfied of the completion of the work relative to which the Completion Certificate has been sought and of the completeness in all respects of the Documents specified in

Clause 5.5.2.0 hereof, the Engineer-in-Charge shall, within 14 (fourteen) days of receipt of the application for Completion Certificate, issue a Completion Certificate in respect of the said work in the format prescribed by the OWNER.

5.5.3.1 The issue of a Completion Certificate shall be without prejudice to the OWNER's rights and to the CONTRACTOR's liabilities under the Contract, including the CONTRACTOR's liability for the defect liability period under Clause 5.6.1.0 hereof, nor shall the issue of a Completion Certificate in respect of the works or work at any job site be construed as a waiver of any right or claim of the OWNER against the CONTRACTOR in respect of work or the works at the job site in respect of which the Completion Certificate has been issued.

5.5.4.0 Up to and until issue of the Completion Certificate as provided for hereinabove in respect of the work or works at any job site, the relative work(s) shall be and remain at the risks of the CONTRACTOR in all respects, including (but not limited to) accident, fire, lightning, earthquakes, flood, storm, tempest, riot, civil commotion and/ or war, except for such works/Plant/Unit or parts, portions, components, sections, groups, systems or sub-systems, which have been taken over by and put to beneficial use by the OWNER, in respect whereof such risks shall pass to the OWNER when the OWNER takes over the same in terms of the Contract.

5.6.0.0 DEFECT LIABILITY PERIOD

5.6.1.0 The Defect Liability Period for the works (including the materials incorporated therein within the CONTRACTOR's scope of supply) shall unless otherwise specified be 12 (twelve) months from the date of issue of the Completion Certificate.

5.6.1.1. The CONTRACTOR shall, at his own cost and initiative, correct, repair and/or rectify any and all defect(s) and/or imperfections in the design of the work (insofar as the CONTRACTOR shall be concerned with the design of the work or any part thereof) and/or in the work performed and/or materials, components or other items incorporated therein within the CONTRACTOR's scope of supply as shall be discovered during the Defect Liability Period and in the event of the CONTRACTOR failing to do so, the provisions of Clauses 5.2.7.0 and 5.2.7.1 hereof shall apply.

SECTION 6

MEASUREMENTS AND PAYMENTS

6.0.0.0 **FINAL MEASUREMENTS:**

6.0.1.0 Within 15 (fifteen) days from the date of completion of Final Test(s) in respect of the works or any portion, section, group or job site, as the case may be, the CONTRACTOR shall cause to be jointly taken with the Site Engineer, final measurements as herein provided for the works covered by the said Final Test(s).

6.0.2.0 If the CONTRACTOR fails to apply to the Engineer-in-Charge for final measurements within 15 (fifteen) days from the date of relative final tests as specified in Clause 6.0.1.0 hereof, the Site Engineer may, of his own initiative, notify the CONTRACTOR in writing of the date(s) for final measurements. The CONTRACTOR shall be bound to present himself for the measurements on date(s) so notified, failing which the provision of Clause 6.1.4.0 hereof shall apply.

6.1.0.0 **MODE OF MEASUREMENT:**

6.1.1.0 All measurements shall be in the metric system, and except where expressly indicated to the contrary in the Schedule of Rates or other Contract Documents, all measurements shall be taken in accordance with the procedures set forth in the Schedule of Rates, Specifications and other Contract Documents, notwithstanding any provision(s) in the relative standard method of measurement or any other general or local custom to the contrary.

6.1.2.0 In the event of the mode of measurement being not provided for by the Contract Documents in respect of any item of the work, such item of work shall be measured in accordance with the Indian Standard Specification No.1200 (latest edition) and such other Indian Standard Specifications as may be applicable, and in the event of such item not being covered by the said Indian Standard Specifications, shall be measured in accordance with the method of measurement in this behalf determined by the Engineer-in-Charge, whose decision shall be final and binding upon the CONTRACTOR.

6.1.3.0 All measurements shall be taken jointly by the Site Engineer or his representative on the one hand and the CONTRACTOR or his representative on the other hand and the CONTRACTOR shall be bound to present himself or his authorised representative whenever so required by the Site Engineer, and shall remain present throughout the time required for joint measurements.

6.1.4.0 If the CONTRACTOR absents himself for any reason whatsoever on any date appointed for joint measurements, the joint measurements shall be taken by the Site Engineer in the absence of the CONTRACTOR and the measurements signed by the Site Engineer shall be final and binding upon the CONTRACTOR.

6.1.5.0 Measurements shall be signed and dated on each page by the CONTRACTOR/ CONTRACTOR's representative and Site Engineer/Site Engineer representative. If the CONTRACTOR objects to any of the measurements recorded, including the mode of measurement, such objection shall be noted in the measurement book against the item objected to and such note shall be signed by the CONTRACTOR/CONTRACTOR's representative and Site Engineer/Site Engineer's representative. In the absence of any noted objection as aforesaid, the CONTRACTOR shall be deemed to have accepted the relative measurements as entered in the Measurement Book/Sheets and shall be barred from raising any objection in respect of any measurements recorded in the Measurement book.

6.1.6.0 All measurements relative to which any objections have been noted in the Measurement Book shall be submitted to the Engineer-in–Charge for his decision, and the decision of the Engineer-in-Charge relative thereto (whether on the correct measurement to be adopted or on the mode of measurement to be adopted) shall be final and binding upon the CONTRACTOR.

6.2.0.0 **FINAL BILL**

6.2.1.0 On the basis of the Final Measurements entered in the Measurement Books/Sheets (the measurements decided by the Engineer-in-Charge upon any objection and/or mode of measurement decided by the Engineer-in-Charge upon any objection being the measurement to be adopted in such event), the CONTRACTOR shall prepare and submit to the Engineer-in-Charge a Final Bill in the prescribed form with reference to the total work covered by the Contract. Such Bill is to be drawn up by applying the applicable rate(s) specified in the Schedule of Rates to the relative measured quantity(ies). Final Bill shall also include the reconciliation or accounting of all materials supplied by or on behalf of theOWNER as free issue material or otherwise.

6.2.1.1 If there is any difference or disputes between the CONTRACTOR and the OWNER as to the item(s) of the Schedule of Rates applicable to any particular supply, work or operation, the decision of the Engineer-in-Charge on the applicable item(s) of the Schedule of Rates shall be final and binding upon the CONTRACTOR. If the Engineer-in-Charge shall be of the opinion (which opinion shall be final and binding upon the CONTRACTOR) that the disputed supply, work or operation is not covered by any item in the Schedule of Rates or by any other rate fixed pursuant to the provisions hereof, the Engineer-in-Charge shall determine the applicable rate(s) in respect thereof according to the provisions of Clause 2.4.1.2 hereof, and the rate(s) so determined by the Engineer-in-Charge shall be final and binding on the CONTRACTOR.

6.2.1.2 If the CONTRACTOR has already prepared the Final Bill, the CONTRACTOR shall amend the Final Bill to apply the applicable item(s) of the Schedule of Rates and/or rate(s) as determined by the Engineer-in-Charge and if the CONTRACTOR has not prepared the Final Bill, shall prepare the Final Bill accordingly.

6.2.2.0 The Final Bill shall, in addition to the payment entitlements arrived at according to the provisions of Clause 6.2.1.0 hereof and associated clauses above, include in a separate statement annexed thereto the notified claims of the CONTRACTOR as provided for in Clause 6.6.3.0 hereof.

6.2.3.0 The Final Bill drawn in accordance with the provisions hereof shall be submitted to the Engineer-in-Charge for certification in quintuplicate (or in such other number of copies as may be prescribed), accompanied by the Completion Certificate relating to the works.

6.2.3.1 The Engineer-in-Charge shall within 30 days of the receipt of the Final Bill drawn in accordance with the provisions hereof proceed to check, correct and certify the Final Bill and shall forward the corrected and certified Final Bill to the OWNER for scrutiny and payment together with the Completion Certificate, and shall send to the CONTRACTOR for his information a copy of the Final Bill as corrected and certified.

6.2.4.0 All monies payable under the Contract shall become due to the CONTRACTOR only after submission to the OWNER of the certified Final Bill accompanied by the Completion Certificate in respect of the works.

6.2.5.0 Payment of the amount(s) due on the Certified Final Bill to the extent admitted by the OWNER shall be made within 90 (ninety) days from the date of its certification by the Engineer-in-Charge.

6.2.5.1 The payment to the CONTRACTOR on the Final Bill shall be subject to deduction of retention money(ies), balance security deposits and other claims, if any, as well as income tax as provided under section 194-C of the Income Tax Act and such other taxes and deductions as provided for under any law, rule or regulation having the force of law for the time being applicable (including

any hold ups directed or necessitated by Court Orders or Orders of any Tribunal or other statutory authority and/or of the Vigilance Commission).

6.2.6.0 The OWNER may authorise the Engineer-in-Charge and/or any other person(s) to commence a dialogue with the CONTRACTOR for arriving at a settlement of the notified claims of the CONTRACTOR annexed to the Final Bill as provided in Clause 6.6.3.0 hereof.

6.2.6.1 If a settlement is negotiated with the CONTRACTOR in respect of such claims and such settlement is approved by the OWNER, the CONTRACTOR shall submit a Supplementary Final Bill to the OWNER drawn in terms of the said settlement, and the provisions of Clause 6.2.3.1 and associated clauses thereunder shall mutatis mutandis apply to such Supplementary Final Bill.

6.2.6.2 Payment of the amount due on the Supplementary Final Bill to the extent admitted by the OWNER shall be made within 90 (ninety) days from the date of its certification by the Engineer-in-Charge.

6.3.0.0 **SCHEDULE OF RATES:**

6.3.1.0 The remuneration determined due to the CONTRACTOR under the provision of Clause 6.2.2.0 hereof shall constitute the entirety of the remuneration and entitlement of the CONTRACTOR in respect of the work(s) under the Contract, and no further or other payment whatsoever shall be or become due or payable to the CONTRACTOR under the Contract.

6.3.2.0 Without prejudice to the generality of the provisions of Clause 6.3.1.0 hereof, the Schedule of Rates shall be deemed to include and cover:

(i) All costs, expenses, outgoings and liabilities of every nature and description whatsoever and all risks whatsoever (foreseen or unforeseen) to be taken or which may occur in or relative to the execution, completion, testing and/or handing over the work to the OWNER and/or in or relative to acquisition, loading, unloading, transportation, storing, working upon, using, converting, fabricating, erecting any item, equipment, material or component in or relative to the works and the CONTRACTOR shall be deemed to have known the nature, scope, magnitude and the extent of the works and items, materials, utilities, consumables, equipment, and components and work, labour and services required for the proper and complete execution of the works though the Contract Documents may not fully and precisely set out, describe or specify them; and the generality hereof shall not be deemed to be anywise limited, restricted or abridged because in certain cases, the Contract Documents or any of them shall or may and/or in other cases, they shall or may not expressly state that the CONTRACTOR shall do or perform any particular work, labour or service or because in certain cases, the Contract Documents state a particular work, operation, supply, labour or service shall be performed/made by the CONTRACTOR at his own cost or without additional payment, compensation or charge or without entitlement of claim against the OWNER or words to similar effect, and in other cases, they do not do so or because in cases it is stated that the same are included in or covered by the Schedule of Rates and in other cases, it is not so stated;

(ii) The cost of all constructional plant, equipment, supply of water and power, construction of temporary roads and access, temporary works and facilities, pumps, wiring, pipes, scaffolding, shuttering, and other materials, supervision, labour, insurances, fuel, stores, spares, supplies, appliances and other materials, items, articles and things whatsoever (foreseen or unforeseen) to be supplied, provided or arranged by the CONTRACTOR in or relative to or in connection with the performance and/or execution of each item specified in the Schedule of Rates and any related or incidental works or operations by expression or implication involved therein or incidental thereto, complete in every aspect in accordance with Contract Documents, and the plan(s), drawing(s), design(s), order(s) and/or instruction(s).

(iii) The cost of royalties, licence fees, charges, duties, penalties, levies and damages whatsoever payable for or in respect of any protected or patented goods, materials, equipment or processes employed in or relative to the works and all rents, royalties, licence fees and any other fee, duty, penalty, levy, loss or damage payable on the excavation, removal or transportation of any material or acquisition or use of any right of way or other rights, licences, permits, privileges or usages required for or relative to the performance of the works;

(iv) Customs duties, excise duties and other duties, sales tax on sale or purchase or turnover or on Works Contract or otherwise and other direct and indirect taxes, quay and port dues or charges and all other duties, taxes, fees, charges, levies octroi and/or cesses whatsoever imposed by the Central Government or State Government or Municipal or Local Bodies and other Authorities whatsoever payable on any materials and/or works imported, exported, transported, supplied or performed (including materials incorporated in the works or brought to site for the performance of the work) without any entitlement to the CONTRACTOR for any exemption, remission, refund or reduction thereof.

(v) The cost of all indemnities to the OWNER and insurance premia on insurance required in terms of the Contract Documents under any law, rule or regulation, or otherwise taken out by the CONTRACTOR and the cost of all risks whatsoever (foreseen or unforeseen) including but not limited to risks of delay or extension of time or reduction or increase in the work or scope of work and/or cancellation of Contract and/or accidents, strike, civil commotion, war, labour trouble, third party breach, fire, lightning, inclement weather, storm, tempest, flood, earthquake and other acts of God, Government regulation or imposition or restriction, dislocation of road, rail and other transport, access or facilities, flooding of site and/or access roads or approaches thereto, suspension of work, sabotage and other cause whatsoever.

(vi) The cost of all material supplied to the OWNER and/or intended for incorporation in the works delivered to the job site and stacked as instructed by the Engineer-in-Charge including (but not limited to) loading, transportation and unloading thereof, waste or materials and returns and disposal of waste and of empties; and

(vii) All supervision charges, establishment overheads, finance charges and other costs and expenses of and charges to the CONTRACTOR, and CONTRACTOR's profit of and relative to the work.

6.3.2.1 The rates stated in the Schedule of Rates shall not be subject to escalation or increase on any account whatsoever, other than new taxes, duties, levies etc. imposed by Central or State government subsequent to submission of the bid.

6.4.0.0 **ON ACCOUNT PAYMENTS AND ADVANCES:**

6.4.1.0 Without prejudice to the provision of Clause 6.2.4.0 hereof, the OWNER may at its discretion by way of assistance to the CONTRACTOR, make 'on account' payments to the CONTRACTOR, during the progress of the work on the basis of Running Account Bills as hereinafter more specifically mentioned.

6.4.1.1 Monthly or otherwise as the Engineer-in-Charge may specify in this behalf, the CONTRACTOR shall make a quantitative assessment of the work performed by CONTRACTOR at each job site during the preceding month or other specified period and submit a Running Account Bill (in the form prescribed by the OWNER) in quintuplicate to the Site Engineer of the work during the said month/period with detailed measurements thereof, the said Running Account Bill(s), to be drawn by applying unit quantities measured to the applicable item(s) in the Schedule of Rates. The Engineer-in-Charge shall thereafter have summary verification undertaken of the work and quantities entered in the Running Account Bill(s), and shall certify the Running Account Bill(s) for payment on basis of such verification.

6.4.1.2 Running Account Bills as specified in Clause 6.4.1.1 hereof may be drawn by the CONTRACTOR every alternate month, and an ad hoc payment made by the OWNER in respect of the intervening month for the amount certified by the Engineer-in-Charge on the basis of a summary assessment made by the Engineer-in-Charge of the value performed by the CONTRACTOR during the intervening month, such ad hoc payment(s) to be deducted from the amount(s) certified by the Engineer-in-Charge as payable on the Running Account Bill(s) thereafter following.

6.4.1.3 Where the Contract stipulates a lump sum as payable for the work or where a lump sum rate is stipulated in the Schedule of Rate(s) or otherwise in respect of any particular work or part thereof and the works are not, at any intervening stage, capable of measurement, the Running Account Bill to be prepared by the CONTRACTOR according to the provisions of Clause 6.4.1.1 hereof shall be prepared on the basis of a value assessment of such work as certified by the Engineer-in-Charge, as percentage of the entire work or item of work for which the lump sum rate is stipulated.

6.4.1.4 No running Account Bill(s) shall be made and/or certified for a total value of less than Rs.25,000/- (Rupees twenty five thousand only) unless otherwise expressly agreed.

6.4.2.0 All on account payments shall be subject to deductions therefrom of all dues to the OWNER, retention monies and other deductions provided for in the Contract, and taxes and other monies deductible within the provisions of Section 194-C of the Income Tax Act or any other law, rule or regulation for the time being in force.

6.4.3.0 All on account payments shall be regarded merely as advance payments against the amount which will become due to the CONTRACTOR in terms of the Contract, and any such payments shall be without prejudice to the full rights of the OWNER under the Contract and to the liabilities of the CONTRACTOR thereunder, and specifically shall not be regarded as an acceptance or completion of any work(s) paid for in terms of any Running Account Bill or otherwise, notwithstanding any verification or certification by the Engineer-in-Charge in respect thereof.

6.4.3.1 The Schedule of Rate item(s) applied by the CONTRACTOR in respect of any work in his Running Account Bill(s) and the acceptance thereof by the Engineer-in-Charge while verifying and certifying the Bill for payment in respect of such work or otherwise in certifying any payment within the provisions aforesaid shall not be deemed to be binding upon the OWNER as determining the applicable Schedule of Rate item(s) and shall be without prejudice to the rights of the OWNER within the provisions of Clause 6.2.1.1 hereof.

6.4.4.0 Unless or until an extension of time has been granted by the Engineer-in-Charge under Clause 4.3.5.0 hereof or by the OWNER under Clause 4.3.6.0 hereof on account payments made under Running Account Bills raised by the CONTRACTOR for the works executed after the expiry of the date of final completion of the works under the approved Progress schedule, shall be subject to provisional withholding of an amount towards adjustment by way of discount in the price calculated as per provisions of Clause 4.4.2.0 hereof. The amount so withheld shall be adjusted towards the Price Adjustment (if any) finally determined after completion of the works. As an alternative, the **CONTRACTOR** shall have an option to provide a Bank guarantee from a schedule bank and in a format acceptable to the OWNER for a sum equal to 10% (ten percent) of the total contract value which shall be available for recovery of the Price Discount (if any) finally determined after completion of the works. This Bank guarantee shall be in addition to any other guarantee to be provided by the **CONTRACTOR** and shall be valid for a period of not less than 12 (twelve) months from the date of final completion of the works.

6.4.5.0 In Contracts of a Total Contract Value of Rs. 50 lakh (Rupees fifty lakhs only) and above, the CONTRACTOR may (if specified by him in his bid and accepted by the OWNER) be allowed a Mobilisation advance for an amount equivalent to upto 10% (ten per cent) of the Total Contract Value, subject to the fulfillment of the following conditions:

a) The CONTRACTOR shall have signed and sent back a copy (or copies if so required) of the Acceptance of Tender issued by the OWNER in token of unqualified acceptance thereof.

b) The CONTRACTOR shall have furnished the Initial Security Deposit as stipulated in Clause 2.1.1.0 and associated clauses hereof.

c) The CONTRACTOR shall have executed the formal contract in terms of the Form of Contract.

d) The CONTRACTOR shall have made a formal application for the release of the Mobilisation Advance and shall have furnished a Bank Guarantee to cover the Mobilisation Advance from a Bank in a format approved by the OWNER.

e) The outstanding balance of the Mobilisation Advance shall carry interest at 1% (one percent) above the State Bank of India declared rate for cash credit advances prevailing on the date of opening of Price Bids;

f) Without prejudice to any other mode of recovery available to the OWNER, the Mobilisation Advance, together with interest thereon calculated on the reducing balance, may be recovered at the rate of 10% (ten per cent) of the gross amount certified against each Running Account Bill, till the advance, together with the interest accrued thereon, is recovered in full. The unrecovered balance if any, and interest may be recovered from the Final Bill of the CONTRACTOR and/or from any other amount due to the CONTRACTOR under any other contract or otherwise.

g)(i) If the OWNER is satisfied that 25% (twenty five per cent) of the Mobilisation Advance and interest accrued till then on the Mobilisation Advance has been repaid to or recovered by the OWNER, the OWNER may on the application of the CONTRACTOR, if the Bank Guarantee submitted by the CONTRACTOR covers and secures only the Mobilisation Advance, permit the CONTRACTOR to substitute the Bank Guarantee by a Bank Guarantee acceptable to OWNER for an amount reduced by 25% (twenty five per cent).

(ii) The provisions of paragraph (i) hereof above, shall mutatis mutandis apply to the OWNER's satisfaction that the CONTRACTOR has repaid 50% (fifty per cent) and/or 75% (seventy five per cent), as the case may be, of the Mobilisation Advance, and interest upto then accrued till then on the Mobilisation Advance.

h) All other conditions stipulated in Clause 2.1.2.0 hereof shall be applicable to the advance(s).

6.4.6.0 In addition, the OWNER may, at its discretion, allow Secured Advance(s) to the CONTRACTOR, against imperishable materials brought to site for incorporation in the permanent works. Such Secured Advance(s) shall be governed by the following conditions:

(a) The decision of the OWNER as to whether or not to grant a Secured Advance and as to what materials, if any, are imperishable for the grant of Secured Advance and/or as to what has to be done to qualify any particular material for the grant of Secured Advance, shall be final and binding on the CONTRACTOR.

(b) The Secured Advance shall be limited to lower of the following:

(i) 75% (Seventy Five percent) of the value of the imperishable material brought to site for permanent incorporation in the works as assessed by the Engineer-in-Charge, who may call for (but shall not be bound by) the voucher(s)/invoices for any such material from the CONTRACTOR, who shall forthwith comply with the same ;

(ii) 90% (Ninety percent) of the concerned item rate for the work in which the material is to be incorporated as set out in the Schedule of Rates.

(c) The Secured Advance shall be recovered from the subsequent Running Account bill(s) of the CONTRACTOR, to the extent as determined by the Engineer-in-Charge (whose decision shall be final and binding upon the CONTRACTOR) that the materials covered by the Secured Advance are used up in or for the work(s) covered by the bill(s).

(d) Upon payment/disbursement by the OWNER to the CONTRACTOR or any supplier of the CONTRACTOR of any Secured advance with respect to any materials, the ownership of the said materials shall forthwith vest in the OWNER as security for the repayment of the said advance(s) without necessity of any further act, deed, matter or thing, and the said materials shall be deemed to be OWNER supplied materials entrusted to the CONTRACTOR for permanent incorporation in the works and the provisions of Clause 3.2.1.0 hereof {including sub clauses (a) to (t) thereof shall mutatis mutandis apply thereto in the same manner as apply to other OWNER supplied materials, AND before payment/disbursement of any secured advance by the OWNER pursuant hereto the CONTRACTOR and the Engineer-in-Charge shall jointly sign a Statement setting out and detailing the material(s) with reference to which the advance has been reckoned, title to which shall vest in the OWNER pursuant to the provisions hereof.

(e) Notwithstanding anything provided in sub-clause (c) hereof above, the OWNER shall be entitled (without prejudice to any other right or remedy available to the OWNER) by written notice to the CONTRACTOR to recall the advance or the outstanding balance thereof in the circumstances set out in Clause 6.4.8.0 hereof or if the OWNER is of the opinion that by virtue of delay by the CONTRACTOR in the execution or completion of the work or for any other cause, the value of the remaining material against which the advance has been paid is insufficient to adequately secure the outstanding balance of the advance and interest payable thereon or if allowed to continue will become inadequate to secure the same. Should the CONTRACTOR upon such notice fail to repay the OWNER the outstanding balance of the said advance, it will be open to the OWNER without further reference or notice to the CONTRACTOR to sell in whole or part(s) the materials referred to in sub-clause (d) hereof above by private contract or public tender or a combination thereof or otherwise as the OWNER deems fit, and for the purpose to exercise all powers and to sign and do all acts, deeds, matter and things as are set out in Clause 7.0.6.0 hereof, and the provisions of the said clause shall mutatis mutandis apply to such materials in the same manner as they apply to scaffolding, wiring, pipes, surplus and other materials, equipment and machinery covered by the said Clause.

6.4.7.0 Nothing provided in the foregoing clauses hereof shall anywise be deemed to confer any rights or entitlement on the CONTRACTOR to receive on account payments or Advance payments of any kind whatsoever, nor shall any failure or delay by the OWNER to make any advance or on account payment(s) as herein envisaged or otherwise afford the CONTRACTOR a ground or basis for extension of time for completion or otherwise relieve the CONTRACTOR from any of its/his liabilities under the Contract, it being clearly understood that these on account payments or advance payments are only by way of assistance to the CONTRACTOR.

6.4.8.0 The Mobilisation Advance and the materials covered by the Secured Advance shall be utilised by the CONTRACTOR solely for and in the execution of the Contract and for no other purpose, and the CONTRACTOR shall satisfy the OWNER/Engineer-in-Charge in this regard whenever required. If it is found that any of the advance(s) or materials aforesaid have been utilised by the CONTRACTOR in whole or part for any other purpose or if the Contract is for any reason cancelled or terminated, the OWNER may at its discretion recall the said advances or the unrecovered portion(s) thereof, as the case may be, and without prejudice to any other right or remedy available to the OWNER, recover the same by recourse to any Bank guarantee to which the OWNER may have recourse for the purpose.

6.5.0.0 **MODE OF PAYMENT**

6.5.1.0 All payment(s) by the OWNER under or in terms of the Contract shall be made in official Indian currency only by crossed "Account Payee" cheque sent to the registered office of the CONTRACTOR or other office notified in this behalf by the CONTRACTOR or delivered to his authorised representative. All cheques drawn shall be payable at the office of the OWNER's bankers and in no case will the OWNER be responsible if the cheque is mislaid, misappropriated or otherwise lost or stolen.

6.6.0.0 **CLAIMS BY THE CONTRACTOR**

6.6.1.0 Should the CONTRACTOR consider that he is entitled to any extra payment or compensation in respect of the works over and above the amounts due in terms of the Contract as specified in Clause 6.3.1.0 hereof or should the CONTRACTOR dispute the validity of any deductions made or threatened by the OWNER from any Running Account Bills, the CONTRACTOR shall forthwith give notice in writing of his claim in this behalf to the Engineer-in-Charge and the Site Engineer within 10 (ten) days from the date of the issue of orders or instructions relative to any works for which the CONTRACTOR claims such additional payment or compensation or of the happening of other event upon which the CONTRACTOR bases such claim, and such notice shall give full particulars of the nature of such claim, grounds on which it is based, and the amount claimed. The OWNER shall not anywise be liable in respect of any claim by the CONTRACTOR unless notice of such claim shall have been given by the CONTRACTOR to the Engineer-in-Charge and the Site-Engineer in the manner and within the time aforesaid and the CONTRACTOR shall be deemed to have waived any and all claims and all his rights in respect of any claim not notified to the Engineer-in-Charge and the Site Engineer in writing in the manner and within the time aforesaid.

6.6.2.0 The Engineer-in-Charge and/or the Site Engineer shall be under no obligation to reply to any notice of claim given or claim made by the CONTRACTOR within the provisions aforesaid or otherwise or to reject the same and no omission or failure on the part of the Engineer-in-Charge or Site Engineer to reject any claim made or notified by the CONTRACTOR or delay in dealing therewith shall be deemed to be an admission by the OWNER of the validity of such claim or waiver by the OWNER of any of its rights in respect thereof, with the intent that all such claims otherwise valid within the provisions of Clause 6.6.1.0 read with Clauses 6.6.3.0 and 6.6.3.1 shall be dealt with/considered by the OWNER at the time of submission of the Final Bill.

6.6.3.0 Any claims of the CONTRACTOR notified in accordance with the provision of Clause 6.6.1.0 hereof as shall remain at the time of preparation of Final Bill by the CONTRACTOR shall be separately included in the Final Bill prepared by the CONTRACTOR in the form of a Statement of Claims attached thereto, giving particulars of the nature of the claim, grounds on which it is based, and the amount claimed and shall be supported by a copy(ies) of the notice(s) sent in respect thereof by the CONTRACTOR to the Engineer-in-Charge and Site Engineer under Clause 6.6.1.0 hereof. In so far as such claim shall in any manner or particular be at variance with the claim notified by the CONTRACTOR within the provision of Clause 6.6.1.0 hereof, it shall be deemed to be a claim different from the notified claim with consequence in respect thereof indicated in Clause 6.6.1.0 hereof, and with consequences in respect of the notified claim as indicated in Clause 6.6.3.1 hereof.

6.6.3.1 The OWNER shall not anywise be liable in respect of any notified claim not specifically reflected in the Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof and any and all notified claims not specifically reflected and included in the Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof shall be deemed to have been waived by the CONTRACTOR. Further the OWNER shall have no liability in respect thereof and the CONTRACTOR shall not be entitled to raise or include in the Final Bill any claim(s) other than a notified claim conforming in all respects and in accordance with the provisions of Clause 6.6.3.0 hereof.

6.6.4.0 No claim(s) shall on any account be made by the CONTRACTOR after the Final Bill, with the intent the Final Bill prepared by the CONTRACTOR shall reflect any and all notified claims whatsoever of the CONTRACTOR against the OWNER arising out of or in connection with the Contract or work performed by the CONTRACTOR thereunder or in relation thereto, and the CONTRACTOR shall notwithstanding any enabling provision under any law or Contract and notwithstanding any right of claim in quantum meruit that the CONTRACTOR could have in respect thereof, be deemed to have waived any and all such claims not included in the Final Bill and to have absolved and discharged the OWNER from and against the same, even if in not including the same as aforesaid, the CONTRACTOR shall have acted under a mistake of law or fact.

6.6.5.0 Notwithstanding the existence of any claim by the CONTRACTOR in terms hereof or otherwise, the CONTRACTOR shall continue and be bound to continue and perform the works to completion in all respects according to the Contract (unless the Contract or works be priorly determined by the OWNER in terms hereof) and shall remain liable and bound in all respects under the Contract.

6.6.6.0 The payment of any sum on account to the CONTRACTOR during the performance of any work or item of work in respect of which a claim has been notified by the CONTRACTOR in terms of Clause 6.6.1.0 hereof or the making or negotiation of any interim arrangements in respect of the performance of such work or item of work by the OWNER, shall not be deemed to be an acceptance of the related claim by the OWNER, or any part or portion thereof with the intent that any such payment shall constitute merely an interim facility or interim assistance to the CONTRACTOR, and not an obligation upon the OWNER.

6.7.0.0 **DISCHARGE OF OWNER'S LIABILITY**

6.7.1.0 The acceptance by the CONTRACTOR of any amount paid by the OWNER to the CONTRACTOR in respect of the final dues of the CONTRACTOR under the Final Bill upon condition that the said payment is being made in full and final settlement of all said dues to the CONTRACTOR shall, without prejudice to the notified claims of the CONTRACTOR included in the Final Bill in accordance with the provisions under Clause 6.6.3.0 hereof and associated provisions thereunder, be deemed to be in full and final satisfaction of all such dues to the CONTRACTOR notwithstanding any qualifying remarks, protest or condition imposed or purported to be imposed by the CONTRACTOR relative to the acceptance of such payment, with the intent that upon acceptance by the CONTRACTOR of any payment made as aforesaid, the Contract (including the arbitration clause) shall, subject to the provisions of Clause 6.8.2.0 hereof, stand discharged and extinguished except in respect of the notified claims of the CONTRACTOR included in the Final Bill and except in respect of the CONTRACTOR's entitlement to receive the unadjusted portion of the Security Deposit in accordance with the provisions of Clause 6.8.3.0 hereof on successful completion of the defect liability period.

6.7.2.0 The acceptance by the CONTRACTOR of any amount paid by the OWNER to the CONTRACTOR in respect of the notified claims of the CONTRACTOR included in the Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof and associated provisions thereunder, upon the condition that such payment is being made in full and final settlement of all the claims of the CONTRACTOR shall, subject to the provisions of Clause 6.7.3.0 hereof, be deemed to be in full and final satisfaction of all claims of the CONTRACTOR notwithstanding any qualifying remarks, protest or condition imposed or purported to be imposed by the CONTRACTOR relative to the acceptance of such payment with the intent that upon acceptance by the CONTRACTOR of any payment made as aforesaid, the Contract (including the arbitration clause) shall stand discharged and extinguished insofar as relates to and/or concerns the claims of the CONTRACTOR.

6.7.3.0 Notwithstanding anything provided in Clause 6.7.1.0 and/or Clause 6.7.2.0 hereof the CONTRACTOR shall be and remain liable for defects in terms of Clause 5.6.0.0 hereof and for the indemnity to the OWNER in terms of Clause 6.8.2.0, and shall be and remain entitled to

receive the unadjusted balance of the Security Deposit remaining in the hands of the OWNER in terms of Clause 6.8.3.0 hereof.

6.8.0.0 **FINAL CERTIFICATE**

6.8.1.0 After the expiry of the defect liability period as provided for in clause 5.6.0.0 hereof and after all the liabilities of the CONTRACTOR in respect of the Contract have been satisfied, the OWNER or the Engineer-in-Charge, shall on the Application of the CONTRACTOR, issue a Final Certificate to the CONTRACTOR, certifying that the CONTRACTOR has performed all his obligations in respect of the defect liability period in terms of clause 5.6.1.1 hereof.

6.8.2.0 Upon Application for the Final Certificate, the CONTRACTOR shall be deemed to have warranted that it/he has fully paid and satisfied all claims for work, labour, materials, supplies, equipment and all other liabilities whatsoever touching or affecting the Contract, and to have undertaken to indemnify and keep indemnified the OWNER from and against all claims, demands, debts, liens, obligations and liabilities whatsoever arising therefrom or relating thereto and upon issue of the Final Certificate, the CONTRACTOR shall be deemed to have released, acquitted and discharged the OWNER from and against all claims (known or unknown), liens, demands or causes of action of any kind whatsoever arising out of or relating to the Contract or otherwise howsoever touching or affecting the same and to have undertaken to indemnify and keep indemnified the OWNER from and against the same.

6.8.3.0 Within 15 (fifteen) days of Application made by the CONTRACTOR in this behalf accompanied by the Final Certificate, or within 15 (fifteen) days of the passing of the CONTRACTOR's Final Bill by the OWNER, whichever shall be later, the OWNER shall pay/refund to the CONTRACTOR the unadjusted balance (if any) of the Security Deposit for the time being remaining in the hands of the OWNER, and upon such payment/refund, the OWNER shall stand discharged of all obligations and liabilities to the CONTRACTOR under the Contract.

6.9.0.0 **CLAIMS OF OWNER:**

6.9.1.0 No release or payments of any unadjusted balance of the Security Deposit by the OWNER to the CONTRACTOR as aforesaid or otherwise shall be deemed or treated as a waiver of any right(s) or claim(s) of the OWNER or shall estop or prevent the OWNER from thereafter making or enforcing any claims or any rights against the CONTRACTOR. The claims of the OWNER, if any, against the CONTRACTOR shall continue to survive and shall not get extinguished notwithstanding the issue of Final Certificate and/or the release of Security Deposit to the CONTRACTOR.

6.9.2.0 If and where the Contract requires the CONTRACTOR to pass or pay to the OWNER any MODVAT/CENVAT or like benefit(s), or if the OWNER is required in terms of the Contract to pay, bear or reimburse any excise, customs or like duties or sales or other taxes, the CONTRACTOR shall on receiving any such benefit(s) or on obtaining or being granted any exemption, refund, rebate, set-off or draw-back of any such duty or tax, as the case may be, forthwith pay and pass on the OWNER the full amount or value thereof ; and if the CONTRACTOR fails to pass on or pay to the OWNER the full amounts of the said benefit(s) available to the OWNER, or the full amount or value of such exemption refund, rebate, set-off, or draw-back of any such duty or tax as the case may be, the CONTRACTOR shall be liable to pay interest thereon @ 16% (sixteen percent) per annum from the date the same is received or obtained by or granted to the CONTRACTOR, and OWNER shall, without prejudice to the generality of the foregoing, be entitled to claim and recover the same from the CONTRACTOR as and when the OWNER derives knowledge thereof, together with interest as aforesaid.

SECTION 7

TERMINATION

7.0.0.0 **TERMINATION:**

7.0.1.0 Notwithstanding anything elsewhere herein provided and in addition to any other right or remedy of the OWNER under the Contract or otherwise (including the right of the OWNER to claim price discount due under the provisions of Clause 4.4.0.0 hereof or otherwise), the OWNER shall be entitled to terminate the Contract by written notice at any time during the currency on or after the occurrence of any one or more of the following events or contingencies, namely:

(i) Default or failure by the CONTRACTOR of any of the obligations of the CONTRACTOR under the Contract, including but not limited to:

(a) Failure to start the work within 10 (ten) days of handing over the job site to the CONTRACTOR, and in the event of more than one job site being involved, failure to start the work at each job site involved within 10 (ten) days of handing over of the concerned job site to the CONTRACTOR;

(b) Failure to commence any work at any job site in accordance with the time prescribed in this behalf in the Progress Schedule;

(c) Failure to carry out on the works or any of item to meet the Progress Schedule;

(d) Failure to provide at each job site sufficient labour, material, equipment, machinery, temporary work and/or facilities required for the proper and/or due execution of the work or any part thereof;

(e) Failure to execute the works or any of item in accordance with the Contract;

(f) Disobedience of any order or instruction of the Engineer-in-Charge and/or Site Engineer;

(g) Negligence in carrying out the works or carrying out of work found to be unsatisfactory by the Engineer-in-Charge;

(h) Abandonment of the works or any part thereof;

(i) Suspension of the entire works or any part thereof, for a period of 14 (fourteen) days or more without due authority from the OWNER or Engineer-in-Charge.

(j) Commission, permission or sufferance of any other breach of any of the terms, conditions or provisions of the Contract on the part of the CONTRACTOR to be paid, performed and/or observed;

(k) Failure to deposit the Initial Security Deposit within 10 (ten) days of receipt by the CONTRACTOR of Acceptance of Tender;

(l) Failure to execute the Contract in terms of the Form of Contract forming part of the Tender Documents within 10(ten) days of notice in this behalf from the OWNER;

(ii) If the CONTRACTOR is incapable of carrying out the work;

(iii) If the CONTRACTOR misconducts himself in any manner;

(iv) If there is any change in the constitution of the CONTRACTOR (if a firm) or in the circumstances or organization of the CONTRACTOR, which is detrimental to the interests of the work or the OWNER;

(v) Dissolution of the CONTRACTOR (if a firm) or commencement of liquidation or winding up (whether voluntary or compulsory) of the CONTRACTOR (if a company) or appointment of a receiver or manager of any of the CONTRACTOR's assets and/or insolvency of the CONTRACTOR (if a sole proprietorship) or any Partner of the CONTRACTOR (if a firm);

(vi) Distress, execution, or other legal process being levied on or upon any of the CONTRACTOR's goods and/or assets;

(vii) Death of a CONTRACTOR (if an individual);

(viii) If upon any change in the Partnership/constitution of a CONTRACTOR's organization (if a Partnership), the OWNER shall refuse to continue the contract with the re-constituted firm;

(ix) If the CONTRACTOR or any person employed by him shall make or offer for any purpose connected with the Contract any gift, gratuity, royalty, commission, gratification or other inducement (whether money or in any other form) to any employee or agent of the OWNER;

(x) If the CONTRACTOR shall sub-contract the whole or any part of the work in contravention of the provisions of Clause 4.8.1.0 hereof or the CONTRACTOR shall assign or attempt to assign his interest or any part thereof in the Contract.

7.0.1.1 The decision of the General Manager, as to whether any of the events/ contingencies mentioned in Clause 7.0.1.0 hereof, entitling the OWNER to terminate the Contract, has occurred or not, shall be final and binding upon the CONTRACTOR.

7.0.2.0 The notice of termination shall set forth, in addition to a statement of the reason(s) for terminating the contract, the time(s) and place(s) for conducting a survey and measurement of the work performed under the Contract up to the date of termination for the purpose of determining the final amount(s) due to the CONTRACTOR therefor. The reason(s) for the termination stated in the notice of termination, shall be final and binding upon the CONTRACTOR.

7.0.3.0 For the purpose of measurements, the provisions of Clause 6.1.1.0 to 6.1.6.0 hereof shall apply. Only completed items of the work shall be reckoned for the purpose of measurements and the decision of the Engineer-in-Charge as to whether or not any items of works have been completed for the purpose of measurement shall be final and binding upon the CONTRACTOR. Incomplete items of works shall be measured only on the basis of materials supplied and the decision of the Engineer-in-Charge as to the quantity of material involved in or relative to any incomplete works, shall be final and binding upon the CONTRACTOR.

7.0.4.0 For the purpose of determining the amount due to the CONTRACTOR in respect of the work, the provisions of Clauses 6.2.1.0, 6.2.1.1, 6.2.1.2, 6.2.2.0 and 6.3.1.0 shall apply, and the measurements taken shall for the purpose of such accounting be deemed to be final measurements and the bill prepared by the CONTRACTOR on the basis thereof shall be deemed to the final bill and no other amount(s) shall be due to the CONTRACTOR in respect thereof, subject to the provisions of Clause 6.6.0.0 and associated clauses thereunder with regard to claims of the CONTRACTOR.

7.0.5.0 Within 7 (seven) days of completion of the measurements, the CONTRACTOR shall clear the job site of all scaffolding, wiring, pipes, surplus materials, CONTRACTOR's labour, equipment and machinery and shall demolish, dismantle and remove all CONTRACTOR's site offices and quarters, and other temporary works, structures and construction and other items and things whatsoever brought upon or erected at the job site or on any land allotted to the CONTRACTOR by the OWNER and not incorporated in the permanent works and shall remove all rubbish from

the job site and the land allotted to the CONTRACTOR and shall clear, level and dress the job site and said land to the satisfaction of the Engineer-in-Charge and shall put the OWNER in undisputed custody and possession of the job site and all land allotted by the OWNER to the CONTRACTOR.

7.0.6.0 Should the CONTRACTOR fail to comply with provision of Clause 7.0.5.0 hereof in the manner and within the time specified therein, the OWNER shall have the right at the risks and costs of the CONTRACTOR in all respects to clear the job site of all scaffolding, wiring, pipes, surplus materials, CONTRACTOR's labour, equipment and machinery and other materials and things and/or demolish/dismantle and remove all CONTRACTOR's site offices and quarters and other temporary works, constructions and erections whatsoever on or at the job site or on any land allotted to the CONTRACTOR by the OWNER and/or remove all rubbish from the job site, the land allotted to the CONTRACTOR and store, sell, dispose of and/or otherwise deal with any and all material, equipment and machinery etc., and other items and things aforesaid and recoveries of any demolition/dismantlings as the OWNER shall in its absolute discretion deem fit, and the CONTRACTOR shall forthwith on demand pay the OWNER, the entirety of the costs and expenses of the OWNER relative to the above, together with 15% (fifteen percent) thereon to cover OWNER's supervision, with right in the OWNER (without prejudice to any other mode of recovery), to recover the same from the proceeds of any sale or disposal as aforesaid or any monies of the CONTRACTOR held by the OWNER or dues of the CONTRACTOR and the CONTRACTOR doth thereby irrevocably nominate, constitute and appoint the OWNER (with right to the OWNER to delegate any and all of its rights in terms hereof to such of its officer(s) and/or other person(s) as it shall deem fit) for and on behalf of and as attorney of the CONTRACTOR to do, commit and sign all acts, deeds, matters and things as shall or may be necessary to be done, committed and/or signed by the OWNER to put into effect the provision of this clause with full right to enter into arrangements with third parties for or relative to the storage, sales and/or other disposal of any material, equipment and machinery, etc., and other items and things and to enter into or upon any of the CONTRACTOR's premises and to break locks and other fasteners for entry thereto and generally to do all other acts, deeds, matters and things as shall be necessary to give full effect to the provision of this clause.

PROVIDED ALWAYS THAT

(i) The OWNER shall be entitled, without prejudice to the aforegoing and in addition thereto, upon the CONTRACTOR failing to comply with the provisions of Clause 7.0.5.0 hereof after removing/demolishing/dismantling from the job site or land allotted to the CONTRACTOR, any of the CONTRACTOR's scaffolding, wiring, pipes, materials, temporary works and other items and things, by written notice to the CONTRACTOR, to require the CONTRACTOR to take delivery of, lift and/or clear the same within 7 (seven) days (or such other period as may be specified in the said notice) of date of said notice, failing which the OWNER may abandon the same at the risk and costs of the CONTRACTOR, and should the CONTRACTOR fail to take delivery of, lift and/or clear the same within the period in this behalf specified in said notice, the OWNER shall be entitled at any time thereafter to abandon the same at the risks and cost of the CONTRACTOR, whereupon (without prejudice to any other rights of the OWNER), the OWNER shall stand absolutely discharged and absolved in respect of all and any material, equipment, machinery and other items and things whatsoever abandoned as aforesaid;

(ii) Notwithstanding anything to the contrary herein provided, nothing herein stated shall constitute the OWNER as a trustee or bailee for or in respect of any of the CONTRACTOR's material, equipment, machinery or other items or things removed, cleared, demolished, dismantled or abandoned as aforesaid, nor shall the OWNER be bound in law or fact by any duty of care in respect thereof, with the intent that all actions, dealings and disposals within the provisions of this clause shall be exclusively at the risks and liability of the CONTRACTOR (including relative to any loss or damage), and the OWNER shall not be howsoever responsible, accountable or liable in respect thereof.

7.0.7.0 If, due to any cause (including, but not limited to resistance put up by the CONTRACTOR and/or his servants or agent or sub-CONTRACTOR(s) or any court order consequent upon a suit or proceedings filed by the CONTRACTOR and / or the CONTRACTOR's servants, agents or sub-CONTRACTOR(s)), the OWNER is unable to fully take over possession of the entire works at any or all job sites within 7 (seven) days from the date of completion of the measurements as contemplated above, the OWNER shall, in addition to all amounts, compensation and/or damages recoverable from the CONTRACTOR in terms hereof (including but not limited to OWNER's entitlements under Clause 4.4.0.0 and Clause 7.0.9.0 hereof) or otherwise, be entitled to recover from the CONTRACTOR liquidated damages in the amount equivalent to 1% (one per cent) of the total Contract value for each week or part thereof that the said taking over of possession at any job site is delayed beyond the period of seven days specified above, subject to a maximum of 5% (Five percent) of the Total Contract Value.

7.0.8.0 Notwithstanding anything provided in Clause 7.0.6.0, the OWNER shall have the right at any time prior to the removal of the same from the job site, to take possession of such of the CONTRACTOR's materials at any and all job sites, as the OWNER shall deem fit, and the CONTRACTOR shall forthwith upon being required to do so place the OWNER in undisputed possession and custody of all such materials opted for by the OWNER. The price payable to the CONTRACTOR for such material shall be determined by the Engineer-in-Charge having due regard to the condition of the materials and the cost thereof as determined by the Engineer-in-Charge for which purpose the Engineer-in-Charge shall be entitled to call upon the CONTRACTOR to produce the CONTRACTOR's accounting and other records relevant to such materials. The cost of such materials as determined by the Engineer-in-Charge shall be final and binding on the CONTRACTOR.

7.0.9.0 Upon termination of the Contract, the OWNER shall be entitled at the risk and expense of the CONTRACTOR by itself or through any independent CONTRACTOR(s) or partly by itself and/or partly through independent CONTRACTOR(s) to complete and/or get completed to its entirety the work as contemplated in the scope of work and to recover from the CONTRACTOR in addition to any discounts, compensations or damages that the OWNER may in terms hereof or otherwise be entitled (including price discount within the provisions of Clause 4.4.0.0 and liquidated damages under Clause 7.0.7.0 hereof) to the difference between the amounts as would have been payable to the CONTRACTOR in respect of the work(s) (calculated as provided for in Clause 6.2.1.0 hereof read with the associated provisions thereunder and Clause 6.3.1.0 hereof) and the amount actually expended by the OWNER for completion of the entire work(s) as aforesaid together with 15% (fifteen per cent) of the said amount expended by the OWNER for completion of the entire work(s) to cover OWNER's supervision charges, and in the event of the latter being in the excess of the former, the OWNER shall be entitled (without prejudice to any other mode of recovery available to the OWNER) to recover the excess from the Security Deposit or any monies due or becoming due to the CONTRACTOR.

7.1.0.0 No amount shall be due and payable to the CONTRACTOR upon or in the event of termination of the Contract unless and until the entirety of the works contemplated in the scope of work shall have been completed in all respects to the satisfaction of the OWNER and following such completion, the Defect Liability Period in respect thereof as herein otherwise provided for has elapsed and all payments finally due on any account to the OWNER and/or other CONTRACTOR(s) in respect of all liabilities in respect thereof has been determined.

7.2.0.0 If, upon the satisfaction of the provisions of Clauses 7.0.9.0 and 7.1.0.0 hereof, there shall remain in the hands of the OWNER any excess/balance after all accounting and adjustment of all dues from the CONTRACTOR to the OWNER, the OWNER shall forthwith pay such excess/balance to the CONTRACTOR and in the event of the Security Deposit and other dues of the CONTRACTOR in the hands of the OWNER being insufficient to meet the dues of the OWNER as aforesaid the CONTRACTOR shall forthwith on demand by the OWNER pay the OWNER the shortfall.

SECTION 8

MISCELLANEOUS

8.0.0.0 **PERSONAL ACTS AND LIABILITIES:**

8.0.1.0 No Director, officer or other employee of the OWNER shall anywise be personally bound or liable to the CONTRACTOR for the acts, omissions or obligations of the OWNER under the Contact otherwise or be personally answerable to the CONTRACTOR for or in respect of any default or omission in the performance of any act(s), deed(s), matter(s) or things to be observed and/or performed by the OWNER under the Contract.

8.0.2.0 The CONTRACTOR shall not be entitled to any increase in the rate(s) mentioned in the Schedule of Rates or any of them or to any other payment, right, benefit or claim whatsoever, by reason of any representation, explanation, statement, assurance or understanding given or alleged to have been given to him by any Director, officer, or other employees of the OWNER, nor shall any Director, officer, or other employee of the OWNER be personally liable for or in respect of any representation, explanation, statement, assurance or understanding given or alleged to have been given by him to the CONTRACTOR or any other person relative to the Contract.

8.0.3.0 The CONTRACTOR shall not under any circumstances pay or advance to any officer(s), servant(s) or agent(s) of the OWNER any sum or money on any account without prior authority of the OWNER in writing and any such payment made or money advanced by the CONTRACTOR without such authority shall be entirely at the risks of the CONTRACTOR without any liability to the OWNER in respect thereof.

8.0.4.0 Any money paid to any partner of the CONTRACTOR (if a firm) and any receipt, settlement, acknowledgement of liability or other document whatsoever signed by any one of the partners of the firm or erstwhile partner of the firm (without notice of the cessation of his interest) or any person held out to be a partner of the firm shall be binding upon the CONTRACTOR vis-à-vis the OWNER and shall constitute a full release and discharge to the OWNER and/or valid settlement, acknowledgement or obligation upon the CONTRACTOR, as the case may be, and the OWNER shall not be concerned, with the application of any monies so paid or the authority of the concerned partner (or erstwhile or purported partner) vis-à-vis the other partners to make the settlement, receipt, acknowledgement or other document(s) concerned provided always that the OWNER shall be entitled at its discretion at any time to call upon all the partners of the CONTRACTOR firm to sign any receipt, settlement, acknowledgement or other document(s) including any receipt, settlement, acknowledgement or other documents signed by a partner (or erstwhile or purported partner) as aforesaid, and all the partners of the firm shall, when called upon to do so by the OWNER, forthwith sign the receipt, order, acknowledgement or other document required to be so signed.

8.1.0.0 **TAXES**

8.1.1.0 The CONTRACTOR shall be exclusively liable for the payment of any and all taxes, duties, levies etc. now in force, increased or modified in respect of any work done and/or materials supplied and for the payment of all contributions and taxes for unemployment compensation, insurance and old age pension and annuity now, by the Central or any State government or any authority, with respect to or covered by the wages, salaries or other compensations paid to persons employed or engaged by the CONTRACTOR and doth hereby undertake to indemnify and keep indemnified the OWNER from and against the same and all claims, actions, demands and payments whatsoever against the OWNER howsoever arising there from or in connection therewith. However, any new taxes, duties, levies etc. imposed by the Central or State government subsequent to the submission of the bid shall be reimbursed.

8.2.0.0 **GOVERNMENT REGULATIONS:**

8.2.1.0 The CONTRACTOR shall comply with and ensure strict compliance by his/its sub-contractors and agents of all applicable Central, State, Municipal and local laws and regulations and undertakes to indemnify the OWNER from and against all levies, damages, penalties, any payments whatsoever as may be imposed by reason of any breach or violation of any law, rule or regulation and against all actions, proceedings claims and demands arising therefrom and/or relative thereto.

8.3.0.0 **LABOUR LAWS AND REGULATIONS:**

8.3.1.0 The CONTRACTOR shall be responsible for strict compliance of and shall ensure strict compliance by its sub-contractors, servants and agents of all laws, rules or regulations having the force of law affecting the relationship of employer and employee between the CONTRACTOR/sub-contractors and their respective employees and/or otherwise concerning labour, social welfare and provident fund, pension, bonus, gratuity and other benefits to employees. Without prejudice to the generality of this provision, the CONTRACTOR shall comply with and ensure that his sub-contractors and other agencies employed by him comply with the provisions of the Payment of Wages Act 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1961, Mines Act, 1952, Contract Labour (Abolition & Regulation) Act, 1970, Payment of Bonus Act, Gratuity Act, Factories Act and the Employees Provident Fund and Miscellaneous Provisions Act, 1952 as amended from time to time and all rules, regulations and schemes framed thereunder from time to time.

8.3.2.0 The contractor and sub-contractor(s) of the CONTRACTOR shall obtain from the authority(ies) designated in this behalf under any applicable law, rule or regulation (including but not limited to) the Factories Act and Labour (Abolition and Regulation) Act, 1970 (in so far as applicable) any and all such licence(s), consent(s), registration(s) and/or other authorisation(s) as shall from time to time be or become necessary for or relative to the execution of the work or any part or portion thereof or the storage or supply of any material(s) or otherwise in connection with the performance of the Contract and shall at all times observe and ensure due observance by the sub-contractors, servants and agents of all terms and conditions of the said licence(s), consent(s), regulation(s) and other authorisation(s) and laws, rules and regulations applicable thereto. Without prejudice to the generality of this provision, the CONTRACTOR shall obtain and ensure that his sub-contractors and other agencies employed by him on the Work, obtain a valid Licence under the Contract Labour (Regulation & Abolition) Act, 1970 and shall duly and faithfully observe and comply with the provisions of the Contract Labour (Regulation & Abolition) Central Rules 1971 and other Central and State Rules as amended from time to time and applicable to the work, and shall duly, promptly and faithfully maintain and/or cause to be maintained all records and facilities required to be maintained and/or provided in terms thereof or any licence granted thereunder.

8.3.3.0 The CONTRACTOR shall ensure that wages are paid by himself or by his sub-contractors to their workmen directly without the intervention of any Jamadars or Thekedars and that no amount by way of commission or otherwise is deducted or recovered by the Jamadars from the wages of the workmen.

8.3.4.0 The OWNER shall be entitled at all times to carry out any check(s) or inspection(s) of the CONTRACTOR's facilities, records and accounts to ensure that the provisions aforesaid are being observed by the CONTRACTOR and the sub-contractors and that the workmen are not denied the rights and benefits to which they are entitled under such provisions. Any violation shall, without prejudice to any other rights or remedies available to the OWNER, constitute a ground for termination of the Contract as though specifically set forth under Clause 7.0.1.0 thereof.

8.3.5.0 Nothing in the Contract Documents stated shall anywise constitute any workman/employee of the CONTRACTOR or any sub-contractor as or to be a workman/employee of the OWNER, or place obligation or liability in respect of any such workman/employee upon the OWNER.

8.3.6.0 The CONTRACTOR shall not employ in connection with the work, any person below the age of 18 years.

8.3.7.0 The establishment of the CONTRACTOR shall be duly registered under the Employees Provident Fund and Miscellaneous Provisions Act, 1952 and the Employees State Insurance Act, 1948 and the CONTRACTOR shall duly pay his contributions and his employees' contributions to the Authorities prescribed under the said Acts and any Schemes framed thereunder in respect of all labour employed by him for the execution of the contract.

8.3.8.0 On receiving information of any breach, non-fulfillment and/or non-observance by the CONTRACTOR and/or his sub-contractors and other agencies engaged by him in connection with the Works or any of the provisions or requirements of any of the Labour Laws, rules and regulations and/or as to the inaccuracy of any of the returns or statements furnished by the CONTRACTOR and/or his sub-contractors and/or any records or accounts maintained by any of them with respect to which the OWNER as the principal employer or otherwise can have a liability, the OWNER shall be entitled to deduct from the Bills and any amounts due or becoming due to the CONTRACTOR, under this or other contract(s) with the CONTRACTOR, any sum(s) required or estimated to be required, in its judgement which shall be final and binding on the CONTRACTOR, for making good or compensating for the liability or possible liability of the OWNER by reason of the said breach, non-fulfillment or non-observance and/or inaccuracy aforesaid.

8.3.9.0 The CONTRACTOR shall indemnify and keep indemnified the OWNER from and against all actions, claims, demands and liabilities whatsoever under and in respect of the breach of any of the provisions hereof and/or against any claim, action or demand by any workman/employee of the CONTRACTOR or any sub-contractor and/or from any liability anywise to any sub-contractor under any law, rules or regulation having the force of law including (but not limited to) claims against the OWNER under the Workmen's Compensation Act, 1923, the Employees Provident Funds and Miscellaneous Provisions Act, 1952, the Employee's State Insurance Act, 1948 and/or the Contract Labour (Abolition & Regulation) Act, 1970.

8.3.10.0 The CONTRACTOR and his sub-contractors and agents employed by him for and/or in the performance of the Works shall strictly abide by and observe the provision of the "Contractors' Labour Regulations" and the "Model Rules for Labour Welfare" as set out in Appendix I and Appendix II to these General Conditions of Contract, which shall be binding on the CONTRACTOR, his sub-contractors and agents.

8.3.10.1 In the event of an irreconcilable conflict between the provisions herein and the provisions contained in the "Contractors' Labour Regulations" and/or the "Model Rules of Labour Welfare" (as set out in Appendix I and Appendix II hereto), the "Contractors' Labour Regulations" and "Model Rules for Labour Welfare" shall prevail to the extent of the irreconcilable conflict.

8.3.10.2 In the event of irreconcilable conflict between the "Contractors' Labour Regulations" and/or the "Model Rules for Labour Welfare" (set out in Appendix I and Appendix II hereto) and any applicable law, rule or regulation, the law, rule or regulation shall prevail over the "Contractors' Labour Regulation" and/or the "Model Rules for Labour Welfare", as the case may be, and shall be complied with.

8.4.0.0 **SAFETY REGULATIONS, ACCIDENT AND DAMAGE**

8.4.1.0 The CONTRACTOR shall be responsible at his own cost in and relative to performance of the work and contract to observe and to ensure observance by his sub-contractors, agents and servants of the provisions of the Safety Code as hereinafter appearing and all fire, safety and security regulations as may be prescribed by the OWNER from time to time and such other precautions and measures as shall be necessary and shall employ/deploy all equipments necessary to protect all works, material properties, structures, equipment, installations, communications and facilities whatsoever from damage, loss or other hazard whatsoever (including but not limited to fire and

explosion) and shall during construction and other operations minimise the disturbance and inconvenience to the OWNER, other contractors, the public and the adjoining land and property owners and occupiers and crops, trees and vegetation and shall indemnify and keep indemnified the OWNER from and against all losses and damages and costs, charges and expenses and penalties, actions, claims, demands and proceeding whatsoever suffered or incurred by or against the OWNER as the case may be, by virtue of any loss, alteration, displacement, disturbance or destruction or accident to any works, materials, properties, structures, equipment, installations, communications and facilities and land and property, owner and occupiers and crops, trees and vegetation as aforesaid, with the intent that the CONTRACTOR shall be exclusively responsible for any accident, loss, damage, alteration, displacement, disturbance or destruction as aforesaid resultant directly or indirectly from any breach by the CONTRACTOR of his obligations aforesaid or upon any operation, act or omission of the CONTRACTOR or his sub-contractor(s) or agent(s) or servant(s).

8.4.2.0 The CONTRACTOR's liabilities under Clause 8.4.1.0 and otherwise under the Contract shall remain unimpaired notwithstanding the existence of any storage-cum-erection or other insurance covering any risk, damage, loss or liability for which the CONTRACTOR is liable to the OWNER in terms of the foregoing sub-clause or otherwise and/or in respect of which the CONTRACTOR has indemnified the OWNER, with the intent that notwithstanding the existence of such insurance, the CONTRACTOR shall be and remain fully liable for all liabilities and obligations under the Contract and indemnities to the OWNER, and the OWNER shall not be obliged to seek recourse under such policy(ies) in preference to recourse against the CONTRACTOR or otherwise to exhaust any other remedy in preference to the remedies available to it under the Contract.

8.5.0.0 INDEMNITY AND INSURANCE:

8.5.1.0 The CONTRACTOR shall be at all times indemnify and keep indemnified the OWNER and its officers, servants and agents from and against all third party claims whatsoever (including but not limited to property loss and damage, personal accident, injury or death of or to property or person of any sub-contractor and/or the servants or agents of the CONTRACTOR or any other contractor(s) and any sub-contractor and/or of the Owner), and the CONTRACTOR shall at his own cost and initiative at all times up to the successful conclusion of the defect liability period specified in Clause 5.4.1.0 hereof take out and maintain insurance policies in respect of all insurable liabilities under this clause, including but not limited to third party insurance and liabilities under the Motor Vehicles Act, 1988; Workmen's Compensation Act, 1923; Fatal Accidents Act, 1855; Personal Injuries (Compensation) Insurance Act, 1963, Emergency Risk Insurance Act, and/or other Industrial Legislation from time to time in force in India with insurance company(ies) approved by the OWNER, and such policy(ies) shall be of not lesser limit than the limits hereunder specified with reference to the matters hereunder specified, namely :

(a) Workmen's Compensation Insurance – to the limit to which compensation may be payable under the laws of the Republic of India ; but not less than the limits specified below.

(b) Third Party Insurance – body injury and property damage to the limit specified below:

The limits aforesaid shall be as follows :

(i) If the total contract value exceeds Rs. 1(one) crore, the policy shall be for not less than Rs.10,00,000/- (Rupees ten lakhs only) for each accident. The sum assured shall not be less than Rs.20,00,000/- (Rupees twenty lacs only) for all accidents ; and

(ii) If the total contract value does not exceed Rs.1 (one) crore, the policy shall be for not less than Rs.3,00,000/- (Rupees three lac only) for each accident. The sum assured shall not be less than Rs.10,00,000/- (Rupees ten lakhs only) for all accidents.

Provided that the limits specified above shall operate only as a specification of minimum limits for insurance purpose, but shall not anywise limit the Contractor's liability in terms of this clause to the limit(s) specified.

8.5.2.0 Should the CONTRACTOR fail to take out and/or keep afoot insurance as provided for in the foregoing sub-clauses, the OWNER shall be entitled (but without obligation to do so) to take out and/or keep afoot such insurance at the cost and expense of the CONTRACTOR and without prejudice to any other right or remedy of the OWNER in this behalf to deduct the sum(s) incurred therefor from the dues of the CONTRACTOR.

8.6.0.0 **TRAINING OF APPRENTICES:**

8.6.1.0 The CONTRACTOR shall, if and when called upon by the Engineer-in-Charge during the currency of Contract, himself engage and/or procure engagement by his sub-contractor(s) of such number of apprentices and for such period as may be required by the Engineer-in-Charge in this behalf. Such apprentices shall be trained in accordance with the provisions of the Apprentices Act, 1961 and any other Act, rule or regulation having the force of law, regulating upon the employment of apprentices, and the CONTRACTOR shall be responsible at his own cost and initiative and without entitlement to any extra compensation or remuneration from the OWNER in this behalf, to fulfill all obligations of the employer under the said Act, including liability for payment to apprentices as required thereunder.

8.7.0.0 **RECORDS AND INSPECTION**

8.7.1.0 The CONTRACTOR shall, if and when required by the Engineer-in-Charge produce or cause to be produced before the Engineer-inCharge or any other officer of the OWNER designated by the Engineer-in-Charge in this behalf, for examination, any cost or other book(s) of account and/or other records and documents in the possession of the CONTRACTOR or any sub-contractor or subsidiary or associated firm or Company of the Contractor or any sub-contractor, and/or copies of extracts thereof and/or other information or returns relative thereto (such returns to be verified in the manner prescribed by the Engineer-in-Charge or other officer aforesaid designated in this behalf) as may be required relative to the execution of the Contract or for verifying or ascertaining the cost of any material, labour, service or item or thing whatsoever in connection with the Contract, and the decision of the Engineer-in-charge or other officer designated in this behalf, as the case may be, as to whether any book, record, document, information or return is relevant for any of the purpose aforesaid, shall be final and conclusive.

8.7.2.0 Should the Engineer-in-Charge (whose decision in this behalf shall be final) consider it necessary for the purpose of verifying or ascertaining the cost of production for any item or thing to examining the works and/or records of the CONTRACTOR or any sub-contractor(s) or any subsidiary or associated firm or company of the CONTRACTOR engaged in the fabrication, manufacture or assembly of any item or thing, the CONTRACTOR shall permit and/or facilitate such inspection by the Engineer-in-Charge or other officer of the OWNER designated in this behalf by the Engineer-in-Charge and shall afford the Engineer-in-Charge or concerned officer all assistance as shall be necessary for the purpose.

8.8.0.0 **PATENT AND ROYALTIES:**

8.8.1.0 If any equipment, machinery or materials to be used or supplied or methods or processes to be practices or employed in the performance o this Contract is/are covered by a patent under which the CONTRACTOR is not licensed, the CONTRACTOR shall before supplying or using the equipment, machinery, materials, methods or processes as the case may be, obtain such licence(s) and pay such royalty(ies) and licence fee(s) as may be necessary in connection with the performance of this Contract. In the event that the CONTRACTOR fails to pay such royalty or

obtain such licence, the CONTRACTOR will defend at his own expense any suit for infringement of patent which is brought against the CONTRACTOR or the OWNER as a result of the failure, and shall pay any damages and costs awarded in such suit and will keep the OWNER indemnified from and against all other consequences thereof.

8.9.0.0 **ARTICLES OF VALUE FOUND:**

8.9.1.0 All gold, silver and other metals, minerals or ore of any kind or description and precious and semi-precious stones and bearing earth, rock or strata, coins, treasures, treasure trove, antiques and other items and things whatsoever which shall be found under or upon the job site shall as between the CONTRACTOR and the OWNER be the exclusive property of the OWNER and the CONTRACTOR shall forthwith upon discovery thereof notify the OWNER of such discovery with the details of the item(s) or things discovered and pending directions by the OWNER for the disposal thereof shall hold and preserve the same as trustee of the OWNER to the satisfaction of the Engineer-in-Charge.

8.10.0.0 **MATERIALS OBTAINED FROM DISMANTLING :**

8.10.1.0 Any material obtained by the CONTRACTOR consequent upon dismantling of any building, structure or construction whatsoever at the job site other than any building, structure or construction dismantled by the CONTRACTOR pursuant to the CONTRACTOR's liabilities for defects as elsewhere herein provided, shall be the exclusive property of the OWNER.

8.11.0.0 **LIENS AND LIABILITIES:**

8.11.1.0 If at any time there is evidence of any lien or claim for which the OWNER might be or become liable and which in terms of the Contract or otherwise is chargeable to or payable by the CONTRACTOR, the OWNER shall have the right to retain out of any payment then due or thereafter becoming due to the CONTRACTOR an amount sufficient to completely indemnify the OWNER against such lien or claim, and should the CONTRACTOR not dispute such lien or claim and/or if in the opinion of the OWNER, such lien or claim is otherwise valid (the Owner's opinion in this behalf being final and binding on the CONTRACTOR), the OWNER may pay and discharge the same and deduct the amount so paid together with any legal and other costs, charges and expenses incurred by the OWNER in defending any action and/or in obtaining legal advice or opinion relative to the lien, claim or action, from any monies then due or thereafter becoming due to the CONTRACTOR and/or retained as aforesaid, and if there is no money due or retained as aforesaid or if the same be insufficient to satisfy the payment(s) aforesaid, the CONTRACTOR shall on demand pay to the OWNER the same and failing such payment within 10 (ten) days of demand by the OWNER in this behalf, shall be liable to pay interest on the amount due from the date of demand up to and until the date of payment in full at the bank rate as applicable to the OWNER plus 1% (one percent) per annum and the provisions hereof (in so far as such notice shall be deemed to be necessary in addition to the contractual provisions herein) shall be deemed to constitute a notice for the payment of interest under the provisions of the Indian Interest Act and in determining such interest, the Certificate issued by an officer of the OWNER in a financial department of the OWNER shall be conclusive evidence of the Bank rate of interest applicable to the OWNER.

8.12.0.0 **LIABILITIES FOR SUB-CONTRACTOR (S):**

8.12.1.0 Without prejudice to any other liabilities or obligations of the CONTRACTOR relative to sub-contractors in terms hereof or otherwise, the CONTRACTOR shall require every sub-contractor to whom any portion of the work to be performed under the Contract has been sub-contracted, to comply with the provisions of the Contract in so far as applicable to each sub-contractor, and the

CONTRACTOR shall hold the OWNER harmless and indemnified from any and against all penalties, actions, claims and demands and costs, charges and expenses whatsoever arising out of or in connection with any failure of the CONTRACTOR or any sub-contractor(s) to make full and proper compliance with any of the terms and conditions of the Contract.

8.13.0.0 **WAIVER**

8.13.1.0 It shall always be open to the OWNER by written communication to the CONTRACTOR to waive in whole or part any right or the enforcement of any right or remedy which the OWNER may have against the CONTRACTOR or of any obligations which the CONTRACTOR may have hereunder, provided always that:

(i) No waiver shall be presumed or inferred unless made in a written communication addressed by the OWNER to the CONTRACTOR and specifically communicated as a Waiver;

(ii) No waiver of any right or part of any right on one occasion shall be deemed to be a waiver or abandonment of that right for all occasions with the intent that a waiver once given shall be limited to the specific waiver and shall be without prejudice to the right of the Owner to insist upon the strict adherence of the attendant obligations of the Contractor and/or the future enforcement of the right by the Owner in respect of the same and/or any other dependent obligation.

8.14.0.0 **CONTRACTOR'S ESTABLISHMENT**

8.14.1.0 It is understood that the establishment of the CONTRACTOR (and any Sub-Contractor engaged by the CONTRACTOR) constitutes an independent establishment involving inter alia in undertaking works and/or services for others of the nature and kind forming the subject matter of the Contract. It is consequently understood that all the employees of the CONTRACTOR (and any Sub-Contractor engaged by the CONTRACTOR) are the employees of the independent establishment of the CONTRACTOR or Sub-Contractor (as the case may be) who have been and will be appointed solely for and/or with reference to the work of that establishment, and have not been and will not be appointed specifically or otherwise for the sole purpose of the work covered by the present Contract. To this end, each CONTRACTOR (and Sub-Contractor engaged by the CONTRACTOR) shall issue to each of its employees deputed to the job-site to perform any work in relation to the Contract a regular letter of appointment for employment in the CONTRACTOR'S/ Sub-Contractor's independent establishment, with authority in the CONTRACTOR/Sub-Contractor to employ or depute him for or in relation to any work or engagement assumed by the CONTRACTOR/Sub-Contractor from time to time in the course of its business and the production of a certified copy of each letter of appointment duly acknowledged by the concerned employee shall be a pre-condition for the issue of a Gate Pass to any employee of the CONTRACTOR/Sub-Contractor into any area the entry to which is restricted by the OWNER.

8.15.0.0 COLLECTION OF INDEBTEDNESS

8.15.1.0 Without prejudice to any other rights or remedies of the OWNER and in addition to any other provisions hereof, the OWNER shall be entitled to deduct out of the Security Deposit (including by recourse Bank Guarantee) any monies or securities under this or any other contract(s) for the time being of the CONTRACTOR in its hands and out of any payments then due or becoming due in future to the CONTRACTOR under this or any other Contract, any and all amounts due to the OWNER from the CONTRACTOR arising out of or in connection with the Contract.

8.16.0.0 OBSERVANCE OF ENVIRONMENTAL REGULATIONS AND ENVIRONMENTAL PROTECTION.

8.16.1.0 The **CONTRACTOR** shall ensure that its servants and agents and sub-contractors and their servants and agents shall duly comply with all environmental laws, rules and regulations and the conditions of any permit, permission, consent and/or no-objection granted in this behalf by any authority with respect to or concerning the work, and shall independently so organise and conduct its operations and cause its sub-contractors so organise and conduct their operations as not to cause any hazard or pollution to health, life, property or environment including (but not limited to) discharge of any noxious substance or effluent into the atmosphere or into the earth or into any drain, canal, stream, river, pond, lake or other water body.

8.16.2.0 The **CONTRACTOR** shall indemnify and keep indemnified the OWNER from and against the breach, non-observance, infraction or dereliction of any of the provisions of Clause 8.16.1.0 hereof, and against any and all claims, actions or proceedings, prosecutions and liabilities and losses and damages and costs (including legal costs), charges and expenses whatsoever suffered or incurred or instituted against the OWNER as the case may be.

8.17.0.0 CONFIDENTIAL HANDLING OF INFORMATION

8.17.1.0 The CONTRACTOR and its/his employees, agents and Sub-Contractors and the employees and agents of the Sub-Contractor(s) shall treat as strictly confidential and shall take all steps necessary to ensure confidential handling of all maps, plans, charts, designs, drawings, photographs, data, reports, tests, specifications, methods, and other information developed or acquired by the CONTRACTOR from or by means of the Tender Documents or any facility extended to the CONTRACTOR pursuant thereto or the award or performance of the works or any of them or otherwise disclosed or made available to the CONTRACTOR or any of the aforesaid persons, and shall not disclose or reproduce the same in any book, article, speech or other publication, provided always that the OWNER may upon application by the CONTRACTOR to the OWNER in this behalf permit report, disclosure or re-production of the same in any book, article, speech or other publication if it is satisfied that this would not involve the disclosure of any classified or other information which would not be in the interest of public or security to disclose.

8.17.2.0 Application for such consent shall be submitted to the OWNER in writing outlining the intended use of the relative material and shall be submitted to the OWNER at least one month prior to the expected use accompanied by the text of the relative publication in which it is sought to be used. Photographs should be accompanied by their caption. An application shall not be understood to have been permitted unless expressly permitted in writing by the OWNER.

SECTION 9

ARBITRATION AND ALTERNATIVE DISPUTE RESOLUTION MACHINERY

9.0.0.0 **ARBITRATION**

9.0.1.0 Subject to the provisions of Clauses 6.7.1.0, 6.7.2.0 and 9.0.2.0 hereof, any dispute arising out of a Notified Claim of the CONTRACTOR included in the Final Bill of the CONTRACTOR in accordance with the provisions of Clause 6.6.3.0 hereof, if the CONTRACTOR has not opted for the Alternative Dispute Resolution Machinery referred to in Clause 9.1.1.0 hereof, and any dispute arising out of any Claim(s) of the OWNER against the CONTRACTOR shall be referred to the arbitration of a Sole Arbitrator selected in accordance with the provisions of Clause 9.0.1.1 hereof. It is specifically agreed that the OWNER may prefer its Claim(s) against the CONTRACTOR as counter-claim(s) if a Notified Claim of the CONTRACTOR has been referred to arbitration. The CONTRACTOR shall not, however, be entitled to raise as a set-off defence or counter-claim any claim which is not a Notified Claim included in the CONTRACTOR's Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof.

9.0.1.1 The Sole Arbitrator referred to in Clause 9.0.1.0 hereof shall be selected by the CONTRACTOR out of a panel of 3 (three) persons nominated by the OWNER for the purpose of such selection, and should the CONTRACTOR fail to select an arbitrator within 30 (thirty) days of the panel of names of such nominees being furnished by the OWNER for the purpose, the Sole Arbitrator shall be selected by the OWNER out of the said panel.

9.0.2.0 Any dispute(s) or difference(s) with respect to or concerning or relating to any of the following matters are hereby specifically excluded from the scope, purview and ambit of this Arbitration Agreement with the intention that any dispute or difference with respect to any of the said following matters and/or relating to the Arbitrator's or Arbitral Tribunal's jurisdiction with respect thereto shall not and cannot form the subject- matter of any reference or submission to arbitration, and the Arbitrator or the Arbitral Tribunal shall have no jurisdiction to entertain the same or to render any decision with respect thereto, and such matter shall be decided by the General Manager prior to the Arbitrator proceeding with or proceeding further with the reference. The said excluded matters are:

(i) With respect to or concerning the scope or existence or otherwise of the Arbitration Agreement;

(ii) Whether or not a Claim sought to be referred to arbitration by the CONTRACTOR is a Notified Claim;

(iii) Whether or not a Notified Claim is included in the CONTRACTOR's Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof.

(iv) Whether or not the CONTRACTOR has opted for the Alternative Dispute Resolution Machinery with respect to any Notified Claim included in the CONTRACTOR's Final Bill.

9.0.3.0 The provisions of the Indian Arbitration & Conciliation Act, 1996 and any re-enactment(s) and/or modification(s) thereof and of the Rules framed thereunder shall apply to arbitration proceedings pursuant hereto subject to the following conditions:

(a) The Arbitrator shall give his Award separately in respect of each Claim and Counter-Claim; and

(b) The Arbitrator shall not be entitled to review any decision, opinion or determination (howsoever expressed), which is stated to be final and/or binding on the CONTRACTOR in terms of the Contract Documents.

9.0.4.0 The venue of the arbitration shall be New Delhi, provided that the Arbitrator may with the consent of the OWNER and the CONTRACTOR agree upon any other venue.

9.1.0.0 **ALTERNATIVE DISPUTE RESOLUTION MACHINERY**

9.1.1.0 Subject to the provisions of Clause 6.7.2.0 hereof, the CONTRACTOR may as alternative to reference to arbitration under Clause 9.0.1.0 with respect to its/his Notified Claims included in the CONTRACTOR's Final Bill in accordance with Clause 6.6.3.0, opt for the Alternative Dispute Resolution Machinery herein provided, and upon the exercise of such option, the CONTRACTOR shall be deemed to have waived his right (if any) of arbitration with respect to such Claim(s).

9.1.1.1 The option of adopting alternative dispute resolution machinery shall be exercised by the CONTRACTOR by making a written communication to the General Manager informing him of its/his decision to adopt the Alternative Dispute Resolution Machinery. The Alternative Dispute Resolution Machinery shall consist of a Committee (the Committee) of three members selected by the CONTRACTOR from a panel of 5 (five) persons nominated by the General Manager at the request of the CONTRACTOR in order to enable the CONTRACTOR to exercise its option contemplated in Clause 9.1.1.0 hereof.

9.1.1.2 The CONTRACTOR shall not refuse to make a selection within the provisions of Clause 9.1.1.1 hereof nor after making a selection shall be entitled to contest or otherwise refuse to be bound by the decision of the Alternative Dispute Resolution Machinery referred to hereinabove on the ground that one or more or all the persons nominated by the General Manager for selection of the Committee are employees of the OWNER or is or are otherwise connected with the OWNER and/or have otherwise previously dealt with the matter.

9.1.1.3 Upon appointment of the Committee, the exercise of the option by the CONTRACTOR to opt for the Alternative Dispute Resolution Machinery shall be deemed to be complete with consequences in this behalf specified in Clause 9.1.1.0 hereof.

9.1.2.0 The Committee shall not constitute an arbitral tribunal and shall not act as arbitrators but shall act as an expert body which shall not be bound by any rule or procedure of natural justice or to hear the parties, but shall be entitled to adopt and regulate its own procedure, to consult such experts and other persons as it deems fit (even behind the back of the Parties or any of them), and to hear the Parties separately or not at all, and the proceedings of the Arbitration and Conciliation Act, 1996 shall be inapplicable to its proceedings.

9.1.3.0 The Committee shall examine the Notified Claims of the CONTRACTOR included in its/his Final Bill in accordance with the provisions of Clause 6.6.3.0 hereof and the claims/counter-claims of the OWNER and endeavor to mediate a settlement thereof, failing which the Committee shall render its decision thereon.

9.1.4.0 The decision rendered by the Committee shall be in writing and shall be final and binding upon the OWNER and the CONTRACTOR. The said decision shall not be required to be supported by any reason and need not be rendered separately in respect of any claim.

9.2.0.0 **GENERAL**

9.2.1.0 The CONTRACTOR shall not refuse to make a selection within the provisions of Clause 9.0.1.0 hereof nor after making a selection shall be entitled to contest the Award or otherwise refused to be bound by the decision of the Arbitrator or of the Alternative Dispute Resolution Machinery referred to in Clause 9.1.1.0 hereof on the ground that one or more or all the persons nominated by the OWNER for selection of the Sole Arbitrator or appointed by the OWNER to constitute the Committee is or are employees of the OWNER or is or are otherwise connected with the OWNER.

9.2.2.0 Notwithstanding the existence of any arbitration or the adoption of the Alternative Dispute Resolution Machinery in terms hereof or otherwise, the CONTRACTOR shall continue and be bound to continue and perform all its/ his outstanding obligations in all respects under the Contract (unless the Contract is determined by the OWNER), and the CONTRACTOR shall remain liable and bound in all respects under the Contract.

SECTION 10

SAFETY CODE

10.0.0.0 **GENERAL:**

10.0.1.0 CONTRACTOR shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with OWNER's safety rules as set forth herein.

10.0.2.0 In addition, the Contractor shall adhere to and be bound by the "Safety Practices During Construction" (OISD-GDN-192) formulated by the Oil Industry Safety Directorate from time to time. A copy of the existing "Safety Practices During Construction" as presently formulated by the Oil Industry Safety Directorate is annexed hereto as Appendix III.

10.0.3.0 In the event of any irreconcilable conflict between the 'Safety Practices During Construction" prescribed by the Oil Industry Safety Directorate and the Safety provisions set out herein, the "Safety Practices During Construction" established by the Oil Industry Safety Directorate shall prevail to the extent of the irreconcilable conflict.

10.1.0.0 **FIRST AID AND INDUSTRIAL INJURIES:**

10.1.1.0 CONTRACTOR shall maintain first aid facilities for its employees and those of its sub-contractors.

10.1.2.0 CONTRACTOR shall make outside arrangements for ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to Engineer-in-charge prior to start of construction, and their telephone numbers shall be prominently posted in CONTRACTOR's field office.

10.1.3.0 All critical industrial injuries shall be reported promptly to Engineer-in-charge, and a copy of CONTRACTOR's report covering each personal injury requiring the attention of a physician shall be furnished to OWNER.

10.2.0.0 **GENERAL RULES:**

10.2.1.0 Carrying/Striking of matches, lighters insider the refinery area, smoking within the refinery, tank, farm, or dock limits are strictly prohibited. Violators of the "No Smoking" rules shall be discharged immediately. Within the operation area, no hot work shall be permitted without valid gas safety/fire permits. The CONTRACTOR shall be held and responsible for all lapses of his sub-contractors/employees in this regard.

10.3.0.0 **CONTRACTOR'S BARRICADES**

10.3.1.0 CONTRACTOR shall erect and maintain barricades required in connection with his operation to guard or protect:

(i) Excavation

(ii) Hoisting areas

(iii) Areas adjudged hazardous by CONTRACTOR's or Owner's inspectors.

(iv) OWNER's existing property liable to damage by CONTRACTOR's operations, in the opinion of Engineer-in-Charge/Site Engineer.

(v) Railroad unloading spots.

10.3.2.0 CONTRACTOR's employees and those of its sub-contractors shall become acquainted with OWNER's barricading practice and shall respect the provisions hereof.

10.3.3.0 Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

10.4.0.0 **SCAFFOLDING :**

10.4.1.0 Suitable scaffolding shall be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal 4 vertical)

10.4.2.0 Scaffolding or staging than 12′, above the ground floor, swing or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise rewinded at least 3′, high above the floor or platform of scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

10.4.3.0 Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or the stairway is more than 12', above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in Clause 10.4.2.0 above.

10.4.4.0 Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 3 feet.

10.4.5.0 Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 30′ in length while the width between the side rails in rung ladder shall in no case be less than 11.5″ for ladder up to and including 10′ in length for longer ladders this width would be increased at least ¼″ for each additional foot of length. Uniform step spacing shall not exceed 12″. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the site of work shall be so stacked or placed as to cause danger or inconvenience to any person or public. The CONTRACTOR shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceedings, as law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay damages and costs which may be awarded in any such suit or action or proceedings to any such person, or which may with the consent of the CONTRACTOR be paid to compromise any claim by any such person.

10.5.0.0 **EXCAVATION AND TRENCHING :**

10.5.1.0 All trenches 4′ or more in depth shall at all times be supplied with at least one ladder for each 100′ length or fraction thereof.

10.5.2.0 Ladder shall be extended from bottom of the trench to at least 3′3″ above the surface of the ground. The site of the trenches which is 5′ or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated material shall not be placed within 5′ of the edge of the trench or half of trench depth whichever is more. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.

10.6.0.0 **DEMOLITION**

10.6.1.0 Before any demolition work is commenced and also during the process of the work all roads and open area adjacent to the work site shall either be closed or suitably protected.

10.6.2.0 No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.

10.6.3.0 All practical steps shall be taken to prevent danger to persons employed, from risk of fire or explosion or flooding. No floor, or other part of the building shall be so overloaded with debris or material as to render it unsafe.

10.7.0.0 **SAFETY EQUIPMENT**

10.7.1.0 All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be made available for the use to the persons employed on the site and maintained in a condition suitable for immediate use, and the CONTRACTOR should take adequate steps to ensure proper use of equipment by those concerned.

10.7.2.0 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves.

10.7.3.0 Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.

10.7.4.0 Those engaged in welding and cutting works shall be provided with protective face and eyeshields, and gloves, etc.

10.7.5.0 Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

10.7.6.0 When workers are employed in sewers and manholes, which are in use, the CONTRACTOR shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers and allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.

10.7.7.0 The CONTRACTOR shall not employ men below the age of 18 years and women on the work of painting or products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken:

10.7.7.1 No paint containing lead product shall be used except in the form of paste or readymade paint.

10.7.7.2 Suitable face masks shall be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.

10.7.7.3 Overalls shall be supplied by the CONTRACTOR to workmen and adequate facilities shall be provided to enable the working painters to wash during and on cessation of work.

10.8.0.0 **RISKY PLACES:**

10.8.1.0 When the work is done near anyplace where there is a risk of drowning, all necessary safety equipments shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

10.9.0.0 **HOISTING EQUIPMENT:**

10.9.1.0 Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:

10.9.1.1 These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good condition and in good working order.

10.9.1.2 Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.

10.9.1.3 Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21years should be in charge of any hoisting machine including any scaffolding winch or give signals to the operator.

10.9.1.4 In case of every hoisting machine and of every chain ring hook, shackle, swivel and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

10.9.1.5 In case of departmental machine, the safe working load shall be notified by the Engineer-in-Charge. As regards CONTRACTOR's machines, the CONTRACTOR shall notify the safe working load of the machine to the Engineer-in-charge, whenever he brings any machinery to site of work and get it verified by the Engineer-in-charge concerned.

10.10.0.0 **ELECTRICAL EQUIPMENT:**

10.10.1.0 Motor, Gearing, Transmission, wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards, hoisting appliance should be provided with such means as will reduce to the minimum, the risk of accidental descent of the load, adequate precautions shall be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating mats, wearing apparel, such as gloves and boots as may be necessary shall be provided. The workers shall not wear any rings, watches and carry keys or other materials which are goods conductors of electricity.

10.11.0.0 **MAINTENANCE OF SAFEY DEVICES:**

10.11.1.0 All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near place of work.

10.12.0.0 **DISPLAY OF SAFETY INSTRUCTIONS:**

10.12.1.0 These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety code shall be named therein by the CONTRACTOR.

10.13.0.0 **ENFORCEMENT OF SAFETY REGULATIONS:**

10.13.1.0 To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the CONTRACTOR shall be open to inspection by the Welfare Officer, Engineer-in-charge or Safety Engineer of the OWNER or their representatives.

10.14.0.0 **NO EXEMPTION**

10.14.1.0 Notwithstanding the above Clauses 10.0.0.0 to 10.13.0.0 there is nothing in these to exempt the CONTRACTOR from the operations of any other Act or rules in force in the Republic of India.

10.14.2.0 The works throughout including any temporary works shall be carried on in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths, at the site or in the vicinity thereto or any existing works whether the property of the OWNER or of a third party.

10.14.3.0 In addition to the above, the CONTRACTOR shall abide by the safety code provision as per CPWD Safety Code framed from time to time.

10.14.4.0 The CONTRACTOR shall also arrange to obtain valid gate passes for his men and equipment from the concerned authorities of the Refinery/Project

10.14.5.0 No man/material/equipment not covered by valid passes shall be permitted within the Refinery/Project area and no material/equipment shall be permitted to be taken out of the Refinery/Project area, unless authorised by the concerned authorities of the Refinery Project. The CONTRACTOR shall be held fully responsible for any or all delays/losses/damages that may result consequent on any lapses that may occur on the part of his sub-contractors/employees in this regard.

10.15.0.0 **PENALTY CLAUSE**

10.15.1.0 Violation of applicable Safety, Health and Environmental related norm, a penalty of Rs. 5000/- per occasion.

10.15.2.0 Violation as above resulting in.

i. Any physical injury, a penalty of 0.5% o the contract value (maximum of Rs. 2,00,000/-) per injury in addition to Rs. 5000/- as in item 1.

ii. Fatal accident, a penalty of 1% of the contract value (maximum of Rs. 10,00,000/-) per fatality in addition to Rs. 5000/- as in item 1.

10.15.3.0 Aforsaid penalty clause in over and above the applicable statutory requirements.

APPENDIX –I

To

GENERAL CONDITIONS OF CONTRACT

CONTRACTORS' LABOUR REGULATIONS

(Reference: Clause 8.3.10.0 of GCC)

1. These regulations may be called Model Contractors Labour Regulations.

2. Definition: In these regulations, unless otherwise expressed or indicated, the following words and expressions shall have the meaning hereby assigned to them:

   (a) "Labour" means workers employed by a contractor, directly or indirectly through a sub-contractor, or by an agent on his behalf to do any skilled, semi-skilled or unskilled manual, supervisory, technical or clerical work.

   (b) "Fair Wage" means wages, which shall include wages for weekly day of rest and other allowances, whether for time or piece work, after taking into consideration prevailing market rates for similar employments in the neighbourhood but shall not be less than the minimum rates of wages fixed under the payment of Minimum Wages Act.

   (c) "Wages" shall have the same meaning as defined in the Payment of Wages Act.

   (d) "Contractor" for the purpose of these regulations shall include an agent or sub-contractor employing labour on the work taken on the contract.

   (e) "Inspecting Officer" means any Labour Enforcement Officer or Assistant Labour Commissioner of the Chief Labour Commissioner's Organisation.

   (f) "Prescribed" means prescribed under the Contract Labour (Regulation and Abolition) Act, 1970 and Rules framed thereunder.

3. Notice of commencement: The Contractor, shall within SEVEN days of commencement of the work, furnish in writing, to Inspecting Officer of the area concerned the following information :

   (a) Name and Situation of the work.

   (b) Contractor's name and address.

   (c) Particulars of the Department for which the work is undertaken.

   (d) Name and address of sub-contractors as and when they are appointed.

   (e) Commencement and probable duration of the work.

   (f) Number of workers employed and likely to be employed.

   (g) "fair wages" for different categories of workers.

      (i) Number of hours of work to constitute a normal working day : The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that it is inclusive of intervals, if any, for rest, it shall not spread over more than twelve hours on any day. When a worker is made to work for more than NINE hours on any day or for more than FORTY-EIGHT

hours in a week, he shall, in respect of overtime work, be paid wages at double the ordinary rate of wages.

(ii) Weekly day of rest: Every worker shall be given a weekly day of rest which shall normally be a Sunday unless otherwise fixed and notified at least TEN days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of the five days immediately before or after the rest day, provided that no substitution shall be made which will result in the worker working for more than ten days consecutively without a rest day for a whole day.

4. Where, in accordance with the foregoing provisions, a worker works on the rest day and has been given a substituted rest day, he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

(**NOTE:** The expression "ordinary rate of wages" means the fair wage the worker is entitled to.)

5. Display of notice regarding Wages, Weekly Day of Rest etc.: The contractor shall, before the commencement of his work on the Contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the works, notice in English and in the local Indian language, spoken by majority of workers, giving the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy each of such notices to the Inspecting Officers.

6.0 Fixation of Wage Periods: The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall normally exceed one month.

6.1 Payment of wages:

(i) Wages due to every worker shall be paid to him direct. All wages shall be paid in current coins or currency or in both. The wages shall be paid without deductions of any kind except those specified by Central Government by General Order or Special Order in this behalf or permissible under the Payment of Wages Act.

(ii) Wages of every worker employed as contract labour in an establishment or by Contractor are less than one thousand, such workers shall be paid within SEVEN days from the end of the Wage period; and before the expiry of the 10^{th} day from the end of the wage period accordingly as the number of workers exceed 1,000.

(iii) When employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before expiry of the second working day from the date on which his employment is terminated.

(iv) All payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal time.

(**NOTE:** The term "working day" means a day on which labour is employed, and the work is in progress)

7. Register for Workmen: A register of workmen shall be maintained in the prescribed form and kept at the work site or as near to it as possible, and the relevant particulars of every workmen shall be entered therein within THREE days of his employment.

8. Employment Card: The Contractor shall issue an employment card in the Form appended to these regulations to each worker on the day of work or entry into his employment. If a worker already has any such card with him issued by the previous employer, the Contractor shall merely endorse that Employment Card with relevant entries. The Contractor may, alternatively, issue an attendance-cum-wage slip to each worker in the form appended. This card shall be valid for a wage period. The Contractor shall mark attendance on the cards twice each day and again after the rest interval, before he actually starts the work. On termination of employment, the Employment Card shall again be endorsed by the Contractor, service certificate issued and returned to the Worker.

9. Register of Wages etc.

(i) A register of Wages-cum-Muster Roll in the prescribed Form shall be maintained and kept at the work site or as near to it as possible.

(ii) A wage slip in the prescribed Form shall be issued to every worker employed by the Contractor at least a day prior to disbursement of wages.

10. Fines and deductions which may be made from Wages:

(i) Wages of a worker shall be paid to him without any deduction of any kind except the following:

(a) Fines;

(b) Deduction for absence from duty, i.e. from the place of his employment he is required to work. The amount of deductions shall be in proportion to the period for which he was absent;

(c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money which he is required to account for, where such damage or loss is directly attributable to his neglect or default;

(d) Deductions for recovery of advances or for adjustment of overpayment of wages. Advance granted shall be entered in a register; and

(e) Any other deduction which the Corporation may from time to time allow.

(ii) No fines shall be imposed on any worker say in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner or Competent Authority.

(iii) No fine shall be imposed on a worker and no deductions for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.

(iv) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the wages payable to him in respect of that wage period.

(v) No fine imposed on a worker shall be recovered from him in installments, or after expiry of sixty days from the date on which it was imposed. Every fine shall be deemed to have been imposed on the day of the at or omission in respect of which it was imposed.

(vi) The Contractor shall maintain both in English and the local Indian language, a list approved by the Chief Labour Commissioner or Competent Authority clearly stating the acts and commissions for which penalty or fine may be imposed on a workman and display it in good condition in a conspicuous place on the work site.

(vii) The Contractor shall maintain a register of fines and the register of deductions for damage or loss in the prescribed Forms which should be kept at the place of work.

(viii) The Contractor shall display in a conspicuous place of work the list of acts and omissions for which the fines can be imposed. They are as under:

1. Willful insubordination or disobedience, whether alone or in combination with other.

2. Theft, fraud or dishonest in connection with the Contractors beside a business or property of Corporation.

3. Taking or giving bribes or any illegal gratification.

4. Habitual late attendance.

5. Drunkenness, fighting, riotous or disorderly or indifferent behaviour.

6. Habitual negligence.

7. Smoking near or around the area where combustible or other materials are locked.

8. Habitual indiscipline

9. Causing damage to work in the progress or to property of the Corporation or of the Contractor.

10. Sleeping on duty.

11. Malingering or slowing down work.

12. Giving of false information regarding name, age, father's name etc.

13. Habitual loss of wage cards supplied by the employers.

14. Unauthorised use of employer's property of manufacture or making of unauthorised articles at the work place.

15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Corporation and for which the Contractor is compelled to undertake rectification.

16. Making false complaints and/or misleading statements.

17. Engaging on trade within the premises of the establishments.

18. Any unauthorised divulgence of business affairs of the employers.

19. Collection or canvassing for the collection of an money within the premises of an establishment unless authorised by the employer.

20. Holding meeting inside the premises without previous sanction of the employers.

21. Threatening or intimidating any workmen or employer during the working hours within the premises.

22. Non-observance of Safety norms/practices applicable to the Worksite.

11. Register of Accidents: The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

(a) Full particulars of the labourers who met with accident.

(b) Rate of wages.

(c) Sex

(d) Age

(e) Nature of accident and cause of accidet

(f) Time and date of accident

(g) Date and time when admitted in hospital

(h) Date of discharge from the hospital

(i) Period of treatment and result of treatment

(j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.

(k) Claim required to be paid under Workmen's Compensation Act.

(l) Date of payment of compensation

(m) Amount paid with details of the person to whom the same was paid.

(n) Authority by whom the compensation was assessed

(o) Remarks

12. Preservation of Registers: The Register of Workmen and the Register of Wages –cum-Muster Roll required to be maintained under these Regulation shall be preserved for 3 years after the date on which the last entry is made therein.

13. Enforcement: The Inspecting Officer shall either, on his own motion or on a complaint received by him, carry out investigations and send a report to the Engineer-in-charge specifying the amounts representing Workers' dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, indicating full details of the recoveries proposed and the reasons therefor. It shall be obligatory on the part of the Engineer-in-charge on receipt of such a report to deduct such amounts from payments due to the Contractor.

14. Disposal of amounts recovered from the Contractor: The Engineer-in-charge shall arrange payment to workers concerned within FORTY FIVE days from receipt of a report from the Inspecting Officer. In cases where there is an appeal, payment of workers dues would be arranged by the Engineer-in-charge wherever such payments arise, within THIRTY days from the date of receipt of the decision of the Regional Labour Commissioner (RLC).

15. Appeal against decision of Inspecting Officer: Any person aggrieved by a decision of the Inspecting Officer may appeal against such decision to the RLC concerned within THIRTY days from the date of decision, forwarding simultaneously a copy of his appeal to the Engineer-in-charge. The decision of the RLC shall be final and binding upon the Contractor and the workmen.

16. Representation of parties:

(i) A workmen shall be entitled to be represented in any investigation or enquiry under these Regulations by an officer of a registered trade union of which he is a member or by an officer of a Federation of Trade Unions to which the said trade union is affiliated or where the workman is

not a member of any registered trade union, by an officer of a registered trade union, connected with, or by any other workman employed in the industry in which the worker is employed.

(ii) A contractor shall be entitled to be represented in any investigation of enquiry under these Regulations by an officer of an Association of Contractors of which he is a member or by an officer of a Federation of Association of Contractors to which the said association is affiliated or where the Contractor is not a member of any Association of Contractors, by an officer of association of employers, connected with, or by any other employer engaged in, the industry in which the Contractor is engaged.

(iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these Regulations.

17. Maternity benefits for female employees: The Contractor shall extend the leave, pay and other benefits as admissible to the female employees. No maternity benefits shall be admissible to a female worker unless she has been employed for a total period of not less than 6 months immediately proceeding the date on which she proceeds on leave. The Contractor shall maintain a register of maternity benefits in prescribed form, and shall be kept in all places of work.

18. Inspection of Books and other documents: The Contractor shall allow inspection of the Registers and other documents prescribed under these Regulations by Inspecting Officers and the Engineer-in-Charge or his authorised representative at any time and by the worker or his agent on receipt of due notice at the convenient time.

19. Submission of Returns: The Contractor shall submit periodical returns as may be specified from time to time.

20. Amendments: The Corporation may, from time to time, add to or amend these Regulations, and issue such directions, as it may consider necessary for the proper implementation of these Regulations or for the purpose of removing any difficulty, which may arise in the administration thereof.

APPENDIX –II

To

THE GENERAL CONDITIONS OF CONTRACT

MODEL RULES FOR LABOUR WELFARE

(Reference : Clause 8.3.10.0 of GCC)

1. Definitions

   (a) "Workplace" means a place at which, on an average, twenty or more workers are employed on any day during which the Contract work is in progress.

   (b) "Large Workplace" means a place at which, on an average 500 or more workers are employed.

2. First Aid

   (i) At every workplace, there shall be provided and maintained in a readily accessible place First Aid appliances including an adequate supply of sterilized dressings and sterilized cotton wool as prescribed in the Factory Rules of the State in which the work is carried on. The appliances shall be kept in good order and in large work places, they shall be placed under the charge of a responsible person who shall be trained in First Aid treatment and who shall also be readily available during working hours. The First Aid boxes at the rate of not less than one box for 150 contract labour or part thereof shall be ordinarily employed. Adequate arrangement shall be made for immediate recoupment of items/equipment when necessary.

   (ii) At large work places, where hospital facilities are not available within easy distance of the Works, First Aid posts shall be established and be run by a trained compounder.

   Where large work places are remotely situated far away from regular hospitals, an indoor ward shall be provided with one bed for every 250 employees.

   Where large work places are situated in cities, towns or in their suburbs and no beds are considered necessary owing to proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to these hospitals. At other workplaces, some conveyance shall be kept readily available to take injured person or persons suddenly taken seriously ill to the nearest hospital.

   At large work places, there shall be provided and maintained an ambulance room of the prescribed sizes, containing the prescribed equipment and in the charge of such medical and nursing staff as may be prescribed. For this purpose, the relevant provisions of the Factory Rules of the State Government area where the work is carried on may be taken as the prescribed standard.

3. Accommodation for labour : The Contractor shall during the progress of the Works, provide, erect and maintain necessary temporary living accommodation and ancillary facilities for labour at his own expense and to standard and scales as approved by the Engineer-in-charge. However, following specifications shall be followed :

   (a)

      (i) The minimum height of each hut at the eaves level shall be 2.10m (7ft) and the floor area to be provided will be at the rate of 2.7 sq.m (30sq.ft.) for each member of the worker's family staying with the labourer.

(ii) The Contractor shall in addition construct suitable cooking places having a minimum area of 1.80m X 1.50m (6" x 5") adjacent to the hut for each family.

(iii) The Contractor shall also construct temporary latrines and urinals for the use of the labourers, each on the scale of not less than four per each one hundred of the total strength. Separate latrines and urinals been provided for women.

(iv) The Contractor shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These washing and bathing places shall be suitably screened.

(b)

(i) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local material as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobri on both sides. The floor may be katcha, but plastered with mud gobri and shall be at least 15cm. (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the Contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.

(ii) The Contractor shall provide each hut with proper ventilation.

(iii) All doors, windows and ventilators shall be provided with suitable leaves for security purposes.

(iv) There shall be kept an open space at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20ft) according to the availability of site with the approval of the Engineer-in-charge. Back to back construction will be allowed.

4. Drinking Water : In every workplace, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.

Where drinking water is obtained from an intermittent public water supply, each workplace shall be provided with storage where drinking water should be stored.

Every water supply storage shall be at a distance of not less than 15 meters from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and water proof.

A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. Washing and Bathing Places : Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept in clean and drained conditions.

6. Scale of accommodation in latrines and urinals : There shall be provided within the precincts of every workplace, latrines and urinals in an accessible place and the accommodation separately for each of these, shall not be less than at the following scales :

No. of seats

(a)	Where number of persons does not exceed 50	-	2
(b)	Where number of persons exceeds 50 but does not exceed 100	-	3

(c) For additional persons - 3 per 100 or part thereof

In particular cases, the Engineer-in-Charge shall have the power to increase the requirement, where necessary.

7. Latrines and Urinals: Except in workplaces provided with water-flushed latrines connected with a water-borne sewage systems, all latrines shall be provided with receptacies on dry earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in strictly sanitary condition. Receptacies shall be tarred inside and outside at least once a year.

If women are employed, separate latrine and urinals screened from those for men and marked in the vernacular in conspicuous letters "For Women Only" shall be provided on the scale laid down in Rule 6. Those for men shall be similarly marked "For Men Only". A poster showing the figure of a man and a woman shall also be exhibited at the entrance to latrines for each sex. There shall be adequate supply of water close to latrines and urinals.

8. Construction of latrines: Inside walls shall be constructed of masonry or other non-absorbent materials and shall be cement-washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for the purpose and kept available for inspection. Latrines shall have at least thatched roof.

9. Disposal of excreta: Unless otherwise arranged for by the local municipal authority, arrangement for proper disposal of excreta by incineration at the workplace shall be made by means of a suitable incinerator approved by the local medical, health and medical or cantonment authorities. Alternatively, excreta may be disposed off by putting a layer of night soils at the bottom of pucca tank prepared for the purpose and covering it with a 15 c.m. Layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn into manure).

The Contractor shall, at his own expense, carry out all instructions issued to him by the Engineer-in-charge to effect proper disposal of soil and other conservancy work in respect of Contractor's work people or employees at the site. The Contractor shall be responsible for payment of any charges which may be levied by municipal or cantonment authority for execution of such work on his behalf.

10. Provision of shelters during rest : At every workplace shall be provided, free of cost, four suitable sheds, two for meals and two others for rest, separately for use of men and women labour. Height of each shelter shall not be less than 3 meters from the floor level to lowest part of roof. Sheds shall be kept clean and the space provided shall be on the basis of at least 0.5 sq.m per head.

11. Crèches : At a place at which 20 or more women workers are ordinarily employed, there shall be provided at least one hut for use of children under the age of 6 years belonging to such women. Huts shall not be constructed to a standard lower than that of thatched roof, mud floor and wall with wooden planks spread over mud floor and covered with matting.

Huts shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two dais in attendance. Sanitary utensils shall be provided to the satisfaction of local medical, health and municipal or cantonment authorities. Use of huts shall be restricted to children, their attendants and mothers of children.

Where the number of women workers is more than 25 but less than 50, the Contractor shall provide at least one hut and one Dai to look after the children of women workers.

Size of creche(s) shall vary according to the number of women workers employed.

Creche(s) shall be properly maintained and necessary equipment like toys etc. provided.

12. Canteen: A cooked food canteen on a moderate scale shall be provided for the benefit of workers wherever it is considered necessary.

13. Planning, setting and erection of the above mentioned structures shall be approved by the Engineer-in-charge and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and sanitary condition as per requirements of the local bodies and to the satisfaction of the Engineer-in-charge and at the Contractor's expense. The Contractor shall conform generally to sanitary requirements of local medical, health and municipal or cantonment authorities and at all time adopt such precautions as may be necessary to prevent soil pollution of the site.

    On completion of the Work, the whole of such temporary structures shall be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the whole of site left clean and tidy to the entire satisfaction of the Engineer-in-Charge and at the Contractor's expense.

14. Anti-material precautions: The Contractor shall, at his own expense, conform to all anti-material instructions given to him by the Engineer-in-Charge, including filling up any burrow pits which may have been dug by him.

15. Enforcement: The Inspecting Officer mentioned in the Contractors' Labour Regulations or any other officer nominated in his behalf by the Engineer-in-charge shall report to the Engineer-in-charge all cases of failure on the part of the Contractor and or his sub-contractors to comply with the provisions of these Rules either wholly or in part and the Engineer-in-charge shall impose such fines and other penalties as are prescribed in the conditions.

16. Interpretations etc: On any question as to the application, interpretation of effect of these Rules, the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner (Central) shall be final and binding.

17. Amendments: Government/Corporation may, from time to time, add to or amend these rules and issue such directions, as it may consider necessary for the proper implementation of these Rules or for the purpose of removing any difficulty, which may arise in the administration thereof.

APPENDIX –III

To

THE GENERAL CONDITIONS OF CONTRACT

SAFETY CODE

(Reference: Clause NO. 10.0.2.0 of GCC)

OISD – GDN - 192

SAFETY PRACTICES DURING CONSTRUCTION

1.0 INTRODUCTION

Safety in Construction Management deserves utmost attention especially in the hydrocarbon industry, such as Exploration, Refineries, Pipelines and Marketing installations, Gas Processing units etc. Construction is widely recognised as one of the accident-prone activities. Most of the accidents are caused by inadequate planning, failure during the construction process and/or because of design deficiencies. Besides property loss, accidents also result in injuries and fatalities to the personnel; same needs to be prevented.

The reasons for accidents during construction activities are related to unique nature of the industry, human behaviour, difficult work-site conditions, extended odd duty hours, lack of training & awareness and inadequate safety management. Unsafe working methods, equipment failure and improper housekeeping also tend to increase the accident rate in construction.

Ensuring good quality of materials, equipment and competent supervision along with compliance of standard engineering practices shall go a long way to in built safety into the system.

The objective of this standard is to provide practical guidance on technical and educational framework for safety and health in construction with a view to:

(a) prevent accidents and harmful effects on the health of workers arising from employment in construction;
(b) ensure appropriate safety during implementation of construction;
(c) provide safety practice guidelines for appropriate measures of planning, control and enforcement.

2.0 SCOPE

This document specifies broad guidelines on safe practices to be adhered to during construction activities in oil industry. However, before commencing any job, specific hazards and its effects should be assessed and necessary corrective/preventive actions should be taken by all concerned. The document is intended only to supplement and not to replace or supersede the prevailing statutory requirements, which shall also be followed as applicable. For Personal Protective Equipment, OISD-STD-155 (Part I&II) shall be referred to. The scope of this document does not include the design aspects and quality checks during construction.

3.0 DEFINITIONS

Definitions of various terminology are given below:

- *Adequate, appropriate or suitable* are used to describe qualitatively or quantitatively the means or method used to protect the worker.
- *Brace:* A structural member that holds one point in a fixed position with respect to another point; bracing is a system of structural members designed to prevent distortion of a structure.
- *By hand:* The work is done without the help of a mechanised tool.
- *Competent Authority:* A stautory agency having the power to issue regulations, orders or other instructions having the force of law.
- *Competent person:* A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill for the safe performance of the specific work. The competent authorities may define appropriate criteria for the designation of such persons and may determine the duties to be assigned to them.
- *Execution agency:*

  Any physical or legal person, having contractual obligation with the owner, and who employs one or more workers on a construction site
- *Owner:*

  Any physical or legal person for whom construction job is carried out.

  It shall also include owner's designated representative/consultant/nominee/agent, authorised from time to time to act for and on its behalf, for supervising/ coordinating the activities of the execution agency.

- *Hazard:* Danger or potential danger.
- *Guard-rail:* An adequately secured rail erected along an exposed edge to prevent persons from falling.
- *Hoist:* A machine, which lifts materials or persons by means of a platform, which runs on guides.
- *Lifting gear:* Any gear or tackle by means of which a load can be attached to a lifting appliance but which does not form an integral part of the appliance or load.
- *Lifting appliance:* Any stationary or mobile appliance used for raising or lowering persons or loads.
- *Means of access or egress:* Passageways, corridors, stairs, platforms, ladders and any other means for entering or leaving the workplace or for escaping in case of danger.
- *Scaffold:* Any fixed, suspended or mobile temporary structure supporting workers and material or to gain access to any such structure and which is not a lifting appliance as defined above.
- *Toe-board:* A barrier placed along the edge of a scaffold platform, runway, etc., and secured there to guard against the slipping of persons or the falling of material.
- *Worker:* Any person engaged in construction activity.
- *Workplace:* All places where workers need to be or to go by reason of their work.

4.0 GENERAL DUTIES

4.1 GENERAL DUTIES OF EXECUTION AGENCIES

1.1.1 Execution agency should:

i) provide means and organisation to comply with the safety and health measures required at the workplace.

ii) provide and maintain workplaces, plant, equipment, tools and machinery and organise construction work so that, there is no risk of accident or injury to health of workers. In particular, construction work should be planned, prepared and undertaken so that:

(a) dangers, liable to arise at the workplace, are prevented;
(b) excessively or unnecessarily strenuous work positions and movements are avoided;
(c) organisation of work takes into account the safety and health of workers;
(d) materials and products used are suitable from a safety and health point of view;
(e) working methods are adopted to safeguard workers against the harmful effects of chemical, physical and biological agents.

iii) establish committees with representatives of workers and management or make other arrangement for the participation of workers in ensuring safe working conditions.

iv) arrange for periodic safety inspections by competent persons of all buildings, plant, equipment, tools, machinery, workplaces and review of systems of work, regulations, standards or codes of practice. The competent person should examine and ascertain the safety of construction machinery and equipment.

v) provide such supervision to ensure that workers perform their work with due regard to safety and health of theirs as well as that of others.

vi) Employ only those workers who are qualified, trained and suited by their age, physique, state of health and skill.

vii) satisfy themselves that all workers are informed and instructed in the hazards connected with their work and environment and trained in the precautions necessary to avoid accidents and injury to health.

viii) Ensure that buildings, plant, equipment, tools, machinery or workplaces in which a dangerous defect has been found should not be used until the defect has been rectified.

ix) Organise for and remain always prepared to take immediate steps to stop the operation and evacuate workers as appropriate, where there is an imminent danger to the safety of workers.

x) Establish a checking system by which it can be ascertained that all the members of a shift, including operators of mobile equipment, have returned to the camp or base at the close of work on dispersed sites and where small groups of workers operate in isolation.

xi) Provide appropriate first aid, training and welfare facilities to workers as per various statutes like the Factories Act, 1948 etc. and, whenever collective measures are not feasible or are insufficient, provide and maintain personal protective equipment and clothing in line with the requirement as per OISD-STD-155 (Vol. I& II) on Personnel Protective Equipment. They should also provide access to workers to occupational health services.

xii) Educate workers about their right and the duty at any workplace to participate in ensuring safe working conditions to the extent of their control over the equipment and methods of work and to express views on working procedures adopted as may affect safety and health.

xiii) Ensure that except in an emergency, workers, unless duly authorised, should not interfere with, remove, alter or displace any safety device or other appliance furnished for their protection or the protection of others, or interfere with any method or process adopted with a view to avoiding accidents and injury to health.

xiv) Ensure that workers do not operate or interfere with plant and equipment that they have not been duly authorised to operate, maintain or use.

xv) Ensure that workers do not sleep, rest or cook etc in dangerous places such as scaffolds, railway tracks, garages, confined spaces or in the vicinity of fires, dangerous or toxic substances, running machines or vehicles and heavy equipment etc.

xvii) Obtain the necessary clearance/ permits as required and specified by owner

xviii) As per the Govt. circular as amended from time to time all contractors who employ more than 50 workers or where the contract value exceeds Rs. 50 crores, the following facilities are to be provided by contractor at site:

- Arrangement for drinking water
- Toilet facilities
- A creche where 10 or more women workers are having children below the age of 6 years
- Transport arrangement for attending to emergencies

xix) should deploy a safety officer at site

4.2 GENERAL DUTIES OF OWNERS

4.2.1 Owners should:

i) co-ordinate or nominate a competent person to co-ordinate all activities relating to safety and health on their construction projects;
ii) inform all contractors on the project of special risks to health and safety;
iii) Ensure that executing agency is aware of the owner's requirements and the executing agency's responsibilities with respect to safetry practices before starting the job.

5.0 SAFETY PRACTICES AT WORK PLACES

5.1. GENERAL PROVISIONS

5.1.1 All openings and other areas likely to pose danger to workers should be clearly indicated.

5.1.2 Workers & Supervisors should use the safety helmet and other requisite Personal Protective Equipment according to job & site requirement. They should be trained to use personal protective equipment.

5.1.3 Never use solvents, alkalis and other oils to clean the skin.

5.1.4 Lift the load with back straight and knees bent as far as possible. Seek the help in case of heavy load.

5.1.5 Ensure the usage of correct and tested tools and tackles. Don't allow the make shift tools and tackles.

5.1.6 No loose clothing should be allowed while working near rotating equipment or working at heights.

5.2 MEANS OF ACCESS AND EGRESS

Adequate and safe means of access (atleast two, differently located) to and egress from all workplaces should be provided. Same should be displayed and maintained.

5.3 HOUSEKEEPING

5.3.1 Ensure:

i) proper storage of materials and equipment;
ii) removal of scrap, inflammable material, waste and debris at appropriate intervals.

5.3.2 Removal of loose materials, which are not required for use, to be ensured. Accumulation of these at the site can obstruct means of access to and egress from workplaces and passageways.

5.3.3 Workplaces and passageways, that are slippery owing to oil, grease or other causes, should be cleaned up or strewn with sand, sawdust, ash etc.

5.4 PRECAUTIONS AGAINST THE FALL OF MATERIALS & PERSONS AND COLLAPSE OF STRUCTURES

5.4.1 Precautions should be taken such as the provision of fencing, look-out men or barriers to protect any person against injury by the fall of materials, or tools or equipment being raised or lowered.

5.4.2 Where necessary to prevent danger, guys, stays or supports should be used or other effective precautions should be taken to prevent the collapse of structures or parts of structures that are being erected, maintained, repaired, dismantled or demolished.

5.4.3 All openings through which workers are liable to fall should be kept effectively covered or fenced and displayed prominently.

5.4.4 As far as practicable, guardrails and toe-boards should be provided to protect workers from falling from elevated workplaces.

5.5 PREVENTION OF UNAUTHORISED ENTRY

5.5.1 Construction sites located in built-up areas and alongside vehicular and pedestrian traffic routes should be fenced to prevent the entry of unauthorised persons.

5.5.2 Visitors should not be allowed access to construction sites unless accompanied by or authorised by a competent person and provided with the appropriate protective equipment.

5.6 FIRE PREVENTION AND FIRE FIGHTING

5.6.1 All necessary measures should be taken by the executing agency and owner to:

i) avoid the risk of fire;
ii) control quickly and efficiently any outbreak of fire;
iii) bring out a quick and safe evacuation of persons.
iv) Inform unit/fire station control room, where construction work is carried out within existing operating area.

5.6.2 Combustible materials such us packing materials, sawdust, greasy/oily waste and scrap wood or plastics should not be allowed to accumulate in workplaces but should be kept in closed metal containers in a safe place.

5.6.3 Places where workers are employed should, if necessary to prevent the danger of fire, be provided with:

i) suitable and sufficient fire-extinguishing equipment, which should be easily visible and accessible;
ii) an adequate water supply at sufficient pressure meeting the requirements of various OISD standards.

5.6.4 To guard against danger at places having combustible material, workers should be trained in the action to be taken in the event of fire, including the use of means of escape.

5.6.5 At sites having combustible material, suitable visual signs should be provided to indicate clearly the direction of escape in case of fire.

5.6.6 Means of escape should be kept clear at all times. Escape routes should be frequently inspected particularly in high structures and where access is restricted.

5.7 LIGHTING

5.7.1 Where natural lighting is not adequate, working light fittings or portable hand-lamps should be provided at workplace on the construction site where a worker will do a job.

5.7.2 Emergency lighting should be provided for personnel safety during night time to facilitate standby lighting source, if normal system fails.

5.7.2 Artificial lighting should not produce glare or disturbing shadows.

5.7.3 Lamps should be protected by guards against accidental breakage.

5.7.4 The cables of portable electrical lighting equipment should be of adequate size & characteristics for the power requirements and of adequate mechanical strength to withstand severe conditions in construction operations.

5.8 PLANT, MACHINERY, EQUIPMENT AND HAND TOOLS

5.8.1 General Provisions

i) Plant, machinery and equipment including hand tools, both manual and power driven, should:
   a) be of proper design and construction, taking into account health, Safety and ergonomic principles.
   b) be maintained in good working order;
   c) be used only for work for which they have been designed.
   d) be operated only by workers who have been authorised and given appropriate training.
   e) be provided with protective guards, shields or other devices as required.

ii) Adequate instructions for safe use should be provided.

iii) Safe operating procedures should be established and used for all plant, machinery and equipment.

iv) Operators of plant, machinery and equipment should not be distracted while work is in progress.

v) Plant, machinery and equipment should be switched off when not in use and isolated before any adjustment, clearing or maintenance is done.

vi) Where trailing cables or hose pipes are used they should be kept as short as practicable and not allowed to create a hazard.

vii) All moving parts of machinery and equipment should be enclosed or adequately guarded.

viii) Every power-driven machine and equipment should be provided with adequate means, immediately accessible and readily identifiable to the operator, of stopping it quickly and preventing it from being started again inadvertently.

ix) Operators of plant, machinery, equipment and tools should be provided with PPEs, including where necessary, suitable ear protection.

5.8.2 Hand tools

i) Hand tools should be repaired by competent persons.

ii) Heads of hammers and other shock tools should be dressed or ground to a suitable radius on the edge as soon as they begin to mushroom or crack.

iii) When not in use and while being carried or transported sharp tools should be kept in sheaths, shields, chests or other suitable containers.

iv) Only insulated or nonconducting tools should be used on or near live electrical installations.

v) Only non-sparking tools should be used near or in the presence of flammable or explosive dusts or vapours.

5.8.3 Pneumatic Tools

i) Operating triggers on portable pneumatic tools should be:

a) so placed as to minimise the risk of accidental starting of the machine.

b) so arranged as to close the air inlet valve automatically when the pressure of the operator's hand is removed.

ii) Hose and hose connections for compressed air supply to portable pneumatic tools should be:

a) designed and tested for the pressure and service for which they are intended;

b) fastened securely on the pipe outlet and equipped with the safety chain, as appropriate.

iii) Pneumatic shock tools should be equipped with safety clips or retainers to prevent dies and tools from being accidentally expelled from the barrel.

iv) Pneumatic tools should be disconnected from power and the pressure in hose lines released before any adjustment or repair is made.

5.8.4 Electrical Tools

i) Low voltage portable electrical tools should generally be used.

ii) All electrical tools should be earthed, unless they are "all insulated" or "double insulated" tools which do not require earthing.

iii) All electrical tools should get inspected and maintained on a regular basis by a competent electrician and complete records kept.

5.8.5 Engines

i) Engines should:

a) be installed so that they can be started safely and the maximum safe speed cannot be exceeded.

b) have controls for limiting speed.

c) have devices to stop them from a safe place in an emergency.

ii) IC engines should not be run in confined spaces unless adequate exhaust ventilation is provided.

iii) When IC engines are being fuelled:

a) the engine should be shut off.

b) care should be taken to avoid spilling fuel;

c) no person should smoke or have an naked light in the vicinity.

d) a fire extinguisher should be kept readily available.

iv) Secondary fuel reservoir should be placed outside the engine room.

6.0 CONSTRUCTION ACTIVITIES

The various common activities in construction are as under:

- Excavation
- Scaffolding, Platforms & Ladders
- Structural Work, Laying of Reinforcement & Concreting
- Road Work (Laying of roads)
- Cutting /Welding
- Working in Confined Space
- Proof/Pressure Testing

- Working at Heights
- Handling & Lifting Equipments
- Vehicle Movement
- Electrical
- Offshore
- Demolition
- Radiography
- Sand/shot blasting/ spray painting
- Work above water

The safe practices to be followed during the implementation of above construction activities are given below:

6.1 EXCAVATION

6.1.1 All excavation work should be planned and the method of excavation and the type of support work required should be decided considering the following:

i) the stability of the ground;
ii) the excavation will not affect adjoining buildings, structures or roadways;
iii) to prevent hazard, the gas, water, electrical and other public utilities should be shut off or disconnected, if necessary;
iv) presence of underground pipes, cable conductors, etc.,
v) the position of culvert/bridges, temporary roads and spoil heaps should be determined;

6.1.2 Before digging begins on site, all excavation work should be planned and the method of excavation and the type of support work required decided.

6.1.3 All excavation work should be supervised.

6.1.4 Sites of excavations should be thoroughly inspected:

i) daily, prior to each shift and after interruption in work of more than one day;
ii) after every blasting operation;
iii) after an unexpected fall of ground;
iv) after substantial damage to supports;
v) after a heavy rain, frost or snow;
vi) when boulder formations are encountered.

6.1.5 Safe angle of repose while excavating trenches exceeding 1.5m depth upto 3.0m should be maintained. Based on site conditions, provide proper slope, usually 45^0,and suitable bench of 0.5m width at every 1.5m depth of excavation in all soils except hard rock or provide proper shoring and strutting to prevent cave-in or slides.

6.1.6 As far as possible, excavated earth should not be placed within one meter of the edge of the trench or depth of trench whichever is greater.

6.1.7 Don't allow vehicles to operate too close to excavated area. Maintain atleast 2m distance from edge of excavation. No load, plant or equipment should be placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endanger any person unless precautions such as the provision of shoring or piling are taken to prevent the sides from collapsing.

6.1.8 Adequately anchored stop blocks and barriers should be provided to prevent vehicles being driven into the excavation. Heavy vehicles should not be allowed near the excavation unless the support work has been specially designed to permit it.

6.1.9 If an excavation is likely to affect the security of a structure on which persons are working, precautions should be taken to protect the structure from collapse.

6.1.10 Barricade at 1m height (with red & white band/self glowing caution board) should be provided for excavations beyond 1.5m depth. Provide two entries/exits for such excavation.

6.1.11 Necessary precautions should be taken for underground utility lines like cables, sewers etc. and necessary approvals/clearances from the concerned authorities shall be obtained before commencement of the excavation job.

6.1.12 Water shall be pumped/bailed out, if any accumulates in the trench. Necessary precautions should be taken to prevent entry of surface water in trenches.

6.1.13 During rains, the soil becomes loose. Take additional precaution against collapse of side wall.

6.1.14 In hazardous areas, air should be tested to ascertain its quality. No one should be allowed entry till it is suitable for breathing.

6.1.15 In case of mechanised excavation, precaution shall be taken to not to allow anybody to come within one meter of extreme reach of the mechanical shovel. The mechanised excavator shall be operated by a well-trained experienced operator. When not in operation, the machine shall be kept on firm leveled ground with mechanical shovel resting on ground. Wheel or belt shall be suitably jammed to prevent any accidental movement of the machine. Suitable precautions as per manufacturer guidelines should be taken for dozers, graders and other heavy machines.

6.1.16 In case of blasting, follow strictly IS:4081-1986 & Indian Explosive Act and rules for storage, handling and carrying of explosive

materials and execution of blasting operation.

6.2 SCAFFOLDING, PLATFORMS & LADDERS

6.2.1 Metal as material of construction

i) A scaffold should be provided and maintained or other equally safe and suitable provision should be made where work cannot safely be done on or from the ground or from part of a building or other permanent structure.

ii) Scaffolds should be provided with safe means of access, such as stairs, ladders or ramps. Ladders should be secured against inadvertent movement.

iii) Every scaffold should be constructed, erected and maintained so as to prevent collapse or accidental displacement when in use.

iv) Every scaffold and part thereof should be constructed :

(a) in such a way so as not to cause hazards for workers during erection and dismantling;
(b) in such a way so as guard rails and other protective devices, platforms, ladders, stairs or ramps can be easily put together;
(c) with sound material and of requisite size and strength for the purpose for which it is to be used and maintained in a proper condition.

v) Boards and planks used for scaffolds should be protected against splitting.

vi) Materials used in the construction of scaffolds should be stored under good conditions and apart from any material unsuitable for scaffolds.

vii) Couplers should not cause deformation in tubes. Couplers should be made of drop forged steel or equivalent material.

viii) Tubes should be free from cracks, splits and excessive corrosion and be straight to the eye, and tube ends cut cleanly square with the tube axis.

ix) Scaffolds should be designed for their maximum load as per relevant code.

x) Scaffolds should be adequately braced.

xi) Scaffolds which are not designed to be independent should be rigidly connected to the building at designated vertical and horizontal places.

xii) A scaffold should never extend above the highest anchorage to an extent which might endanger its stability and strength.

xiii) Loose bricks, drainpipes, chimney-pots or other unsuitable material should not be used for the construction or support of any part of a scaffold.

xiv) Scaffolds should be inspected and certified:

(a) before being taken into use;
(b) at periodic intervals thereafter as prescribed for different types of scaffolds;
(c) after any alteration, interruption in use, exposure to weather or seismic conditions or any other occurrence likely to have affected their strength or stability.

xv) Inspection should more particularly ascertain that:

(a) the scaffold is of suitable type and adequate for the job;
(b) materials used in its construction are sound and of sufficient strength;
(c) it is of sound construction and stable;
(d) that the required safeguards are in position.

xvi) A scaffold should not be erected, substantially altered or dismantled except by or under the supervision.

xvii) Every scaffold should be maintained in good and proper condition, and every part should be kept fixed or secured so that no part can be displaced in consequence of normal use.

xviii) If out-rigger scaffolding is to be used, it should be specifically designed and inspected before putting in use.

6.2.2 Lifting appliances on scaffolds

i) When a lifting appliance is to be used on a scaffold:

(a) the parts of the scaffold should be carefully inspected to determine the additional strengthening and other safety measures required;
(b) any movement of the scaffold members should be prevented;
(c) if practicable, the uprights should be rigidly connected to a solid part of the building at the place where the lifting appliance is erected.

6.2.3 Prefabricated scaffolds

i) In the case of prefabricated scaffold systems, the instructions provided by the manufacturers or suppliers should be strictly adhered to. Prefabricated scaffolds should have adequate arrangements for fixing bracing.

ii) Frames of different types should not be inter-mingled in a single scaffold.

iii) Scaffolding shall be erected on firm and level ground.

iv) All members of metal scaffolding shall be checked periodically to screen out defective / rusted members. All joints should be properly lubricated for easy tightening.

v) Entry to scaffolding should be restricted.

vi) Erection, alteration and removal shall be done under supervision of experienced personnel.

vii) Use of barrels, boxes, loose bricks etc., for supporting platform shall not be permitted.

viii) Each supporting member of platform shall be securely fastened and braced

ix) Where planks are butt-joined, two parallel putlogs shall be used, not more than 100mm apart, to give support to each plank.

x) Platform plank shall not project beyond its end support to a distance exceeding 4 times the thickness of plank, unless it is effectively secured to prevent tipping. Cantilever planks should be avoided.

xi) The platform edges shall be provided with 150mm high toe board to eliminate hazards of tools or other objects falling from platform.

xii) Erect ladders in the "four up-one out position"

xiii) Lash ladder securely with the structure.

xiv) Using non-slip devices, such as, rubber shoes or pointed steel ferules at the ladder foot, rubber wheels at ladder top, fixing wooden battens, cleats etc.

xv) When ladder is used for climbing over a platform, the ladder must be of sufficient length, to extend at least one meter above the platform, when erected against the platform in "four up-one out position."

xvi) Portable ladders shall be used for heights not more than 4mt. Above 4mt flights, fixed ladders shall be provided with at least 600 mm landings at every 6mt or less.

xvii) The width of ladder shall not be less than 300mm and rungs shall be spaced not more than 300mm.

xviii) Every platform and means of access shall be kept free from obstruction.

xix) If grease, mud, gravel, mortar etc., fall on platform or scaffolds, these shall be removed immediately to avoid slippage.

xx) Workers shall not be allowed to work on scaffolds during storms or high wind. After heavy rain or storms, scaffolds shall be inspected before reuse.

xxi) Don't overload the scaffolding. Remove excess material and scrap immediately.

xxii) Dismantling of scaffolds shall be done in a pre-planned sequential manner.

6.2.4 Suspended scaffolds/boatwain's chair

i) In addition to the requirements for scaffolds in general as regards soundness, stability and protection against the risk of falls, suspended scaffolds should meet the following specific requirements.

(a) platforms should be designed and built with dimensions that are compatible with the stability of the structure as a whole, especially the length;

(b) the number or anchorage should be compatible with the dimensions of the platform;

(c) the safety of workers should be safeguarded by an extra rope having a point of attachment independent of the anchorage arrangements of the scaffold;

(d) the anchorage and other elements of support of the scaffold should be designed and built in such a way as to ensure sufficient strength;

(e) the ropes, winches, pulleys or pulley blocks should be designed, assembled, used and maintained according to the requirements established for lifting gear adapted to the lifting of persons according to national laws and regulations;

(f) Before use, the whole structure should be checked by a competent person.

6.2.5 Bamboo Scaffolding

i) In general, it should be avoided as far as possible. It should not be used in the unit/off-site areas and where hot work is to be done.

ii) For construction and maintenance of residential and office buildings, situated outside explosive licensed area, bamboo scaffold, if used, should conform to provisions given in lS-3696 (Part 1)-1987.

6.3 STRUCTURAL WORK, LAYING OF REINFORCEMENT & CONCRETING

6.3.1 General provisions

i) The erection or dismantling of buildings, structures, civil engineering works, formwork, falsework and shoring should be carried out by trained workers only under the supervision of a competent person.

ii) Precautions should be taken to guard against danger to workers arising from any temporary state of weakness or instability of a structure.

iii) Formwork, falsework and shoring should be so designed, constructed and maintained that

it will safely support all loads that may be imposed on it.

iv) Formwork should be so designed and erected that working platforms, means of access, bracing and means of handling and stabilising are easily fixed to the formwork structure.

6.3.2. Erection and dismantling of steel and prefabricated structures

i) The safety of workers employed on the erection and dismantling of steel and prefabricated structures should be ensured by appropriate means, such as provision and use of:

(a) ladders, gangways or fixed platforms;
(b) platforms, buckets, boatswain's chairs or other appropriate means suspended from lifting appliances;
(c) safety harnesses and lifelines, catch nets or catch platforms;
(d) Power-operated mobile working platforms.

ii) Steel and prefabricated structures should be so designed and made that they can be safely transported and erected.

iii) In addition to the need for the stability of the part when erected, the design should explicitly take following into account:

(a) the conditions and methods of attachment in the operations of transport, storing and temporary support during erection or dismantling as applicable;
(b) Methods for the provision of safeguards such as railings and working platforms, and, when necessary, for mounting them easily on the structural steel or prefabricated parts.

iv) The hooks and other devices built in or provided on the structural steel or prefabricated parts that are required for lifting and transporting them should be so shaped, dimensioned and positioned as:

(a) to withstand with a sufficient margin the stresses to which they are subjected;
(b) Not to set up stresses in the part that could cause failures, or stresses in the structure itself not provided for in the plans, and be designed to permit easy release from the lifting appliance. Lifting points for floor and staircase units should be located (recessed if necessary) so that they do not protrude above the surface;
(c) To avoid imbalance or distortion of the lifted load.

v) Storeplaces should be so constructed that:

(a) there is no risk of structural steel or prefabricated parts falling or overturning;
(b) storage conditions generally ensure stability and avoid damage having regard to the method of storage and atmospheric conditions;
(c) racks are set on firm ground and designed so that units cannot move accidentally.

vi) While they are being stored, transported, raised or set down, structural steel or prefabricated parts should not be subjected to stresses prejudicial to their stability.

vii) Every lifting appliance should:

(a) be suitable for the operations and not be capable of accidental disconnection;
(b) be approved or tested as per statutory requirement.

viii) Lifting hooks should be of the self-closing type or of a safety type and should have the maximum permissible load marked on them.

ix) Tongs, clamps and other appliances for lifting structural steel and prefabricated parts should:

(a) be of such shape and dimensions as to ensure a secure grip without damaging the part;
(b) be marked with the maximum permissible load in the most unfavourable lifting conditions.

x) Structural steel or prefabricated parts should be lifted by methods or appliances that prevent them from spinning accidentally.

xi) When necessary to prevent danger, before they are raised from the ground, structural steel or prefabricated parts should be provided with safety devices such as railings and working platforms to prevent falls of persons.

xii) While structural steel or prefabricated parts are being erected, the workers should be provided with appliances for guiding them as they are being lifted and set down, so as to avoid crushing of hands and to facilitate the operations. Use of such appliances should be ensured.

xiii) A raised structural steel or prefabricated part should be so secured and wall units so propped that their stability cannot be imperiled, even by external agencies such as wind and passing loads before its release from the lifting appliance.

xiv) At work places, instruction should be given to the workers on the methods, arrangements and means required for the storage, transport, lifting and erection of structural steel or prefabricated parts, and, before erection starts, a meeting of all those responsible should be held to discuss and confirm the requirements for safe erection.

xv) During transportation within the construction area, attachments such as slings and stirrups mounted on structural steel or prefabricated parts should be securely fastened to the parts.

xvi) Structural steel or prefabricated parts should be so transported that the conditions do not affect the stability of the parts or the means of transport result in jolting, vibration or stresses due to blows, or loads of material or persons.

xvii) When the method of erection does not permit the provision of other means of protection against fall of persons, the workplaces should be protected by guardrails, and if appropriate by toe-boards.

xviii) When adverse weather conditions such as snow, ice and wind or reduced visibility entail risks of accidents, the work should be carried on with particular care, or, if necessary, interrupted.

xix) Structures should not be worked on during violent storms or high winds, or when they are covered with ice or snow, or are slippery from other causes.

xx) If necessary, to prevent danger, structural steel parts should be equipped with attachments for suspended scaffolds, lifelines or safety harnesses and other means of protection.

xxi) The risks of falling, to which workers moving on high or sloping girders are exposed, should be limited by all means of adequate collective protection or, where this is impossible, by the use of a safety harness that is well secured to a strong support.

xxii) Structural steel parts that are to be erected at a great height should as far as practicable be assembled on the ground.

xxiii) When structural steel or prefabricated parts are being erected, a sufficiently extended area underneath the workplace should be barricaded or guarded

xxiv) Steel trusses that are being erected should be adequately shored, braced or guyed until they are permanently secured in position.

xxv) Load-bearing structural member should not be dangerously weakened by cutting, holing or other means.

xxvi) Structural members should not be forced into place by the hoisting machine while any worker is in such a position that he could be injured by the operation.

xxvii) Open-web steel joists that are hoisted singly should be directly placed in position and secured against dislodgment.

6.3.3 Reinforcement

i) Ensure that workers use Personnel Protective equipment like safety helmet, safety shoes, gloves etc.

ii) Don't place the hand below the rods for checking clear distance. Use measuring devices.

iii) Don't wear loose clothes while checking the rods.

iv) Don't stand unnecessarily on cantilever rods.

v) To carry out welding/cutting of rods, safety procedures/precautions as mentioned in Item No. 6.5 to be followed.

vi) For supplying of rods at heights, proper staging and/or bundling to be provided.

vii) Ensure barricading and staging for supplying and fixing of rods at height.

viii) For short distance carrying of materials on shoulders, suitable pads to be provided.

ix) While transporting material by trucks/trailers, the rods shall not protrude in front of or by the sides of driver's cabin. In case such protrusion cannot be avoided behind the deck, then it should not extend $1/3^{rd}$ of deck length or 1.5M which ever is less and tied with red flags/lights.

6.3.4 Concreting

i) Ensure stability of shuttering work before allowing concreting.

ii) Barricade the concreting area while pouring at height/depths.

iii) Keep vibrator hoses, pumping concrete accessories in healthy conditions and mechanically locked.

iv) Pipelines in concrete pumping system shall not be attached to temporary structures such as scaffolds and formwork support as the forces and movements may effect their integrity.

v) Check safety cages & guards around moving motors/parts etc. provided in concreting mixers.

vi) Use Personal Protective Equipment like gloves, safety shoes etc. while dealing with concrete and wear respirators for dealing with cement.

vii) Earthing of electrical mixers, vibrators, etc. should be done and verified.

viii) Cleaning of rotating drums of concrete mixers shall be done from outside. Lockout devices shall be provided where workers need to enter.

ix) Where concrete mixers are driven by internal combustion engine, exhaust points shall be located away from the worker's workstation so as to eliminate their exposure to obnoxious fumes.

x) Don't allow unauthorised person to stand under the concreting area.

xi) Ensure adequate lighting arrangements for carrying out concrete work during night.

xii) Don't allow the same workers to pour concrete round the clock. Insist on shift pattern.

xiii) During pouring, shuttering and its supports should be continuously watched for defects.

6.4 ROAD WORK

6.4.1 Site shall be barricaded and provided with warning signs, including night warning lamps at appropriate locations for traffic diversion.

6.4.2 Filled and empty bitumen drums shall be stacked separately at designated places.

6.4.3 Mixing aggregate with bitumen shall preferably be done with the help of bitumen batch mixing plant, unless operationally non-feasible.

6.4.4 Road rollers, Bitumen sprayers, Pavement finishers shall be driven by experienced drivers with valid driving license.

6.4.5 Workers handling hot bitumen sprayers or spreading bitumen aggregate mix or mixing bitumen with aggregate, shall be provided with PVC hand gloves and rubber shoes with legging up to knee joints.

6.4.6 At the end of day's work, surplus hot bitumen in tar boiler shall be properly covered by a metal sheet, to prevent anything falling in it,

6.4.7 If bitumen accidentally falls on ground, it shall be immediately covered by sprinkling sand, to prevent anybody stepping on it. Then it shall be removed with the help of spade.

6.4.8 For cement concrete roads, besides site barricading and installation of warning signs for traffic diversion, safe practices mentioned in the chapter on "Concreting", shall also be applicable.

6.5 CUTTING/WELDING

6.5.1 Common hazards involved in welding/ cutting are sparks, molten metal, flying particles, harmful light rays, electric shocks etc. Following precautions should be taken: -

i) A dry chemical type fire extinguisher shall be made available in the work area.

ii) Adequate ventilation shall be ensured by opening manholes and fixing a shield or forced circulation of air etc, while doing a job in confined space.

iii) Ensure that only approved and well-maintained apparatus, such as torches, manifolds, regulators or pressure reducing valves, and acetylene generators, be used.

iv) All covers and panels shall be kept in place, when operating an electric Arc welding machine.

v) The work piece should be connected directly to Power supply, and not indirectly through pipelines/structures/ equipments etc.

vi) The welding receptacles shall be rated for 63 A suitable for 415V, 3-Phase system with a scraping earth. Receptacles shall have necessary mechanical interlocks and earthing facilities.

vii) All cables, including welding and ground cables, shall be checked for any worn out or cracked insulation before starting the job. Ground cable should be separate without any loose joints.

viii) Cable coiling shall be maintained at minimum level, if not avoidable.

ix) An energised electrode shall not be left unattended.

x) The power source shall be turned off at the end of job.

xi) All gas cylinders shall be properly secured in upright position.

xii) Acetylene cylinder shall be turned and kept in such a way that the valve outlet points away from oxygen cylinder.

xiii) Acetylene cylinder key for opening valve shall be kept on valve stem, while cylinder is in use, so that the acetylene cylinder could be quickly turned off in case of emergency. Use flash back arrestors to prevent back-fire in acetylene/oxygen cylinder.

xiv) When not in use, valves of all cylinders shall be kept closed.

xv) All types of cylinders, whether full or empty, shall be stored at cool, dry place under shed.

xvi) Forced opening of any cylinder valve should not be attempted.

xvii) Lighted gas torch shall never be left unattended.

xviii) Store acetylene and oxygen cylinders separately.

xix) Store full and empty cylinders separately.

xx) Avoid cylinders coming into contact with heat.

xxi) Cylinders that are heavy or difficult to carry by hand may be rolled on their bottom edge but never dragged.

xxii) If cylinders have to be moved, be sure that the cylinder valves are shut off.

xxiii) Before changing torches, shut off the gas at the pressure reducing regulators and not by crimping the hose.

xxiv) Do not use matches to light torches, use a friction lighter.

xxv) Move out any leaking cylinder immediately.

xxvi) Use trolleys for oxygen & acetylene cylinder and chain them.

xxvii) Always use Red hose for acetylene and other fuel gases and Black for oxygen, and ensure that both are in equal length.

xxviii) Ensure that hoses are free from burns, cuts and cracks and properly clamped.

xxix) Avoid dragging hoses over sharp edges and objects

xxx) Do not wrap hoses around cylinders when in use or stored.

xxxi) Protect hoses from flying sparks, hot slag, and other hot objects.

xxxii) Lubricants shall not be used on Ox-fuel gas equipment.

xxxiii) During cutting/welding, use proper type goggles/face shields.

6.6 WORKING IN CONFINED SPACES

6.6.1 Following safety practices for working in confined space like towers, columns, tanks and other vessels should be followed in addition to the safety guidelines for specific jobs like scaffolding, cutting/welding etc.

i) Shut down, isolate, depressurise and purge the vessel as per laid down procedures.

ii) Entry inside the vessel and to carry out any job should be done after issuance of valid permit only in line with the requirement of OISD-STD-105.

iii) Ensure proper and accessible means of exit before entry inside a confined space.

iv) The number of persons allowed inside the vessel should be limited to avoid overcrowding.

v) When the work is going on in the confined space, there should always be one man standby at the nearby manway.

vi) Before entering inside the vessels underground or located at lower elevation, probability of dense vapours accumulating nearby should also be considered in addition to inside the vessel.

vii) Ensure requisite O_2 level before entry in the confined space and monitor level periodically or other wise use respiratory devices.

viii) Check for no Hydrocarbon or toxic substances before entry and monitor level periodically or use requisite Personal Protective Equipment.

ix) Ensure adequate ventilation or use respiratory devices.

x) Depending upon need, necessary respirator system, gas masks and suit shall be worn by everyone entering confined space. In case of sewer, OWS or in the confined area where there is a possibility of toxic or inert gas, gas masks shall be used by everyone while entering.

xi) Barricade the confined spaces during hoisting, radiography, blasting, pressure testing etc.

xii) Use 24V flameproof lamp fittings only for illumination.

xiii) Use tools with air motors or electric tools with maximum voltage of 24V.

xiv) House keeping shall be well maintained.

xv) Safety helmet, safety shoes and safety belt shall be worn by everyone entering the confined space.

xvi) Don't wear loose clothing while working in a confined space.

xvii) In case of the vessels which are likely to contain pyropheric substances (like Iron Sulphide), special care need to be taken before opening the vessel. Attempt should be made to remove the pyropheric substances. Otherwise, these should be always kept wet by suitable means.

xviii) The cutting torches should also be kept outside the vessel immediately after the cutting.

xix) The gas cylinders used for cutting/ welding shall be kept outside.

xx) All cables, hoses, welding equipment etc., shall be removed from confined space at end of each work day, even if the work is to be resumed in the same space the next day.

xxi) To the extent possible sludge shall be cleared and removed from outside before entering.

xxii) No naked light or flame or hot work such as welding, cutting and soldering should be permitted inside a confined space or area unless it has been made completely free of the flammable atmosphere, tested and found

safe by a competent person. Only non-sparking tools and flameproof hand lamps protected with guard and safety torches should be used inside such confined space or area for initial inspection, cleaning or other work required to be done for making the area safe.

xxiii) Communication should be always maintained between the worker and the attendant.

6.7 PROOF/PRESSURE TESTING

6.7.1 Review test procedure before allowing testing with water or air or any other fluid.

6.7.2 Provide relief valves of adequate size while testing with air or other gases.

6.7.3 Ensure compliance of necessary precautions, step wise loading, tightening of fasteners, grouting etc. before and during testing.

6.7.4 Inform all concerned in advance of the testing.

6.7.5 Keep the vents open before opening any valve for filling/draining of liquid used for hydrotesting. The filling/draining should not exceed the designed rate for pressure testing.

6.7.6 Provide separate gauges of suitable range for pressurising pump and the equipment to be tested.

6.7.7 Provide gauges at designated locations for monitoring of pressures.

6.7.8 Check the calibration of all pressurising equipment and accessories and maintain records.

6.7.9 Take readings at pre-defined intervals.

6.8 WORKING AT HEIGHTS

6.8.1 General Provision

i) While working at a height of more than 3 meters, ISI approved safety belt shall be used.

ii) While working at a height of more than 3 meters, permit should be issued by competent person before commencement of the job.

iii) Worker should be well trained on usage of safety belt including its proper usage at the time of ascending/descending.

iv) All tools should be carried in tool kits to avoid their falling.

v) If the job is on fragile/sloping roof, roof walk ladders shall be used.

vi) Provide lifeline wherever required.

vii) Additional safety measures like providing Fall Arrestor type Safety belt, safety net should be provided depending upon site conditions, job requirements.

viii) Keep working area neat and clean. Remove scrap material immediately.

ix) Don't throw or drop material/equipment from height.

x) Avoid jumping from one member to another. Use proper passageway.

xi) Keep both hands free while climbing. Don't try to bypass the steps of the ladder.

xii) Try to maintain calm at height. Avoid over exertion.

xiii) Avoid movements on beam.

xiv) Elevated workplaces including roofs should be provided with safe means of access and egress such as stairs, ramps or ladders.

6.8.2 Roof Work

i) All roof-work operations should be pre-planned and properly supervised.

ii) Roof work should only be undertaken by workers who are physically and psychologically fit and have the necessary knowledge and experience for such work.

iii) Work on roofs shouldn't be carried on in weather conditions that threaten the safety of workers.

iv) Crawling boards, walkways and roof ladders should be securely fastened to a firm structure.

v) Roofing brackets should fit the slope of the roof and be securely supported.

vi) Where it is necessary for a person to kneel or crouch near the edge of the roof, necessary precautions should be taken.

vii) On a large roof where work have to be carried out at or near the edge, a simple barrier consisting of crossed scaffold tubes supporting a tubing guardrail may be provided.

viii) All covers for openings in roofs should be of substantial construction and be secured in position.

ix) Roofs with a pitch of more than 10 should be treated as sloping.

x) When work is being carried out on sloping roofs, sufficient and suitable crawling boards or roof ladders should be provided and firmly secured in position.

xi) During extensive work on the roof, strong barriers or guardrails and toe-boards should

be provided to stop a person from falling off the roof.

xii) Where workers are required to work on or near roofs or other places covered with fragile material, through which they are liable to fall, they should be provided with suitable roof ladders or crawling boards strong enough and when spanning across the supports for the roof covering to support those workers.

xiii) A minimum of two boards should be provided so that it is not necessary for a person to stand on a fragile roof to move a board or a ladder, or for any other reason.

6.8.3 Work on tall chimneys

i) For the erection and repair of tall chimneys, scaffolding should be provided. A safety net should be maintained at a suitable distance below the scaffold.

ii) The scaffold floor should always be at least 65 cm below the top of the chimney.

iii) Under the working floor of the scaffolding the next lower floor should be left in position as a catch platform.

iv) The distance between the inside edge of the scaffold and the wall of the chimney should not exceed 20 cm at any point.

v) Catch platforms should be erected over:

(a) the entrance to the chimney;
(b) Passageways and working places where workers could be endangered by falling objects.

vi) For climbing tall chimneys, access should be provided by:

(a) stairs or ladders;
(b) a column of iron rungs securely embedded in the chimney wall;
(c) Other appropriate means.

vii) When workers use the outside rungs to climb the chimney, a securely fastened steel core rope looped at the free end and hanging down at least 3 m should be provided at the top to help the workers to climb on to the chimney.

viii) While work is being done on independent chimneys the area surrounding the chimney should be enclosed by fencing at a safe distance.

ix) Workers employed on the construction, alteration, maintenance or repair of tall chimneys should not:

a) work on the outside without a safety harness attached by a lifeline to a rung, ring or other secure anchorage;
b) put tools between the safety harness and the body or in pockets not intended for the purpose;
c) haul heavy materials or equipment up and down by hand to or from the workplace on the chimney;
d) fasten pulleys or scaffolding to reinforcing rings without first verifying their stability;
e) work alone;
f) climb a chimney that is not provided with securely anchored ladders or rungs;
g) Work on chimneys in use unless the necessary precautions to avoid danger from smoke and gases have been taken.

x) Work on independent chimneys should not be carried on in high winds, icy conditions, fog or during electrical storms.

6.9 HANDLING AND LIFTING EQUIPMENT:

6.9.1 General Provisions

Following are the general guidelines to be followed with regard to all types of handling and lifting equipment in addition to the guidelines for specific type of equipments dealt later on.

i) There should be a well-planned safety programme to ensure that all the lifting appliances and lifting gear are selected, installed, examined, tested, maintained, operated and dismantled with a view to preventing the occurrence of any accident;

ii) All lifting appliances shall be examined by competent persons at frequencies as specified in "The Factories act".

iii) Check thoroughly quality, size and condition of all lifting tools like chain pulley blocks, slings, U-clamps, D-shackles etc. before putting them in use.

iv) Safe lifting capacity of all lifting & handling equipment, tools and shackles should be got verified and certificates obtained from competent authorities before its use. The safe working load shall be marked on them.

v) Check periodically the oil, brakes, gears, horns and tyre pressure of all moving equipments like cranes, forklifts, trailers etc as per manufacturer's recommendations.

vi) Check the weights to be lifted and accordingly decide about the crane capacity, boom length and angle of erection.

vii) Allow lifting slings as short as possible and check packing at the friction points.

viii) While lifting/placing of the load, no unauthorised person shall remain within the radius of the boom and underneath the load.

ix) While loading, unloading and stacking of pipes, proper wedges shall be placed to prevent rolling down of the pipes.

x) Control longer jobs being lifted up from both ends.

xi) Only trained operators and riggers should carry out the job. While the crane is moving or lifting the load, the trained rigger should be there for keeping a vigil against hitting any other object.

xii) During high wind conditions and nights, lifting of heavy equipments should be avoided. If unavoidable to do erection in night, operator and rigger should be fully trained for night signaling. Also proper illumination should be there.

xiii) Allow crane to move on hard, firm and leveled ground.

xiv) When crane is in idle condition for long periods or unattended, crane boom should either be lowered or locked as per manufacturer's guidelines.

xv) Hook and load being lifted shall remain in full visibility of crane operators, while lifting, to the extent possible.

xvi) Don't allow booms or other parts of crane to come within 3 meters reach of overhead electrical cables.

xvii) No structural alterations or repairs should be made to any part of a lifting appliance, which may affect the safety of the appliance without the permission and supervision of the competent person.

6.9.2 Hoists

i) Hoist shafts should be enclosed with rigid panels or other adequate fencing at:

(a) ground level on all sides;
(b) all other levels at all points at which access is provided;
(c) all points at which persons are liable to be struck by any moving part.

ii) The enclosure of hoist shafts, except at approaches should extend where practicable at least 2mt above the floor, platform or other place to which access is provided except where a lesser height is sufficient to prevent any person falling down the hoistway and there is no risk of any person coming into contact with any moving part of the hoist, but in no case should the enclosure be less than 1mt in height.

iii) The guides of hoist platforms should offer sufficient resistance to bending and, in the case of jamming by a safety catch, to buckling.

iv) Where necessary to prevent danger, adequate covering should be provided above the top of hoist shafts to prevent material falling down them.

v) Outdoor hoist towers should be erected on firm foundations, and securely braced, guyed and anchored.

vi) A ladderway should extend from the bottom to the top of outdoor hoist towers, if no other ladderway exists within easy reach.

vii) Hoisting engines should be of ample capacity to control the heaviest load that they will have to move.

viii) Hoists should be provided with devices that stop the hoisting engine as soon as the platform reaches its highest stopping place.

ix) Winches should be so constructed that the brake is applied when the control handle is not held in the operating position.

x) It should not be possible to set in motion from the platform a hoist, which is not designed for the conveyance of persons.

xi) Winches should not be fitted with pawl and ratchet gears on which the pawl must be disengaged before the platform is lowered.

xii) Hoist platforms should be capable of supporting the maximum load that they will have to carry with a safety factor.

xiii) Hoist platforms should be equipped with safety gear that will hold the platform with the maximum load if the hoisting rope breaks.

xiv) If workers have to enter the cage or go on the platform at landings there should be a locking arrangement preventing the cage or platform from moving while any worker is in or on it.

xv) On sides not used for loading and unloading, hoist platforms should be provided with toe-boards and enclosures of wire mesh or other suitable material to prevent the fall of parts of loads.

xvi) Where necessary to prevent danger from falling objects, hoist platforms should be provided with adequate covering.

xvii) Counterweights consisting of an assemblage of several parts should be made of specially constructed parts rigidly connected together.

xviii) Counterweights should run in guides.

xix) Platforms should be provided at all landings used by workers.

xx) Following notices should be posted up conspicuously and in very legible characters:

(a) on all hoists:

- on the platform: the carrying capacity in kilograms or other appropriate standard unit of weight;
- on the hoisting engine: the lifting capacity in kilograms or other appropriate standard unit of weight;

(b) on hoists authorised or certified for the conveyance of persons:

- on the platform or cage: the maximum number of persons to be carried at one time;

(c) *on* hoists for goods only:

- on every approach to the hoist and on the platform: prohibition of use by persons.

xxi) Hoists intended for the carriage of persons should be provided with a cage so constructed as to prevent any person from falling out or being trapped between the cage and any fixed part of the structure when the cage gate is shut, or from being struck by the counterbalance weight or by articles or materials tailing down the hoistway.

xxii) On each side in which access is provided, the cage should have a gate fitted with devices which ensure that the gate cannot be opened except when the cage is at a landing and that the gate must be closed before the cage can move away from the landing.

xxiii) Every gate in the enclosure of the hoist shaft which gives access from a landing place to the cage should be fitted with devices to ensure that the gate cannot be opened except when the cage is at that landing place, and that the cage cannot be moved away from that landing place until the gate is closed.

6.9.3 Derricks

Stiff-leg derricks

i) Derricks should be erected on a firm base capable of taking the combined weight of the crane structure and maximum rated load.

ii) Devices should be used to prevent masts from lifting out of their seating.

iii) Electrically operated derricks should be effectively earthed from the sole plate or framework.

iv) Counterweights should be so arranged that they do not subject the backstays, sleepers or pivots to excessive strain.

v) When derricks are mounted on wheels:

a) a rigid member should be used to maintain the correct distance between the wheels;
b) they should be equipped with struts to prevent them from dropping if a wheel breaks or the derrick is derailed.

vi) The length of a derrick jib should not be altered without consulting the manufacturer.

vii) The jib of a scotch derrick crane should not be erected within the backstays of the crane.

Guy derricks

i) The restraint of the guy ropes should be ensured by fitting stirrups or anchor plates in concrete foundations.

ii) The mast of guy derricks should be supported by six top guys spaced approximately equally.

iii) The spread of the guys of a guy derrick crane from the mast should not be more than 45^0 from the horizontal.

iv) Guy ropes of derricks should be equipped with a stretching screw or turnbuckle or other device to regulate the tension.

v) Gudgeon pins, sheave pins and fool bearings should be lubricated frequently.

vi) When a derrick is not in use, the boom should be anchored to prevent it from swinging.

6.9.4 Gin poles

i) Gin poles should:

(a) be straight;
(b) consist of steel or other suitable metal;
(c) be adequately guyed and anchored;
(d) be vertical or raked slightly towards the load;
(e) be of adequate strength for the loads that they will be required to lift/move.

ii) Gin poles should not be spliced and if a gin pole is composed of different elements, they should be assembled in conformity with their intrinsic material strength.

iii) Gin poles should be fastened at their feet to prevent displacement in operation.

iv) Gin poles, which are moved from place to place and re-erected, should not be taken into use again before the pole, lifting ropes, guys, blocks and other parts have been inspected,

and the whole appliance has been tested under load.

v) When platforms or skips are hoisted by gin poles, precautions should be taken to prevent them from spinning and to provide for proper landing.

6.9.5 Tower cranes

i) Where tower cranes have cabs at high level, persons, capable and trained to work at heights, should only be employed as crane operators.

ii) The characteristics of the various machines available should be considered against the operating requirements and the surroundings in which the crane will operate before a particular type of crane is selected.

iii) Care should be taken in the assessment of wind loads both during operations and out of service. Account should also be taken of the effects of high structures on wind forces in the vicinity of the crane.

iv) The ground on which the tower crane stands should have the requisite bearing capacity. Account should be taken of seasonal variations in ground conditions.

v) Bases for tower cranes and tracks for rail-mounted tower cranes should be firm and level. Tower cranes should only operate on gradients within limits specified by the manufacturer. Tower cranes should only be erected at a safe distance from excavations and ditches.

vi) Tower cranes should be sited where there is clear space available for erection, operation and dismantling. As far as possible, cranes should be sited so that loads do not have to be handled over occupied premises, over public thoroughfares, other construction works and railways or near power cables.

vii) Where two or more tower cranes are sited in positions where their jibs could touch any part of the other crane, there should be direct means of communication between them and a distinct warning system operated from the cab so that one driver may alert the other of impending danger.

viii) The manufacturers' instructions on the methods and sequence of erection and dismantling should be followed. The crane should be tested before being taken into use.

ix) The climbing operation of climbing tower cranes should be carried out in accordance with manufacturers' instructions. The free-standing height of the tower crane should not extend beyond what is safe and permissible in the manufacturers' instructions.

x) When the tower crane is left unattended, loads should be removed from the hook, the hook raised, the power switched off and the boom brought to the horizontal. For longer periods or at times when adverse weather conditions are expected, out of service procedures should be followed. The main jib should be slewed to the side of the tower away from the wind, put into free slew and the crane immobilised.

xi) A windspeed measuring device should be provided at an elevated position on the tower crane with the indicator fitted in the drivers' cab.

xii) Devices should be provided to prevent loads being moved to a point where the corresponding safe working load of the crane would be exceeded. Name boards or other items liable to catch the wind should not be mounted on a tower crane other than in accordance with the manufacturers' instructions.

xiii) Tower cranes should not be used for magnet, or demolition ball service, piling operations or other duties, which could impose excessive loading on the crane structure.

6.9.6 Lifting ropes

i) Only ropes with a known safe working capacity should be used as lifting ropes.

ii) Lifting ropes should be installed, maintained and inspected in accordance with manufacturers' instructions.

iii) Repaired steel ropes should not be used on hoists.

iv) Where multiple independent ropes are used, for the purpose of stability, to lift a work platform, each rope should be capable of carrying the load independently.

6.10 VEHICLE MOVEMENT

6.10.1 Park vehicles only at designated places. Don't block roads to create hindrance for other vehicles.

6.10.2 Don't overload the vehicle.

6.10.3 Obey speed limits and traffic rules.

6.10.4 Always expect the unexpected and be a defensive driver.

6.10.5 Drive carefully during adverse weather and road conditions.

6.10.6 Read the road ahead and ride to the left.

6.10.7 Be extra cautious at nights. Keep wind screens clean and lights in working condition.

6.10.8 All vehicles used for carrying workers and construction materials must undergo

predictive/preventive maintenance and daily checks

6.10.9 Driver with proper valid driving license shall only be allowed to drive the vehicle

6.10.10 Routes shall be leveled, marked and planned in such a way so as to avoid potential hazards such as overhead power lines and sloping ground etc.

6.10.11 While reversing the vehicles, help of another worker should be ensured at all times

6.10.12 An unattended vehicle should have the engine switched off

6.10.13 Wherever possible one-way system shall be followed

6.10.14 Barriers/fixed stops should be provided for excavation/openings to prevent fall of vehicle

6.10.15 Load should be properly secured

6.10.16 The body of the tipper lorry should always be lowered before driving the vehicle off.

6.10.17 Signs/signals/caution boards etc. should be provided on routes .

6.11 ELECTRICAL

6.11.1 General Provisions

i) Only persons having valid licenses should be allowed to work on electrical facilities.

ii) No person should be allowed to work on live circuit. The same, if unavoidable, special care and authorisation need to be taken.

iii) Treat all circuits as "LIVE" unless ensured otherwise.

iv) Electrical "Tag Out" procedure "MUST" be followed for carrying out maintenance jobs.

v) Display voltage ratings prominently with "Danger" signs.

vi) Put caution/notice signs before starting the repair works.

vii) All electrical equipment operating above 250V shall have separate and distinct connections to earth grid.

viii) Proper grounding to be ensured for all switch boards and equipment including Portable ones prior to taking into service.

ix) Make sure that electrical switch boards, portable tools, equipments (like grinding machine etc.) don't get wet during their usage. If it happens, stop the main supply, make the tools dry and then only use them. Check proper earthing.

All temporary switch boards/ KIOSKS put up at work site should be suitably protected from rain and the level of same should be high enough to avoid contact with water due to water logging.

x) Don't work wet on electrical system.

xi) Don't overload the electrical system.

xii) Use only proper rated HRC fuses.

xiii) Industrial type extension boards and Plug sockets are only to be used.

xiv) ELCB for all temporary connections must be provided. Use insulated 3-pin plug tops.

xv) All power supply cables should be laid properly and neatly so that they don't cause hindrance to persons working and no physical damage also takes place to the cables during various construction activities.

xvi) All Power cables to be properly terminated using glands and lugs of proper size and adequately crimped.

xvii) Use spark-proof/flame proof type electrical fittings in Fire Hazard zones as per area classification under OISD-STD-113.

xviii) Check installations of steel plates/pipes to protect underground cables at crossings.

xix) Don't lay unarmored cable directly on ground, wall, roof or trees. All temporary cables should be laid at least 750 mm below ground and cable markers should be provided. Proper sleeves should be provided at road crossings. In case temporary cables are to be laid on wooden poles/steel poles, the minimum cable heights should be 4.5 M.

xx) Maintain safe overhead distance of HT cables as per Indian Electricity Rules and relevant acts.

xxi) Don't connect any earthing wire to the pipelines/structures.

xxii) Don't make any unsafe temporary connections, naked joints/wiring etc.

xxiii) Ensure that temporary cables are free from cuts, damaged insulation, kinks or improper insulated joints.

xxiv) Check at periodic intervals that pins of sockets and joints are not loose.

xxv) Protect electrical wires/equipments from water and naked flames.

xxvi) Illuminate suitably all the work areas.

xxvii) All switchboards should be of MS structure only and incoming source should be marked.

xxviii) Hand lamps should not be of more than 24V rating.

xxix) Fire extinguishers (DCP/CO_2/Sand buckets) should be kept near temporary switch boards being used for construction purposes. Don't use water for fighting electrical fires.

xxx) Insulating mats shall be provided in the front and back end of switch boards.

xxxi) All parts of electrical installations should be so constructed, installed and maintained as to prevent danger of electric shock, fire and external explosion.

Periodic checking/certification of electrical safety appliances such as gloves, insulating mats, hoods etc. to be done/witnessed along with maintaining a register at site signed by competent authority.

xxxii) A notice displaying following, should be kept exhibited at suitable places:

a) prohibiting unauthorised persons from entering electrical equipment rooms or from handling or interfering with electrical apparatus;
b) containing directions as to procedures in case of fire, rescue of persons in contact with live conductors and the restoration of persons suffering from electric shock;
c) specifying the person to be notified in case of electrical accident or dangerous occurrence, and indicating how to communicate with him.

xxxiii) No other cables/pipes to be laid in trench used for electrical cables.

xxxiv) Utmost care should be taken while excavating Earth from cable trench to avoid damage or any accident.

xxxv) Sub-station floor cut-outs meant for switch board installations to be covered wherever installation is incomplete.

NOTE: A Residual Current Operated Circuit Breaker (RCCB) or Earth Leakage Circuit Breaker (ELCB), when installed, protects a human being to the widest extent. RCCB or ELCB should be provided as per Indian Electricity Rules.

6.11.2 Inspection and maintenance

i) All electrical equipment should be inspected before taking into use to ensure suitability for its proposed use.

ii) At the beginning of every shift, the person using the electrical equipment should make a careful external examination of the equipment and conductors, especially the flexible cables.

iii) Apart from some exceptional cases, work on or near live parts of electrical equipment should be forbidden.

iv) Before any work is begun on conductors or equipment that do not have to remain live:

a) the current should be switched off by a responsible authorised person;
b) precautions should be taken to prevent the current from being switched on again;
c) the conductors or the equipment should be tested to ascertain that they are dead;
d) the conductors and equipment should be earthed and short-circuited;
e) neighbouring live parts should be adequately protected against accidental contact.

v) After work has been done on conductors and equipment, the current should only be switched on again on the orders of a competent person after the earthing and short-circuiting have been removed and the workplace reported safe.

vi) Electricians should be provided with approved and tested tools, and personal protective equipment such as rubber gloves, mats etc.

vii) All conductors and equipment should be considered to be live unless there is a proof of the contrary.

viii) When work has to be done in dangerous proximity to live parts the current should be cut off. If for operational reasons this is not possible, the live parts should be fenced off or enclosed by qualified staff from the sub-station concerned.

6.11.3. Testing

i) Electrical installations should be inspected and tested and the results recorded.

ii) Periodic testing of the efficiency of the earth leakage protective devices should be carried out.

iii) Particular attention should be paid to the earthing of apparatus, the continuity of protective conductors, polarity and insulation resistance, protection against mechanical damage and condition of connections at points of entry.

6.12 OFFSHORE

6.12.1 General

The isolated nature of offshore installations are hazardous. They call for greater need for safety and survival at offshore. Safety at offshore is safety of installations and safety of personnel. Safety problems and accidents at offshore have high risks due to limited space, helicopter operation, sea transport etc. Following are the general safety guidelines to be followed in addition to the safety guidelines stipulated for specific jobs dealt later on:

i) Workers should be well trained to do their job independently with high degree of self-control and self-discipline.

ii) On arrival at offshore, everyone should be briefed about the safety rules to be followed at offshore, evacuation system etc. All personnel should wear overall (dangri), helmet and shoes for personnel protection.

iii) In case of emergency, workers should follow instruction of Field Production Superintendent (F.P.S.) In certain cases instructions may be given to abandon the offshore installation and evacuate the persons to safe location.

iv) To overcome above problems, offshore personnel must receive training for using life saving appliances and other personal survival techniques.

v) Any person working at offshore should have one person as standby for any eventuality.

6.12.2 Drilling Rigs

i) Location of jack up rigs should not be less than 5 Kms from shipping route. Orientation of the rig, wind direction etc are required for safe landing of helicopter. Information w.r.t. sea currents, wind speed, Hi-lo tide etc are required for mooring of supply vessels.

ii) Sea bed condition at every location should be ensured for safety of rig.

iii) Radio and other communication facilities should be such to maintain contact with base all times.

iv) During toeing of rig, the rig deck should be clear of load, toeing lines should be in good condition and tensions in various toeing lines should be constantly monitored.

v) Few steps during toeing are:

a) crane booms should be secured to their vesta,
b) all hatches and water tight doors should be closed,
c) number of personnel on board should be restricted,
d) evacuate in case of emergency and operation should be completed preferably in day light.

6.12.3 Drilling

i) In view of CO_2 and H_2S gas cut from well, effective ventilation should be provided where drilling is in progress.

ii) Safety alarm shall be checked in advance in view of failure of ventilation system.

iii) Suitable sensors for H_2S and Methane should be function tested time to time and suitable colour code should be given.

iv) Working areas of the crane should be illuminated during night to avoid accident.

v) Clear space should be available for despatch and receipt of load and, in particular, basket transfer of passengers. Persons engaged in loading/unloading of materials should be protected from falling into the sea.

vi) Signal light should be fitted at the top of the jib.

vii) Crane hook should be fitted with safety latches.

viii) Experienced person should be engaged in operation of specific equipment like winches, cranes etc.

ix) At least three cable turns shall always be there on the winch drum.

x) Adequate communication like walkie talkie, round robin phone should be available between the crane operator, supervisor and helper.

xi) Crane operation should be completely stopped during helicopter landing/taking off.

xii) Except for helicopter landing deck, all decks, platforms, bridges, ladders should have rigid and fixed guard rails atleast one meter high and should have one intermediate rail midway between the handrail and 100 mm toe board.

xiii) Wooden ladders shall not be used at offshore.

xiv) Flow sensor in the flow line should be ensured for safe working and to avoid blow out.

xv) Hydrogen sulphuide gas In offshore is of great risk and at 10 ppm (0.001%) concentration in air, a person should not be exposed for more than 8 hours, If concentration is more, then breathing apparatus should be used. Corrosion of equipment is also caused by H_2S.

xvi) Portable H_2S gas detector should be continously used.

6.12.4 Production Platforms

i) In case hydrocarbon Is released due to overpressure, leak, overflow, gas blow etc., shut down process to stop flow *of* hydrocarbon. Prevent ignition of released hydrocarbon and in case of fire shut in the process complex and follow emergency contigency plan.

ii) Sub surface safetv valve (SSSV)) below the well head should be actuated during

uncontrolled well -flow and they should be regularly checked.

iii) Surface safety valve or SDV should be checked for no gas leakage from bleed port / flange etc., in the well head area. It should not be in "mechanical override" or bypassed from panel.

iv) High pressure gas lift lines - blowdown system should be O.K.

v) Auto actuation of SDVs in the inlet of pressure vessels should be O.K. and in "normal position" from shutdown panels. A record of status of switches normal/bypassed in auto-con* panels (PSH, PSL, LSL, ILSL) should be maintained.

* Shut Down Panels

vi) Welders rectifier set and electrical connections to it should be checked and approved by electrical-in- charge for proper electrical safely.

vii) “SCADA" telementry system if available should be operational for remote opening and closing of wells at unmanned platforms (through RPMC).

viii) Local ESD/FSD (near the work site) should be provided for jobs of very critical nature, so that the persons working can access it immediately in emergency for safety. Safety officer should judge the requirement & inform FPS for the same.

ix) Railings and Gratings etc. in and around work area should be O.K. and inspected to avoid slippage of man into sea.

x) Emergency shut down (ESD) system is initiated when an abnormal condition is detected. ESD should be checked once in six months.

xi) Platform should be manned round the clock.

xii) Welding and cutting work should be regulated by hot work permit.

xiii) All detectors should be calibrated as per recommendation of the manufacturer.

xiv) No system should be by-passed which affects the system of platform.

xv) In H_2S field platforms, due care shall be taken as per recommendations.

xvi) Follow the instructions of F.P.S. during stay at platform

6.12.5 Fire Prevention And Control

i) Provision be made for safe handling and storage of dirty rags, trash, and waste oil. Flammable liquids and chemicals applied on platform should be immediately cleaned.

ii) Paint containers and hydrocarbon samples, gas cylinders for welding and cutting should be stored properly. Cylinders should be transported in hand-cart.

iii) Smoking should be restricted and no smoking area should be identified.

iv) Special attention should be given to crude oil pump seals, diesel and gas engines which are potential source of ignition in the event of failure.

v) Fire and smoke detectors i.e. ultraviolet heat, thermal and smoke detector should be function tested once in three months.

vi) Fire is controlled in offshore by water spraying, Halon, CO_2 flooding, DCP and sprinkler system.

vii) Foaming agent is applied for controlling fire in liquid hydrocarbon. The system is not effective in gas fire.

viii) Light weight breathing system should be used.

ix) The fire control plan at offshore should reveal control station, fire alarms and fire detectors, deluge valves and sprinkler, fire extinguishing appliances, fireman outfit and ventilation system.

x) Fire fighting equipment should be maintained in ready to use condition.

6.12.6 Life Saving Appliances

i) Life boats with a speed of 6 knots and carrying capacity upto 50 persons are used in offshore.

ii) No. of life boats on one installation should have a capacity to accommodate twice the number of persons onboard installation.

iii) Launching appliances and life boat equipment should be checked every week.

iv) Boat landing areas should be adequately illuminated.

v) Life raft has no power and they rely on drift.

vi) Life jacket lifts the wearer after entering water.

vii) Life buoys are used to rescue persons if any person accidentally falls in the sea.

viii) All life saving appliances should be inspected by the MMD surveyor /sr. officials once a year.

ix) Every life boat shall be inspected once a week.

x) Every life boat and life raft should be serviced once a year by a competent authority,

6.12.7 Safety Precautions during Helicopter Transportation

i) Passenger briefing regarding safety rules while travelling in helicopter should be carried out before boarding the helicopter.

ii) Emergency procedure should be briefed to all the passenger In case helicopter is to ditch into the sea.

iii) Heli-pad should have a non-skid surface. Nylon rope net should be stretched on the deck.

iv) Proper drainage should be available on helideck.

v) There should be no obstruction on the helideck itself and within 3 meters of its parameter. Closest super structure above the helideck should have red obstruction light.

vi) While landing fire crew of two persons should be standby adjacent to helideck.

vii) Heli-deck should be properly illuminated for night landing.

viii) During switching off helicopter, persons should not be allowed to go out/ towards helicopter

6.13 DEMOLITION

6.13.1. General provisions

i) When the demolition of any building or structure might present danger to workers or to the public:

(a) necessary precautions, methods and procedures should be adopted, including those for the disposal of waste or residues;

(b) the work should be planned and undertaken only under the supervision of a competent person.

ii) Before demolition operations begin:

(a) structural details and builders' drawings should be obtained wherever possible;

(b) details of the previous use should be obtained to identify any possible contamination and hazards from chemicals, flammables, etc.;

(c) an initial survey should be carried out to identify any structural problems and risks associated with flammable substances and substances hazardous to health. The survey should note the type of ground on which the structure is erected, the condition of the roof trusses, the type of framing used in framed structures and the load-bearing walls;

(d) a method of demolition should be formulated after the survey and recorded in a method statement having taken all the various considerations into account and identifying the problems and their solutions;

iii) All electric, gas, water and steam service lines should be shut off and, as necessary, capped or otherwise controlled at or outside the construction site before work commences.

iv) If it is necessary to maintain any electric power, water or other services during demolition operations, they should be adequately protected against damage.

v) As far as practicable, the danger zone round the building should be adequately fenced off and sign posted. To protect the public a fence 2m high should be erected enclosing the demolition operations and the access gates should be secured outside working hours.

vi) The fabric of buildings contaminated with substances hazardous to health should be decontaminated. Protective clothing and respiratory devices should be provided and worn.

vii) Where plant has contained flammable materials, special precautions should be taken to avoid fire and explosion.

viii) The plant to be demolished should be isolated from all other plant that may contain flammable materials. Any residual flammable material in the plant should be rendered safe by cleaning, purging or the application of an inert atmosphere as appropriate.

ix) Care should be taken not to demolish any parts, which would destroy the stability of other parts.

x) Demolition activities should not be continued under adverse climatic conditions such as high winds, which could cause the collapse of already weakened structures.

xi) To prevent hazards parts of structures should be adequately shored, braced or otherwise supported.

xii) Structures should not be left in a condition in which they could be brought down by wind pressure or vibration.

xiii) Where a deliberate controlled collapse technique is to be used, expert engineering advice should be obtained, and:

(a) it should only be used where the whole structure is to come down because it

relies on the removal of key structural members to effect a total collapse;

(b) it should only be used on sites that are fairly level and where there is enough surrounding space for all operatives and equipment to be withdrawn to a safe distance.

xiv) When equipment such as power shovels and bulldozers are used for demolition, due consideration should be given to the nature of the building or structure, its dimensions, as well as to the power of the equipment being used.

xv) If a swinging weight is used for demolition, a safety zone having a width of at least one-and-a-half times the height of the building or structure should be maintained around the points of impact.

6.13.2. Demolition of structural steelwork

i) All precautions should be taken to prevent danger from any sudden twist, spring or collapse of steelwork, ironwork or reinforced concrete when it is cut or released.

ii) Steel construction should be demolished tier by tier.

iii) Structural steel parts should be lowered and not dropped from a height.

6.14 RADIOGRAPHY

6.14.1 All radiography jobs shall be carried out as per BARC Safety Regulations

6.14.2 During field radiography, nearby area around the radiation source should be cordoned off.

6.14.3 If the field radiography is to be done at the same location repeatedly, it is advisable to provide either a wire fencing around or a temporary brick enclosure.

6.14.4 Special permission/permit should be taken for radiography from area-in-charge.

6.14.5 As far as possible, field radiography should be done only during night time when there is little or no occupancy there.

6.14.6 Radiation warning signals should be pasted all along the cordoned off area.

6.14.7 Entry into the restricted area by unauthorised persons should be strictly prohibited during exposure.

6.14.8 The radiation level alongwith the cordon should be monitored by a suitable and well-calibrated radiation survey meter.

6.14.9 All personnel working with radiography sources should wear appropriate protective equipment and film badges issued by BARC.

6.14.10 Protection facilities such as manipulator rod, remote handling tongs, lead pots, radiation hazard placards and means of cordon off shall be available at each site.

6.14.11 The radiography source shall never be touched or handled directly with hands.

6.14.12 The package containing radiography cameras and sources should never be carried by public transport like bus, train etc.

6.14.13 Radiography sources and cameras, when not in use, should be stored inside a source pit with lock and key arrangement as approved by BARC. The storage room should preferably be located in an isolated area of minimum occupancy and radiation level outside the storage room should not exceed 0.25 mR/hr as per BARC Regulations.

6.14.14 In case of an accident (due to loss or of damage to radiography source), action should be taken in line with BARC Safety Rules/Guidelines.

6.15 SAND/SHOT BLASTING/ SPRAY PAINTING

6.15.1 Sand blasting should be used only after approval from competent person.

6.15.2 Air Compressor used for sand/shot blasting/painting should have guard and positioned away from the work place.

6.15.3 Exhaust of the prime mover, if IC engine is used, should be directed away from the work place.

6.15.4 In case of motor driven compressor, the body of the motor as well as the compressor to be properly earthed.

6.15.5 The hoses used for compressed air should be of proper quality, and health of the same to be ensured through regular check/ test.

6.15.6 The operator of sand/shot blasting/painting should wear suitable PPE's including mask.

6.15.7 Adequate measures to be taken to suppress dust/spray particle.

6.15.8 Sand used for sand blasting should be suitably covered & protected from to rain/moisture.

6.15.9 When these activities are done in confined places, adequate measure to be taken for proper ventilation.

6.16 WORK ABOVE WATER

6.16.1 General Provisions

i) Where work is done over or in close proximity to water & where possibility of drowning exists, provision should be made for:

a) Preventing workers from falling into water;
b) The rescue of workers in danger of drowning;
c) Safe and sufficient transport.

ii) Provisions for the safe performance of work over or in close proximity to water should include, where appropriate, the provision and use of suitable and adequate:

a) fencing, safety nets and safety harnesses;
b) lifebuoys, life jackets and manned boats;
c) protection against such hazards as reptiles and other animals.

iii) Gangways, pontoons, bridges, footbridges and other walkways or work places over water should:
a) possess adequate strength and stability;
b) be sufficiently wide to allow safe movement of workers;
c) have level surfaces free from tripping hazards;
d) be adequately lit when natural light is insufficient;
e) where practicable and necessary, to prevent danger, be provided with toe-boards, guard rails, hand ropes etc.
f) be secured to prevent dislodgment by rising water or high winds;
g) if necessary, be equipped with ladders which should be sound, of sufficient strength and length and be securely lashed to prevent slipping.

iv) All deck openings including those for buckets should be fenced.

6.16.2 Rescue & Emergency procedures

i) Persons who work over water should be provided with some form of buoyancy aid. Life jackets should provided sufficient freedom of movement, have sufficient buoyancy to bring persons to the surface and keep them afloat face upwards, be easily secured to the body, be readily visible by way of self luminous paint/strip.

ii) Nobody should work alone on or above water.

iii) Each worker should be trained in the procedure to be followed in the event of an emergency.

7.0 ADDITIONAL SAFETY PRECAUTION FOR UNITS WITH HYDROCARBONS

In addition to general safety precautions as outlined above for the activities in Clause 6.0, following additional safety precautions need to be taken for the sites within the operating area or nearby, where presence of Hydrocarbons cannot be ruled out.

i) No job shall be carried out without a valid permit. Permit should be in line with OISD-STD-105 "Work Permit System".

ii) Smoking should be prohibited in all places containing readily combustible or flammable materials and "No Smoking" notices be prominently displayed.

iii) In confined spaces and other places where flammable gases, vapours or dusts can cause danger, following measures should be taken:

(a) only approved type electrical installations and equipment, including portable lamps, should be used;
(b) there should be no naked flames or source of ignition;
(c) oily rags, waste and clothes or other substances liable to spontaneous ignition should be removed without delay to a safe place;
(d) ventilation should be provided.

iv) Regular inspections should be made of places where there are fire risks. These include the vicinity of heating appliances, electrical installations and conductors, stores of flammable and combustible materials, welding and cutting operations.

v) Welding, flame cutting and other hot work should only be done after issuance of work permit in line with the requirement of OISD-STD-105 after appropriate precautions, as required, are taken to reduce the risk of fire. For carrying out other jobs also, OISD-STD-105 should be followed strictly.

vi) Fire-extinguishing equipment should be well maintained and inspected at suitable intervals by a competent person. Access to fire-extinguishing equipment such as hydrants, portable extinguishers and connections for hoses should be kept clear at all times.

vii) All supervisors and a sufficient number of workers should be trained in the use of fire-extinguishing equipment, so that adequate trained personnel are readily available during all working periods.

viii) Audio means to give warning in case of fire should be provided where this is necessary to prevent danger. Such warning should be clearly audible in all parts of the site where persons are liable to work. There should be an effective evacuation plan so that all persons are evacuated speedily without panic and accounted for and all plant and processes shut down.

ix) Notices should be posted at conspicuous places indicating:

(a) the nearest fire alarm;
(b) the telephone number and address of the nearest emergency services.

x) The work site shall be cleared of all combustible materials, as Sparks and molten metal coming from the welding job can easily ignite combustible materials near or below the welding site. If the combustible materials cannot be removed from the area, the same shall be properly shielded.

xi) A dry chemical type fire extinguisher shall be made available in the work area. Also fire protection facilities like running hoses etc. as per permit should be complied with.

xii) Wherever required, welding screens shall be put up to protect other equipment in adjoining areas against flying sparks. Material used should be metal/asbestos/water curtain.

xiii) Welding or cutting of vessels/ equipments used in Hydrocarbon/ hazardous chemicals shall be done after proper gas freeing and verifying the same with the explosive-meter.

xiv) The confined space/equipment shall be gas freed and cleaned.

xv) Absence of any toxic gas and any flammable gas above explosion limit shall be ensured with the help of gas detection instrument and explosive meter respectively.

xvi) Used and hot electrode stubs shall be discarded in a metal bucket.

xvii) Use approved and certified flame arrestors for vehicles.

xviii) Work permit to be obtained, if construction work is carried out within existing operating area.

8.0 FIRST AID

First aid facilities should be provided in line with various statutory regulations like factory act etc. However following care should be taken:

i) First aid, including the provision of trained personnel should be ensured at work sites. Arrangement should be made for ensuring the medical attention of the injured workers. First aid box should be as per the Factory rules.

ii) Suitable rescue equipment, like stretchers should be kept readily available at the construction site.

iii) First-aid kits or boxes, as appropriate and as per statutory requirements, should be provided at workplaces and be protected against contamination by dust, moisture etc.

iv) First-aid kit or boxes should not keep anything besides material for first aid in emergencies.

v) First-aid kits and boxes should contain simple and clear instructions to be followed, be kept under the charge of a responsible person qualified to render the first aid and be regularly inspected and stocked.

vi) Where the work involves risk of drowning, asphyxiation or electric shock, first-aid personnel should be proficient in the use of resuscitation and other life saving techniques and in rescue procedures.

vii) Emergency telephone numbers of nearby Hospitals, Police, Fire Station and Administration should be prominently displayed.

9.0 DOCUMENTATION

The intention of keeping documentation of all types of accident(s) is to prevent recurrence of similar accident(s). All accidents should be reported as per OISD Guidelines (OISD-GDN-107) and Factories act, 1948.

All accidents (major, minor or near miss) should be investigated, analysed and recommendations should be documented along with implementation status.

All related data should be well-documented and further analysis highlighting the major cause(s) of accidents be done. This will help in identifying thrust areas and training needs for prevention of accidents.

10.0 SAFETY AWARENESS & TRAINING

Safety awareness to all section of personnel ranging from site-in-charge to workmen helps not only preventing the risk but also build up the confidence. Time and expenditures also get saved as a result.

Safety awareness basically seeks to persuade/inform people on safety besides supplementing skill also. Awareness programme may include followings:

i) **Poster:** Posters with safety slogan in humorous, gruesome demonstrating manner may be used to discourage bad habits attributable to accidents by appealing to the workers' pride, self-love, affection curiosity or human aspects. These should be displayed in prominent location(s).

ii) **Safety Sign Boards**: Different type of message of cautioning, attention, notice etc. should be displayed at the appropriate places for learning/ awareness of the workmen while working at site.

iii) **Films & Slides:** Film(s) narrating the accident including the causes and possible remedial ways of preventing the recurrence of a similar accident should be displayed at regular intervals. Slides consisting main points of the film show may also be shown to workers.

iv) **Talks, lectures & conferences:** The success of these events would depend much on audience's understandings of the speaker (s). The speakers are to be knowledgeable and good presenter. Speakers should know to hold the attention and to influence the audiences.

v) **Competitions:** Organise competition(s) between the different deptts/categories of workers. The sense of reward/recognition also will improve safety awareness and result in enhancing safety levels.

vi) **Exhibitions:** Exhibitions also make the workers acquainted with hazards and means of preventive measures.

vii) **Safety Publication:** Safety publications including pocket books dealing with ways of investigation and prevention in the field of safety and so on, may be distributed to workers to promote the safety awareness.

viii) **Safety Drives:** From time to time, an intensive safety drive by organising a safety day or a safety week etc. should be launched.

ix) **Training:** Training for covering the hazards for different trade should be imparted. Training should also include the specific hazards related to a job in addition to the general safety training as has been dealt in various chapters and should include all workers. Reference may be drawn from OISD-STD-154.

11.0 REFERRENCES

i) *Factory Act, 1948*

ii) *Indian Electricity Rules*

iii) *Safety & Health in Construction by ILO*

iv) *The Building & Other Construction Workers (Regulation, Employment and Conditions of Service) Act 1996*

ANNEXURE I

LIST OF SAFETY CODES FOR CIVIL WORKS PUBLISHED BY BUREAU OF INDIAN STANDARDS

Sr.No	Code No.	Title
01.	IS : 818	Code of Practice for Safety and Health Requirements in Electric and Gas Welding and Cutting Operations – First Revision.
02.	IS : 875	Code of practice for Structural safety of buildings: Masonry walls
03.	IS : 933	Specification for Portable Chemical Fire Extinguisher, Foam Type – Second Revision.
04.	IS : 1179	Specification for Equipment for Eye and Face Protection during Welding – First Revision.
05.	IS : 1904	Code of practice for Structural safety of buildings: Shallow foundations
06.	IS : 1905	Code of practice for Structural safety of buildings: Masonry walls
07.	IS : 2171	Specification for Portable Fire Extinguishers, Dry Powder Type – Second Revision.
08.	IS : 2361	Specification for Building Grips – First Revision.
09.	IS : 2750	Specification for Steel Scaffoldings.
10.	IS : 2925	Specification for Industrial Safety Helmets – First Revision.
11.	IS : 3016	Code of Practice for Fires Precautions in Welding and Cutting Operations – First Revision.
12.	IS : 3521	Industrial safety belts and harnesses
13.	IS : 3696 - Part I	-Safety Code for Scaffolds and Ladders: Part I – Scaffolds
14.	IS : 3696 -Part II	Safety Code for Scaffolds and Ladders: Part II – Ladders.
15.	IS : 3764	Safety Code for Excavation Work
16.	IS : 4014 -Part I & II	Code of practice for Steel tubular scaffolding
17.	IS : 4081	Safety Code for Blasting and Related Drilling Operations.
18.	IS : 4082	Recommendations on staking and storage of construction materials at site
19.	IS : 4130	Safety Code for Demolition of Buildings – First Revision.
20.	IS : 4138	Safety Code Working in Compressed Air-First Revision
21.	IS : 4756	Safety code for Tunneling works
22.	IS : 4912	Safety requirements for Floor and Wall Openings, Railings and toe Boards –First Revision.
23.	IS : 5121	Safety Code for Piling and other Deep Foundations.
24.	IS : 5916	Safety Code for Construction involving use of Hot Bituminous Materials.
25.	IS : 5983	Specification for Eye Protectors – First Revision
26.	IS : 6922	Structures subject to underground blasts, criteria for safety and design of
27.	IS : 7155	Code of recommended practices for conveyor safety
28.	IS : 7205	Safety Code for Erection on Structural Steel Works.
29.	IS : 7069	Safety Code for Handling and Storage of Building Materials

Sr.No	Code No.	Title
30.	IS : 7293	Safety Code for Working with Construction Machinery.
31.	IS : 7323	Guidelines for operation of Reservoirs
32.	IS : 7969	Safety code for handling and storage of building material
33.	IS : 8758	Recommendation for Fire Precautionary Measures in construction of Temporary Structures and Pandals.
34.	IS : 8989	Safety Code for Erection of Concrete Framed Structures.
35.	IS : 9706	Code of Practices for construction of Arial ropeways for transportation of material
36.	IS : 9759	Guidelines for de-watering during construction
37.	IS : 9944	Recommendations on safe working load for natural and man-made fibre rope slings
38.	IS : 10291	Safety code for dress divers in civil engineering works
39.	IS :10386 - Part I	Safety Code for Construction, Operation and Maintenance for River Valley Projects.
40.	IS :10386 - Part II	Safety Code for Construction, Operation and Maintenance of River Valley Projects.
41.	IS : 11057	Code of practice for Industrial safety nets
42.	IS : 13415	Code of Practice on safety for Protective barriers in and around building
43.	IS : 13416	Recommendations for preventive measures against hazards at working places

INSTRUCTIONS TO TENDERERS

1.0 Indian Oil Corporation Limited, a company registered in India under the Companies Act, 1956, through its _____(give the designation of the authority calling for tenders) invites tenders under sealed covers from bona fide and experienced CONTRACTORS of financial standing and reputation for the following job(s):

(a) name of work
(b) name of location
(c) unit/region/division etc.,(more specifically described in the Tender Documents, upon the terms and conditions mentioned in the Tender Documents.)

2.0 The Tender Documents shall consist of the following:

(i) Invitation to Tender
(ii) Instructions to the Tenderers
(iii) General Conditions of Contract
(iv) Special Conditions of Cotract (including Scope of Work and Time Schedule)
(v) Special Instructions to Tenderers
(vi) Specifications
(vii) Plans (Exhibits……. to ……)
(viii) Drawings (Exhibits ……. to ……..)
(ix) Form of Contract
(x) Form of Tender (including formats annexed to the Form of Tender)
(xi) Form of Schedule of Rates
(xii) Addendum/Addenda to Tender Documents.

3.0 Price of Tender Documents

(a) The Price of Rs._____ (Rupees _____) payable for the Tender Documents is made up as follows:

Prices for use of Tender Document	:	Rs._____
Less paid by OWNER to tenderer by way of adjustment to keep the Tender offer open	:	Rs._____
Balance	:	Rs._____

(b) The price of the Tender Document is the net cost/price per set of Tender Document, after accounting for the consideration paid by the OWNER to the tenderer, for keeping the tenders valid for the prescribed period, and any extension thereof.

4.0 Tender Instructions

4.1 Tender Documents shall remain the property of the OWNER. Not more than 2 (two) copies of the Tender Documents will be issued to any one intending tenderer, unless otherwise specified. The Tender Document issued to one party cannot be transferred to or used by another without the specific written permission of the tender issuing authority.

4.2 The Tender shall be completely filled in all respects and shall be tendered together with requisite information and annexures. Any tender incomplete in particulars shall be liable to be rejected.

4.3 If the space in the Tender or any schedule or annexure thereof is insufficient, pages shall be separately added. These shall be consecutively page-numbered and also shall carry the Tender Document numbered and shall be signed by the tenderer and entered in the Index for the Tender.

4.4(a) The Tender with one or more complete sets of the Tender Documents, as required, shall be enclosed in a sealed cover superscribed with name of work and tender notice number and addressed and sent by registered post to the Tender Receiving Authority specified in the Invitation to Tender, or put in the Tender Box designated for the specific work located at the address specified in the Invitation to Tender. In case tenders have been called for in two parts separately viz., the technical and commercial part, and the price part, these two parts shall be put in two separate sealed covers superscribed "technical commercial part" and "price part" respectively. Both the sealed covers thereafter shall be then put inside another sealed cover, superscribed with the name of the work, the tender notice number and date, due date for receipt of tenders, the name of the Tenderer, etc., and sent either by registered post or dropped in the tender box designated for the purpose, located at the address specified in the Tender Document.

(b) Where two copies of Tender Documents have been called for, they should be put in two separate envelopes duly marked as 'original' and 'copy'. Both these sealed envelopes should then be put together inside another sealed envelope, suitably superscribed.

4.5 The sealed tenders must reach the Tender receiving Authority, at the address specified in the Invitation to Tender before the time limit specified therein.

4.6 The Tenders shall be opened on the date and at the time specified in the Invitation to Tender or as soon thereafter as convenient, in the presence of such tenderers as may be present. Tenders not received in time may not be considered.

4.7 Tenderers shall set their quotations in firm figures and without qualifications or variations or additions in the terms of Tender Documents. Tenders containing qualifying expressions such as "subject to minimum acceptance" or "subject to prior sale", or any other qualifying expression or incorporating terms and conditions at variance with the terms and conditions incorporated in the Tender Documents shall be liable to be rejected.

4.8 The tenders, as submitted, shall consist of the following:

(i) Complete set of Tender Documents (including addenda, if any) duly filled in and signed by the tenderers as prescribed in different clauses of the Tender Documents.
(ii) Schedule of Rates in the Form of Schedule of Rates.
(iii) Earnest money amounting to and in the manners specified in Clause 5 hereof.
(iv) Power of Attorney or other proof of authority, in favour of the person who has signed the tender (or copy thereof duly attested by a Gazetted Officer), as required by Clause 4.13 hereof.
(v) Income Tax Clearance Certificate (in the case of Indian Bidders)
(vi) Audited Balance Sheets for the last 3 (three) years.
(vii) Form of Tender
(viii) Information regarding tenderers in the form annexed to the Form of Tender
(ix) Information regarding the tenderer's work of comparable nature in the form annexed to the Form of Tender
(x) Information regarding construction, organisation and equipment in the form annexed to the Form of Tender.
(xi) Solvency certificate from a Scheduled bank in India or a reputed foreign Bank acceptable to the OWNER
(xii) Declaration of Blacklisting in the prescribed format.

4.9(a) The OWNER reserves the right to reject, accept or prefer any tender or to abort the bidding process without assigning any reason whatsoever.

(b) Although ordinarily the lowest responsive bid amongst the bids submitted by tenderers and considered by the OWNER as qualified and competent shall be preferred, the OWNER reserves the right not to accept the lowest bid if in its opinion this would not be in the interest of the work.

(c) If the OWNER in its discretion considers that the interest of the work requires a split, the OWNER may split the works between two or more tenderers.

4.10 The tender shall be irrevocable up to the expiry of 4 (four) months from the date of opening of tenders. In case of a 2 (two) bid system, the 4 (four) month period shall be reckoned from the date of opening of the techno-commercial bid.

4.11 **Rates to be in Figures and Words :**

The tenderer shall quote in English both in figures as well as in words the amount tendered by him in the Form of Schedule of Rates forming part of the Tender Documents, in such a way that interpolation is not possible. If the parties do not quote both in figures and works properly and correctly, their tenders are liable to be rejected. The amount for each item shall be worked out and entered and requisite totals given of all items. The tendered amount for the work shall be entered in the tender duly signed by the tenderer.

If some discrepancies are found between the rates given in words and figures of the amount shown in the tender, the following procedure shall be applied :

(a) When there is a difference between the rates in figures and words, the rate which corresponds to the amount worked out by the tenderer shall be taken as correct.

(b) When the rate quoted by the tenderer in figures and words tallies but the amount is incorrect, the rate quoted by the tenderer shall be taken as correct.

(c) When it is not possible to ascertain the correct rate in the manner prescribed above the rate as quoted in words shall be adopted.

4.12 **Corrections and Alterations**

Tenderers are required to fill in the Tender Documents with all due care, avoiding cuttings/corrections/alteration/overwriting etc. in the entries, as far as possible. In case corrections/alterations become unavoidable or inevitable, the entry to be corrected, altered should be neatly cancelled or scored through by striking the entry by drawing a line through it and making the revised/corrected entry as close to the cancelled entry as possible, each such cancellation and correction/alteration being clearly and unambiguously authenticated by the Tenderer by his full signatures. Overwriting and/or erasing with or by the application of correcting/erasing fluid(s) will not be permitted and shall render the Tender for rejection.

4.13 **Signing of Tender**

(i) The tender shall contain the name, residence and place of business of the person(s) making the tender and shall be signed by the tenderer with his usual signature. Partnership firms shall furnish the full names of all partners in the tender, and shall annex a copy of the Partnership deed to the tender. It shall be signed in the partnership name by the partners or by a duly authorised representative followed by the name and designation of the person signing. Tenders by Corporations shall be signed in the name of the Corporation by a person duly authorised to do so.

(ii) The person signing the tender shall state his capacity and also the source of his ability to bind the tenderer. The power of attorney or authorisation or other document constituting adequate proof of the ability of the signatory to bind the tenderer shall be annexed to the tender. The OWNER may reject outright any tender unsupported by adequate proof of the signatory's authority.

(iii) When a tenderer signs a tender in a language other than English, the total amounts tendered should in addition be written in the same language. The signature should be attested by at least one witness.

4.14 **Witness :**

Name, occupations and addresses of the Witnesses shall be stated below their signature. Witnesses shall be persons of status.

4.15 **All pages to be initialled :**

All signatures in the Tender Documents shall be dated as well. All pages of all sections of Tender Documents shall be initialled at the lower right hand corner or signed wherever required in the Tender Documents by the tenderer or by a person holding power of attorney authorising him to sign on behalf of the tenderer before submission of tender.

4.16 **Canvassing**

Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the tenderers who resort to canvassing shall be liable to rejection.

4.17 **Past Experience**

The tenderer shall enclose documents to show that he has previous experience in having successfully completed in the recent past works of similar nature together with the name of OWNER, location of sites and value of contract in the format annexed to the Form of Tender. It shall be the responsibility of the Tenderers to fill complete, correct and accurate information in line with the requirements/stipulations of the Tender Document, regarding their past experience and other information required to facilitate due evaluation/consideration of their tenders. In case any essential information given by a bidder is found to be incorrect or a misrepresentation, the bid is likely to be rejected as not responsive, and if the bid has resulted in a contract, the contract is liable to be terminated pursuant to the provisions of Clause 7.0.1.0 of the General Conditions of Contract with consequences of termination as provided in Section 7 of the General Conditions of Contract.

4.18 **P.F. Code Number to be furnished**

The tenderer(s) shall indicate his/their P.F. Code Number in the Form of Information about Tender annexed to the Form of Tender. In the absence of the same, the tender shall be liable to be rejected.

4.19 **Form of Earnest Money to be deposited:**

A bank Guarantee may be accepted by the OWNER towards Earnest Money Deposit or Initial Security Deposit or Security Deposit or otherwise, as the case may be, provided the amount of such Bank Guarantee is not less than Rs.1 (one) lakh. Such Bank Guarantee shall be issued by a scheduled bank in India acceptable to the OWNER and shall be strictly in the format prescribed by the OWNER for the specific purpose for which the Bank Guarantee is required to be furnished.

4.20(a) Each tenderer/bidder shall give a declaration in the prescribed format annexed to the Form of Tender that he/it/they is/are not under any blacklist declared by the OWNER or by any Department of the State or Central Government or by any other Public Sector Organisation, and that there is no inquiry in respect of any corrupt or fraudulent practice pending against him/it/them. In case he/it/they are under any such list, or any inquiry is pending, he/it/they shall in the declaration give full details thereof. Such declaration in respect of a partnership firm or association of persons shall cover every partner or member of the association, and in the case of Company, shall cover every Director and Principal Shareholder of the Company and any Holding Company and/or subsidiary Company(ies) if any.

(b) If a tenderer is on any such List or if any such inquiry is pending against it/him/them or if the Bidder makes a false declaration, the OWNER reserves the right to reject the Bid, and if the Bid has resulted into a contract, the contract is liable to be terminated pursuant to the provisions of Clause 7.0.1.0 of the General Conditions of Contract.

4.21 In case pre-qualification of potential bidders/tenderers had been undertaken earlier and completed for the work, only bids from pre-qualified bidders will be considered for evaluation and award of the contract. It shall be incumbent on the tenderer to submit necessary evidence of having been pre-qualified for the particular job in question or part thereof, by submitting copies of intimation received from the OWNER/consultant intimating about their being pre qualified.

4.22 In case no pre-qualification of bidder/tenderers had been undertaken by the OWNER/consultant, the tenderer shall include full details in support of their capacity, capability and financial standing for taking up and completing the work successfully.

4.23 Each tenderer can submit only one tender bid for one package. The names of specialized sub-contractor(s) may, however, appear in different offers submitted by different tenderers.

(a) It is clarified that a person shall be deemed to have submitted more than one bid if a person bids in an individual or proprietorship format and/or in a partnership or association of persons format and/or in a Company format.
(b) A company shall for this purpose include any artificial person whether constituted under the laws of Indian or of any other country.
(c) A person shall be deemed to have bid in a partnership format or in association of persons format if he is a partner of the firm which has submitted the bid or is a member of any association of persons which has submitted a bid.
(d) A person shall be deemed to have bid in a company format if the person holds more than 10% (ten percent) of the voting share capital of the company which has submitted a bid, or is a Director of the Company which has submitted a bid, or holds more than 10% (ten percent) of voting share capital and/or is a Director of a holding Company which has submitted the bid.

5.0 Earnest Money

1.1 The tenderer shall, as a condition for the consideration of the tender, pay the sum specified in Invitation to Tender in the manner specified therein. In the case of cash deposit, he shall attach the official receipt with the tender. The tender is liable to be rejected for failure to deposit money in the manner aforesaid or for failure to furnish proof of having deposited earnest money alongwith the tender.

1.2 The Earnest Money of unsuccessful tenderer(s) shall be refunded without interest only after the award of the work is finalised.

1.3 The Earnest Money deposited by a successful tenderer shall be forfeited if the successful tenderer fails to deposit or furnish the requisite initial Security Deposit as specified in the General Conditions of Contract and/or fails to commence work at each job site within 10 (ten) days of handing over the job or any part thereof to him and/or fails to execute the contract in accordance with the Form of Contract within 10 (ten) days of receipt of Letter of Acceptance in this behalf from the OWNER or within such extended period as may be permitted by the OWNER for the purpose.

5.4(a) A tenderer who has submitted his/it/their bid shall not be permitted to alter/amend or withdraw his/it/their bid after submission of bid, notwithstanding that the bid(s) has/have not yet been opened.

(b) A tenderer who purports to alter/modify or withdraw his/its/their bid/offer after submission, within the period during which he/it/they promised to keep his/its/their bid valid, shall be liable to have his/its/their tender rejected and his/its/their Earnest Money deposit or Bank Guarantee submitted by way of earnest money forfeited/encashed.

(c) A bidder who offers unsolicited reduction in the price offer whether before or after the opening of the price part of the tender(s)/bid(s) shall be liable to have his/its/their bid(s) rejected. Bidders may, however, at any stage offer a reduction if such reduction is solicited or if the OWNER gives the Bidder an opportunity to offer such reduction.

6.0 **Cost of Preparation and Submission of Bids**

6.1 The tenderer shall prepare the tender at his/its/their own risk and shall bear all the costs of preparing and submitting his/its/their tenders, as well as all other costs of tendering for the work and the OWNER shall take no liability for these costs.

7.0 Addenda

7.1 Addenda to the Tender Documents may be issued prior to the date of opening of the tender (and in the case of 2 (two) bid system, prior to the date of opening the price part of the bid) to clarify documents or to reflect modifications in the design or contract terms.

7.1 Such addendum(s) issued shall be distributed in duplicate, to each person or organisation to whom Tender Documents have been issued. Each recipient will retain one signed copy of such addendum(s) for submission alongwith his tender and return one signed copy to the authority inviting tenders as acknowledgment of receipt of the addendum. All such addendum(s) issued shall form part of Tender Documents.

8.0 Retired Company Directors

8.1 No Director of the OWNER is allowed to tender for a period of 2 (two) years after his retirement from the employment of the OWNER, without the previous permission of the OWNER. The Contract if awarded is liable to be cancelled if the tenderer is found at any time to be such a person and has not obtained the permission of the OWNER before submission of the tender. Any tender by a person aforesaid shall carry a disclosure thereof on the tender, and shall be accompanied by a copy of the document by which the requisite consent is given. Such disqualifications shall apply to every partner of a partnership firm.

8.1 The tenderer is required to state whether he is a relative of any Director of the OWNER, or whether the tenderer is a firm, whether a Director of the OWNER or relative of such Director is a partner in the firm, or whether the tenderer is a Company, whether a Director of the OWNER or relative of such Director is a substantial member holding more than 10% (ten percent) of the paid up capital in the Company, or a Director of the Company.

9.0 **Quotations**

9.1 The tenderer shall quote for the jobs on the basis of the items entered in the Form of Schedule of Rates, and shall quote separately for each and every item(s) entered in the Form of Schedule of Rates.

9.2 The prices quoted shall be all inclusive as proved for in respect of Schedule of Rates in the General Conditions of Contract and the OWNER shall not entertain any claim(s) for enhancement of the price(s) on any account whatsoever.

10.0 **Information**

10.1 The information given in the Tender Documents and the Plans and Drawings forming part thereof is merely intended as a general information without undertaking on the part of the OWNER as to their accuracy and without obligation relative thereto upon the OWNER. The tenderers are expected to conduct their own surveys and investigations prior to tendering.

10.1 All information disclosed to the tenderers by way of the Tender Documents shall be considered confidential and shall not be disclosed to any party by the tenderers except as may be necessary for carrying out the work. Where it is found that any tenderer has violated and has disclosed sensitive and vital information impugning on the security of the installation/national security, necessary action, as may be called for, may be taken against the tenderer concerned in addition to his being liable to be black listed and/or barred from participating in future bids.

10.2 The tenderer shall before tendering and shall be deemed before tendering to have undertaken a thorough study of the proposed work, the job site(s) involved, the site conditions, soil conditions, the terrain, the climatic conditions, the labour, power, material and equipment availability and transport and communications facilities, the availability and transport suitability or borrow areas, the availability of land for right of way and temporary office and accommodations, quarters, and all other facts and facilities necessary or relevant for the formulation of the tender, supply of materials and the performance of the work. Without prejudice to the aforegoing, the tenderers may be allowed access to any information regarding the site of the work, the investigations conducted relative thereto, such as soil investigation etc. But, these shall be only indicative in nature and the tenderers are expected to collect their own data for preparation and submission of their tender. Any claim at a later date based on either incorrectness or inadequacy of the information/data made available by the OWNER/consultant to a tenderer shall not be entertained. The OWNER/consultant shall be fully absolved of any and all liabilities in this regard.

10.3 In case the OWNER/consultant decides to have a pre-bid conference to clarify any issues, necessary intimation with adequate notice will be sent to the intending tenderers. Brief summary of the queries raised by the attending tenderers and the clarifications given by the OWNER/consultant respect thereof, as well as any further information which the OWNER/consultant choose to furnish to the tenderers, in the form of Minutes of the Meeting or Addendum, which shall form a part of the Tender Documents, unless otherwise specified.

10.4 All communication from the OWNER/consultant to the tenderers shall be sent by speed post/courier as may be applicable. The tenderers must acknowledge each and every communication sent by the OWNER/consultant the duplicate copy or the Xerox copy of the said communication duly signed by the Tenderer(s) in token of receipt. Wherever feasible, communications may be sent by Fax/E-mail also followed by confirmatory copies by post.

10.5 The OWNER/consultant may, at his discretion, call for technical/commercial clarification or any other clarifications required, from any Tenderer(s), in respect of his/their tender(s).

10.6 The OWNER reserves the right to consider/evaluate only substantially responsive tenders. A substantially responsive tender is one, which, in the opinion of the OWNER (which shall be final and binding on the Tenderer(s)), substantially conforms to all the terms, conditions, specifications and requirements of the Tender Document without material deviations or reservations in respect of any of the following:

(a) scope, quality or performance of the work;
(b) OWNER's rights or the tenderer's obligations under the contract as per the tender documentation;
(c) Such deviations the correction of which would affect the competitive position of other tenderers, who have submitted substantially responsive bids ;
(d) Any tender unaccompanied by the earnest money in a form which is not acceptable as per the Tender Documents, or falling short of the requirement of the Tender Document, shall be liable for rejection.

10.7 Bidders are expected to bid strictly on the format and subject to the terms and conditions specified in the Tender Documents. Any bid containing any deviation which in the sole opinion of the OWNER is material, or which in the opinion of the ONWER cannot be evaluated so as to place other bidders at a disadvantage, shall be liable to have his/its/their bid rejected.

10.8 In case any bidder/tenderer considers it inevitable or unavoidable to make certain deviations from requirements and stipulations of the Tender Document, such bidder/tenderer shall bring out the same separately and prominently in a separate statement enclosed with the tender (or techno-commercial part of the tender in case of two part tenders) so as to make it prominently noticeable by the authority opening the tender. Such a statement should clearly indicate the particular page number, clause, or section of the Tender Document deviated from, the scope and extent of the deviations and explanation as to why the said deviation is considered inevitable or unavoidable in the view of the tenderer.

11.0 **Collusive or fraudulent tenders**

11.1 In case it appears to the OWNER, after examining the tenders received, that any 2 (two) or more tenders are collusive or otherwise manipulated to the disadvantage of the OWNER and against the spirit of ethical competition, the OWNER reserves the right to summarily reject such tenders. It shall not be incumbent on the OWNER to prove any collusion or other malpractice in this regard.

12.0 **Signing of the Contract**

12.1 The successful tenderers shall be required to execute a formal contract in accordance with the Form of Contract within 10 (ten) days from the date of receipt of Letter of Acceptance from the OWNER, or such extended time as may be permitted by the OWNER for the purpose to do so.

For and on behalf of
Indian Oil Corporation Ltd.
(Pipelines Division)

PROFORMA OF DECLARATION OF BLACK LISTING/HOLIDAY LISTING

In the case of a Proprietary Concern :

I hereby declare that neither I in my personal name or in the name of my Proprietary concern M/s. _____ which is submitting the accompanying Bid/Tender nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a Managing Partner have been placed on black list or holiday list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum & Natural Gas), except as indicated below :

(Here give particulars of blacklisting or holiday listing, and in absence thereof state "NIL")

In the case of a Partnership Firm :

We hereby declare that neither we, M/s. _____ , submitting the accompanying Bid/Tender nor any partner involved in the management of the said firm either in his individual capacity or as proprietor or managing partner of any firm or concern have or has been placed on blacklist or holiday list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum & Natural Gas), except as indicated below :

(Here give particulars of blacklisting or holiday listing and in the absence thereof state "NIL")

In the case of Company :

We hereby declare that we have not been placed on any holiday list or black list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum and Natural Gas), except as indicated below :

(Here give particulars of black listing or holiday listing and in the absence thereof state "NIL")

It is understood that if this declaration is found to be false in any particular, Indian Oil Corporation Ltd or its Administrative Ministry, shall have the right to reject my/our bid, and if the bid has resulted in a contract, the contract is liable to be terminated.

Place : Signature of Bidder: _____

Date : Name of Signatory :_____

EQUIPMENT QUESTIONNAIRE

(To be furnished with the Tender)

The tenderer shall specify in the form given below the list of equipment owned by the tenderer which shall be used for the work if awarded to the tenderer.

Type	Number	Make	Capacity	Location	Owner

Signature of Tenderer
Name and Address of
the Tenderer

EXPERIENCE QUESTIONNAIRE
(To be furnished with Tenderer)

The Tenderer has completed the following similar Construction Projects in the last five years :

Type	Owner	Value	Year completed

Signature of Tenderer
Name and Address of
the Tenderer

FORM OF TENDER

(To be filled up by the Tenderer)

For Price Bid

Serial No. **Date:**

From

_____
_____
_____

To
Indian Oil Corporation Ltd.
(Refineries/Pipelines Division)

Tender No._____

Dear Sirs,

Having examined the Tender Documents consisting of the Short Tender Notice, General Instructions to Tenderers, General Conditions of Contract, Special Instructions to Tenderers, Special Conditions of Contract, Specifications, Plans (Exhibits _____ to _____), Drawings (Exhibits _____ to _____)Time Schedule, Form of Contract, Form of Tender, Form of Schedule of Rates, and Addendum(a) to the Tender Documents, and having understood the provisions of the said Tender Documents and having thoroughly studied the requirements of Indian Oil Corporation Ltd. relative to the work tendered for in connection with the _____(Name of the Project) and having conducted a thorough study of the job site(s) involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability, the transport and communication facilities, the availability and suitability of borrow areas, the availability of land for right of way and temporary office accommodation and quarters and all other facilities and things whatsoever necessary for or relative to the formulation of the tender of the performance of work, I/we hereby submit my/our tender offer for the performance of proposed work in accordance with the terms and conditions and within the time mentioned in the Bid Documents at the rate(s) quoted by me/us in the accompanying Schedule of Rates based on the Form of Schedule(s) of Rates included within the Tender Documents and arrived at a total contract value of Rs._____ (Rupees _____ only) based on an application of the rates tendered in the accompanying Schedule(s) of Rates to the relative quantities indicated in the Form Schedule(s) of Rates forming part of the Tender Documents.

If the work or any part thereof is awarded to me/us, I/ We undertake to perform the work in accordance with the Contract Documents as defined in the Form of Contract forming part of the Tender Documents and accept the terms and conditions of Contract as laid down therein and undertake within 10 (ten) days of receipt of acceptance of Tender to pay to and/or deposit with the Accounts Officer, _____ (Name of the Refinery/Pipelines/Project) Indian Oil Corporation Ltd. (Refineries/Pipelines Division) a sum which together with the amount of earnest money deposited by me/us in terms hereof, shall make 2 ½% (two and one-half percent) of total contract value as specified in the Acceptance of Tender for the purpose of security deposit, by any one or

more of the modes of payments specified in this behalf in the General Conditions of Contract, and to commence work at each job site(s) involved within 10 (ten) days of handing over the job site or any part thereof to me/us, and to sign the formal Contract in the terms of the form of contract forming part of Tender Documents, within 10 (ten) days of receipt of Letter of Acceptance from and on behalf of Indian Oil Corporation Ltd., in this behalf failing which Indian Oil Corporation Ltd., shall be at liberty, without reference to me/us and without prejudice to any of its rights or remedies, to terminate the Contract and/or to forfeit the earnest money deposited in terms hereof.

In consideration of the sum of Rupee 1/- (Rupee one) only paid to me/us by Indian Oil Corporation Ltd., by adjustment in the price of Tender Documents, I/We further undertake to keep my/our this tender offer open for a period of not less than 4 (four) months from the scheduled date of opening of Tenders as specified in the General Instructions to Tenderer forming part of the Tender Documents.

I/We have annexed to this Bid the following documents:

(i) Schedule of Rates in the prescribed Form.

(ii) Original Power of Attorney or other proof of authority of the person who has signed the Tender OR copy of Power of Attorney or other authority duly certified by a Gazetted Officer or a Notary Public in proof of authority of the person who has signed the Tender.

I/We hereby undertake that the statements made herein/information given in the Annexures referred to above are true in all respects and that in the event of any such statement or information being found to be incorrect in any particular, the same may be construed to be a misrepresentation entitling Indian Oil Corporation Ltd. to avoid any resultant contract.

I/We further undertake as and when called upon by Indian Oil Corporation Ltd. to produce, for its inspection, original(s) of the document(s) of which copies have been annexed hereto.

(Signature(s) of the Tenderer(s))

Name & Designation of
authorised person
signing the Tender on behalf of
the Tenderer (s)
Full Name and address of the Bidder(s)

Witness :
Signature :
Name :
Occupation :

FORM OF TENDER

(To be filled up by the Tenderer)

For Commercial Bid

Serial No. **Date:**

From

_____

_____

_____

To
Indian Oil Corporation Ltd.
(Refineries/Pipelines Division)
_____Refinery/Project

Tender No. _____

Dear Sirs,

Having examined the Tender Documents consisting of the Tender Notice, General Instructions to Tenderers, General Conditions of Contract, Special Instructions to Tenderers, Special Conditions of Contract, Specifications, Plans (Exhibits _____ to _____), Drawings (Exhibits _____ to _____)Time Schedule, Form of Contract, Form of Schedule of Rates, and Addendum(a) to the Tender Documents, and having understood the provisions of the said Tender Documents and having thoroughly studied the requirements of Indian Oil Corporation Ltd. relative to the work tendered for in connection with the _____(Name of the Refinery/Project) and having conducted a thorough study of the job site(s) involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability, the transport and communication facilities, the availability and suitability of borrow areas, the availability of land for right of way and temporary office accommodation and quarters and all other facilities and things whatsoever necessary for or relative to the formulation of the tender or the performance of work, I/we hereby submit my/our tender offer for the performance of proposed work in accordance with the terms and conditions and within the time mentioned in the Tender Documents.

In consideration of the sum of Rupee 1/- (Rupee one) only paid to me/us by Indian Oil Corporation Ltd., by adjustment in the price of Tender Documents, I/We further undertake to keep my/our this tender offer open for a period of not less than 4 (four) months from the scheduled date of opening of Tenders as specified in the General Instructions to Tenderers forming part of the Tender Documents.

I/We hereby further state that I/We/None of us (in the case of partnership firm) and none of our Directors (in the case of a Company) was/were employed as Directors of Indian Oil Corporation Ltd., during the period of 2 (two) years immediately preceding the date hereof OR I/We hereby declare that I/Shri _____ _____one of our partners (in the case of partnership firm/Directors in the case of a Company) was employed as a Director in Indian Oil Corporation Ltd., during the period of 2 (two) years immediately preceding the date hereof and that I/Shri _____ have/has obtained previous permission of Indian Oil Corporation Ltd. to make this tender.
I/We have annexed to this Bid the following documents:

(i) Schedule of Rates in the prescribed form.

(ii) Original Power of Attorney or other proof of authority of the person who has signed the Tender OR copy of Power of Attorney attested by a Gazetted Officer or a Notary Public in proof of the authority of the person who has signed the Tender.

(iii) Original Income-tax Clearance Certificate OR copy of Income-Tax Clearance Certificate duly attested by a Gazetted Officer/Notary Public.

(iv) Information regarding tenderer in the form annexed to the Form of Tender.

(v) Information regarding experience of the tenderer in the performance of work of a comparable nature in the form annexed to the Form of Tender.

(vi) Information regarding construction organisation and equipment in the form annexed to the Form of Tender.

(vii) Solvency Certificate from a Nationalised/Scheduled Bank.

(viii) Set of Tender Documents, as issued duly signed.

(ix) Additional Documents as listed below.

I/We hereby undertake that the statements made herein/information given in the Annexures referred to above are true in all respects and that in the event of any such statement or information being found to be incorrect in any particular, the same may be construed to be a misrepresentation entitling Indian Oil Corporation Ltd. to avoid any resultant contract.

I/We further undertake as and when called upon by Indian Oil Corporation Ltd. to produce, for its inspection, original(s) of the document(s) of which copies have been annexed hereto.

I/We confirm having deposited Earnest Money of Rs._____ (Rupees _____) as detailed hereunder (Strike off whichever is not aplicable)

(Signature(s) of the Tenderer(s))

Name & Designation of
authorised person
signing the Tender on behalf of
the Tenderer (s)
Full Name and address of the Bidder(s)

Witness :
Signature :
Name :
Occupation :

INFORMATION ABOUT TENDERER
(To be furnished with Tender)

1. **In case of Individual**

1.1 Name of Business :
1.2 Whether his business is registered :
1.3 Date of Commencement of business :
1.4 Whether he pays Income Tax over Rs.10,000/- per year :
1.5 Whether he is a Director or is related to any Director of IOC present or retired within the past 2 years :
1.6 Permanent Account Number :
1.7 What are his profits/losses for the past 3 (three) years with a copy of Balance Sheet and Profit & Loss Account for the past 3 (three) years with a copy of the audited balance sheets and Profit & Loss account for the past 3 (three) years:
1.8 What are his concurrent job commitments :
1.9 How does he propose to finance the work if awarded to him :

2. **In case of Partnership**

2.1 Name of Partners :
2.2 Whether the partnership is registered :
2.3 Date of establishment of firm :
2.4 If each of the partner of the firm pays Income tax over Rs.10,000/- a year and if not, which of them pays the same :
2.5 Whether any partner of the firm is a Director or is related to any Director of IOC, present or retired within the past 2 years.
2.6 Permanent Account Number :
2.7 What are the firm's profits/losses for the past 3 (three) years with a copy of Balance Sheet and Profit & Loss Account for the past 3 (three) years :
2.8 What are the firm's concurrent job commitments :
2.9 How does the firm propose to finance the work if awarded to him :

3. **In case of Limited Company or Company Limited by Guarantees :**

3.1 Amount of paid up capital :
3.2 Name of Directors :
3.3 Date of Registration of Company :
3.4 Copies of the Balance Sheet of the company of the last two years:
3.5 Whether any of the Directors of the Company is a Director or is related to any Director of IOC, present or within the past 2 years;
3.6 Permanent Account Number
3.7 What are the Company's profits/losses for the past 3 (three) years with a copy of the audited Balance Sheet for the past 3 (three) years:
3.8 What are the company's concurrent job commitments:
3.9 How does the Company propose to finance the work if awarded to it:

FOOT NOTE: Reference is also invited to Clause 9.0 of General Instructions to the Tenderers forming part of GCC.

Signature of Tenderer
Name & Address of the Tenderer

FORM OF CONTRACT

THIS CONTRACT made at this _____ day of _____ 200___ BETWEEN INDIAN OIL CORPORATION LTD; a Government of Indian Undertaking registered in India under the Indian Companies Act 1956, having its registered office at G-9 , Ali Yavar Jung Marg, Bandra (East), Mumbai – 400 051 and the Headquarters of its Refineries and Pipelines Division of Indian Oil corporation Ltd. Scope Complex, Core- 2, 4th Floor, 7 Institutional Area, Lodhi Road, New Delhi-110 003 (hereinafter referred to as the "OWNER" which expression shall include its successors and assigns) of the One Part; AND _____ *carrying on business in sole proprietorship/ *carrying on business in partnership under the name and style of _____ a Company registered in India under the Indian Companies Act*, 1913/ 1956 having its registered office at _____(hereinafter referred to / as collectively referred to as the "CONTRACTOR" which expression shall include *his/ *their/ *its executors, administrators, representatives and permitted assigns/ *successors and permitted assign) of the other part:

WHEREAS
The OWNER desires to have executed the work of _____more specifically mentioned and described in the contract documents (hereinafter called the 'work' which expression shall include all amendments therein and / or modifications thereof) and has accepted the tender of the CONTRACTOR for the said work.

NOW , THEREFORE THIS CONTRACT WITNESSTH as follows:

ARTICLE – 1

CONTRACT DOCUMENTS

1.1 The following documents shall constitute the Contract Documents, namely:
(a) This Contract
(b) Tender Documents as defined in the General Instructions to Tenderers ;
(c) Letter of Acceptance of Tender along with Fax/ Telegram of Intent.

1.2 A copy of each of the Tender Documents is annexed hereto and the said copies have been collectively marked Annexure "A" while a copy of the Letter of Acceptance of Tender alongwith annexures thereto and a copy of Fax/ Telegram of Intent dated _____are annexed hereto and said copies have been collectively marked as Annexure- 'B'.

ARTICLE – 2

WORK TO BE PERFORMED

2.1 The CONTRACTOR shall perform the work upon the terms and conditions and within the item specified in the Contract documents.

ARTICLE – 3

COMPENSATION

3.1 Subject to and upon the terms and conditions contained in the Contract Documents, the OWNER shall pay CONTRACTOR compensation as specified in the Contract documents upon the satisfactory completion of the work and/ or otherwise as may be specified in the Contract documents.

ARTICLE – 4

JURISDICTION

4.1 Notwithstanding any other court or courts having jurisdiction to decide the question(s) forming the subject matter of the reference if the same had been the subject matter of a suit, any and all actions and proceedings arising out of or relative to the contract (including any arbitration in terms thereof) shall lie only in the court of competent civil jurisdiction in this behalf at _____ (where this Contract has been signed on behalf of the OWNER and only the said court(s) shall have jurisdiction to entertain and try any such action(s) and/ or proceedings (s) to the exclusion of all other Courts.

ARTICLE – 5

ENTIRE CONTRACT

5.1 The Contact Documents mentioned in Article – 1 hereof embody the entire Contract between the parties hereto, and the parties declare that in entering into this Contract they do not rely upon any previous representation, whether express or implied and whether written or oral, or any inducement, understanding or agreements of any kind not included within the Contract documents and all prior negotiations, representations, Contracts and/ or agreements and understandings relative to the work are hereby cancelled.

ARTICLE –6

NOTICES

6.1 Subject to any provisions in the Contract documents to the contrary, any notice, order or communication sought to be served by the CONTRACTOR on the OWNER with reference to the Contract shall be deemed to have been sufficiently served upon the OWNER (notwithstanding any enabling provisions under any law to the contrary) only if delivered by hand or by Registered Acknowledgment Due Post to the Engineer – in- Charge as defined in the General Conditions of Contract.

6.2 Without prejudice to any other mode of service provided for in the Contract Documents or otherwise available to the OWNER , any notice, order or other communication sought to be served by the OWNER on the CONTRACTOR with reference to the Contract, shall be deemed to have been sufficiently served if delivered by hand or through Registered Post Acknowledgement Due to the principal office of the CONTRACTOR at _____ or to the CONTRACTOR's representatives as referred to in the General Conditions of Contract forming part of the Contract Documents.

ARTICLE –7

WAIVER

7.1 No failure or delay by the OWNER in enforcing any right or remedy of the OWNER in terms of the Contract or any obligation or liability of the CONTRACTOR in terms thereof shall be deemed to be a waiver of such right, remedy, obligation or liability, as the case may be, by the OWNER and notwithstanding such failure or delay, the OWNER shall be entitled at any time to enforce such right, remedy, obligation or liability, as the case may be.

ARTICLE –8

NON-ASSIGNABILITY

The Contract and benefits and obligations thereof shall be strictly personal to the CONTRACTOR and shall not on any account be assignable or transferable by the CONTRACTOR.

*IN WITNESS WHEREOF the parties hereto have executed this Contract in duplicate the place, day and year first above written.

SIGNED AND DELIVERED
For and on behalf of
INDIAN OIL CORPORATION LTD.

by _____

In the presence of _____

1.

2.

SIGNED AND DELIVERED
For and on behalf of _____ (CONTRACTOR)

by _____
(this day of _____200__)

In the presence of

1.

2.

Note: * (Strike off whichever is not applicable)

BANK GUARANTEE IN LIEU OF EARNEST MONEY DEPOSIT

BG NO:_____
DATED :_____
VALID UPTO:_____

To,
Indian Oil Corporation Limited
(Refineries/Pipelines Division)
_____

Dear Sirs,

In consideration of Indian Oil Corporation Limited (Refineries/Pipelines Division) (hereinafter called "the Corporation" which expression shall include its successors and assigns), having agreed interalia to consider the tender of _____(Name of the Tenderer)_____having its Head Office/Registered Office at_____(Address of the Tenderer)_____ (hereinafter called the "Tenderer" which expression shall include its successors and assigns), for the work of _____ (Name of the Project/Work)____ at _____ to be awarded under Tender No._____ upon the Tenderer furnishing an undertaking from the Bank as hereinafter appearing in lieu of cash deposit of the Earnest Money.

We __(Name of the Bank)_____, a Bank constituted/Registered under the _____Act, having our Head Office/Registered Office at _____ (hereinafter called the "Bank" which expression shall include its successors and assigns), at the request of the Tenderer and with the intent to bind the Bank and its successors and assigns do hereby unconditionally and irrevocably undertake to pay the Corporation at New Delhi forthwith on first demand without protest or demur or proof or satisfaction or condition and without reference to the Tenderer, all sums payable by the Tenderer as and by way of Earnest Money to the Corporation, upto an aggregate limit of (Amount in figures and words).

AND THE BANK DOTH HEREBY FURTHER AGREES AS FOLLOWS:

1. This Guarantee/Undertaking shall be a continuing guarantee and shall remain in full force and effect for all claims or demands made by the Corporation on the Bank until the Corporation discharges this Guarantee/Undertaking subject, however, that the Corporation shall have no claims under this Guarantee/Undertaking after the midnight of _____200____ or any written extension(s) thereof.

   PROVIDED that if the aforesaid work tendered for or any part thereof shall be awarded to the Tenderer on or before the said date, whether on the basis of accompanying tender or any other basis, then the validity of this guarantee/undertaking shall stand automatically extended for all claims and demands made by the Corporation for further three months.

2. The Corporation shall have the fullest liberty without reference to the Bank and without affecting in any way the liability of the Bank under this Guarantee/Undertaking at any time and/or from time to time any wise to postpone and/or vary any of the powers, rights, and obligations exercisable by the Corporation against the Tenderer and either to enforce or to forbear from enforcing all or any of the terms and conditions of or governing the said Tender and/or any contract consequent upon any award of work or the said Earnest Money Deposit or the securities available to the Corporation or any of them and the Bank shall not be released from its liability under these Presents and the liability of the Bank hereunder shall remain in full force and effect notwithstanding any exercise by the Corporation of the liberty with reference to any or all the matters aforesaid or by reason of any other act, matter or thing whatsoever which under law relating to the sureties or otherwise which could, but for this provision have the effect of releasing the Bank from all or any of its obligations hereunder or any part thereof, and the Bank specifically waives any and all contrary rights whatsoever.

3. It shall not be necessary for the Corporation to proceed against the Tenderer before proceeding against the Bank and the Guarantee/Undertaking herein contained shall be enforceable against the Bank as principal debtor notwithstanding the existence of any other undertaking or security for any indebtedness of the Tenderer to the Corporation and notwithstanding that any such security shall at the time when claim is made against the Bank or proceedings taken against the Bank hereunder, be outstanding or unrealised.

4. The amount stated by the Corporation in any demand, claim or notice made with reference to this guarantee shall as between the Bank and the Corporation for the purpose of these Presents be conclusive of the amount payable by the Bank to the Corporation hereunder.

5. The liability of the Bank to the Corporation under this Guarantee/Undertaking shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Tenderer and the Corporation, the Tenderer and the Bank and/or the Bank and the Corporation or otherwise howsoever touching these Presents or the liability of the Tenderer to the Corporation, and notwithstanding the existence of any instructions or purported instructions by the Tenderer or any other person to the Bank not to pay or for any cause withhold or defer payment to the Corporation under these Presents, with the intent that notwithstanding the existing of such difference, dispute or instructions, the Bank shall be and remain liable to make payment to the Corporation in terms thereof.

6. This Guarantee/Undertaking shall not be determined or affected by the liquidation or winding up or dissolution or change of constitution or insolvency of the Tenderer or any change in the legal constitution of the Bank or the Corporation.

7. Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by bank.

8. Notwithstanding anything contained herein:

   (i) The Bank's liability under this guarantee/undertaking shall not exceed (Amount in figures & words);
   (ii) This guarantee/undertaking shall remain in force upto _____ and any extension(s) thereof; and
   (iii) The Bank shall be released and discharged from all liability under this guarantee/undertaking unless a written claim or demand is issued to the Bank on or before _____ or the date of expiry of any extension(s) thereof if this guarantee/undertaking has been extended.

The Bank doth hereby declare that Shri _____ who is authorised to sign this Guarantee/Undertaking on behalf of the Bank and to bind the Bank thereby.

This _____ day of_____20_____.

Yours faithfully

Signature :_____

Name & Designation:_____

Name of the Branch:_____

FORM OF BANK GUARANTEE

IN LIEU OF SECURITY DEPOSIT/INITIAL SECURITY DEPOSIT

BG NO:_____
DATED:_____
VALID UPTO:_____

To,
INDIAN OIL CORPORATION LIMITED
(Refineries/Pipelines Division)

_____

Dear Sirs,

In consideration of Indian Oil Corporation Limited (Refineries/Pipelines Division) (hereinafter called "the Corporation" which expression shall include its successors and assigns), having awarded certain work for and relative to _____ (Name of the Project/Work) to _____ _____(Name and address of the Contractor) (hereinafter called "the Contractor" which expression shall include its successors and assigns), upon certain terms and conditions inter-alia mentioned in the Corporation's Letter of Acceptance No. _____ dated _____read with the relative Tender Documents (hereinafter collectively called "the Contract", which expression shall include any formal contract entered into between the Corporation and the Contractor in supersession of the said Letter of Acceptance and all amendments and/or modifications in the contract) inclusive of the condition that the Corporation may accept a Bank Guarantee/Undertaking of a Scheduled Bank in India in lieu of Cash Deposit of the Initial Security Deposit as provided for in General Conditions of Contract forming part of the said Tender Documents:

We _____ (Name of the Bank), a body registered/constituted under the _____Act, having our Registered Office/Head Office at _____ (hereinafter called "the Bank" which expression shall include its successors and assigns), at the request of the Contractor and with the intent to bind the Bank and its successors and assigns, do hereby unconditionally and irrevocably undertake to pay to the Corporation at New Delhi forthwith on first demand without protest or demur or proof or satisfaction and without reference to this guarantee upto an aggregate limit of Rs.____ _____ (Rupees _____ only).

AND the Bank doth hereby further agrees as follows: -

i) This Guarantee/Undertaking shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Corporation upon the Bank made up to the midnight of _____ provided that the Bank shall upon the written request of the Corporation made upon the Bank at any time within 6 (six) months from the said date extend the validity of the Bank Guarantee by a further 6 (six) months so as to enable claims to be made under this Guarantee by a further 6 (six) months from the said date with the intent that the validity of this Guarantee shall automatically stand extended by a further 6 (six) months upon such request by the Corporation.

ii) The Corporation shall have the fullest liberty without reference to the Bank and without affecting in any way the liability of the Bank under this Guarantee/Undertaking, at any time and/or from time to time to amend or vary the Contract and/or any of the terms and conditions thereof or relative to the said Initial Security Deposit or to extend time for performance of the said Contract in whole or part or to postpone for any time and/or from time to time any of the obligations of the Contractor and/or the powers or remedies exercisable by the Corporation against the Contractor and either to enforce or forbear from enforcing any of the terms and conditions of or governing the said Contract or the said Initial Security Deposit or the securities available to the Corporation or any of them and the Bank shall not be released from its liability under these presents and the liability of the Bank hereunder shall remain in full force and effect notwithstanding any exercise by the Corporation of the liberty with reference to any or all the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, act or omission on the part of the Contractor or of any indulgence by the Corporation to the Contractors or of any other act,

matter or thing whatsoever which under the law relating to sureties or otherwise which could but for the provision have the effect of releasing the Bank from its liability hereunder or any part thereof and the Bank hereby specifically waives any and all contrary rights whatsoever.

iii) The obligations of the Bank to the Corporation hereunder shall be as principal to principal and shall be wholly independent of the contract and it shall not be necessary for the Corporation to proceed against the Contractor before proceeding against the Bank and the Guarantee/Undertaking herein contained shall be enforceable against the Bank notwithstanding the existence of any other Guarantee/undertaking or security for any indebtedness of the Contractor to the Corporation (including relative to the said Security Deposit) and notwithstanding that any such undertaking or security shall at the time when claim is made against the Bank or proceedings taken against the Bank hereunder, be outstanding or unrealised.

iv) The amount stated by the Corporation in any demand, claim or notice made with reference to this guarantee shall as between the Bank and the Corporation for the purpose of these presents be conclusive of the amount payable by the Bank to the Corporation hereunder.

v) The liability of the Bank to the Corporation under this Guarantee/undertaking shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Contractor and the Corporation, the Contractor and the Bank and/or the Bank and the Corporation or otherwise howsoever touching or affecting these presents for the liability of the Contractor to the Corporation, and notwithstanding the existence of any instructions or purported instructions by the Contractor or any other person to the Bank not to pay or for any cause withhold or defer payment to the Corporation under these presents, with the intent that notwithstanding the existence of such difference, dispute or instruction, the Bank shall be and remain liable to make payment to the Corporation in terms hereof.

vi) The Bank shall not revoke this undertaking during its currency except with the previous consent of the Corporation in writing and also agrees that any change in the constitution of the Contractor or the Bank or the Corporation shall not discharge the Bank's liability hereunder.

vii) Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by bank.

viii) Notwithstanding anything contained herein:

(a) The Bank's liability under this guarantee/undertaking shall not exceed (Amount in figures & words) ;

(b) This guarantee/undertaking shall remain in force upto _____ and any extension(s) thereof; and

(c) The Bank shall be released and discharged from all liability under this guarantee/undertaking unless a written claim or demand is issued to the Bank on or before _____ or the date of expiry of any extension(s) thereof if this guarantee/undertaking has been extended.

(ix) The Bank doth hereby declare that Shri_____(Name of the person signing on behalf of the Bank) who is _____ (his designation), is authorised to sign this undertaking on behalf of the Bank and to bind the Bank hereby.

Dated this _____ day of _____ 200_____.

Yours faithfully,

Signature :_____
Name & Designation:_____
Name of the Branch:_____
Dated : _____

FORM OF BANK GUARANTEE
TO COVER LUMPSUM ADVANCE (MOBILISATION)

BG NO:_____
DATED:_____
VALID UPTO_____

To,

INDIAN OIL CORPORATION LIMITED
(Refineries/ Pipelines Division)
_____

Dear Sirs,

WHEREAS Indian Oil Corporation Limited (hereinafter called "the Corporation" which expression shall include its successor and assigns) has awarded to_____(Name & Address of the Contractor) hereinafter called "the Contractor" which expression shall include its successors and assigns) the work of_____(Name of the Project/Work)_____ under and in terms of a Contract as evidenced by a Letter of Acceptance No._____ dated_____ issued by the Corporation to the Contractor read with the relevant Tender Documents (hereinafter collectively called "the Contract" which expression shall include any formal contract entered into between the Corporation and the Contractor in supersession of the said Letter of Acceptance and all amendments and/or modifications therein or in the terms of the said advance as herein stipulated) :

AND WHEREAS the Corporation has agreed to advance the Contractor, inter-alia, a sum of Rs._____ (Rupees_____ only) (hereinafter called "the said Advance"), upon the condition, inter-alia, that the said Advance together with interest thereon at the rate of _% (____percent) per annum on the amount of the said Advance for the time being outstanding shall without prejudice to any other mode of recovery available to the Corporation be recoverable by the Corporation by deduction from the gross accepted amount of any Running Account Bills and the Final Bill of the Contractor commencing from the first Running Account Bill of the Contractor, and meanwhile, the said Advance shall be secured by an undertaking from a Bank as hereinafter appearing.

We _____(Name of the Bank)_____, a body registered/constituted under the _____ Act, having Registered Office/Head Office at _____ (hereinafter called the "Bank" which expression shall include its successors and assigns), at the request of the Contractor and with the intent to bind the Bank and its successors and assigns, do hereby unconditionally and irrevocably undertake to pay the Corporation at New Delhi forthwith on first demand without protest or demur or proof or satisfaction and without reference to the Contractor, any and all amounts demanded from us by the Corporation with reference to this Undertaking upto an aggregate limit of Rs. _____ (Rupees_____ only) and interest thereon at the rate hereinabove provided.

AND the Bank doth hereby further agrees as follows : -

i) This Guarantee/Undertaking shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Corporation upon the Bank made up to the midnight of _____ provided that the Bank shall upon the written request of the Corporation made upon the Bank at any time within 6 (six) months from the said date extend the validity of the Bank Guarantee by a further 6 (six) months so as to enable claims to be made under this Guarantee by a further 6 (six) months from the said date with the intent that the validity of this Guarantee shall automatically stand extended by a further 6 (six) months upon such request by the Corporation.

ii) The Corporation shall have the fullest liberty without reference to the Bank and without affecting in any way the liability of the Bank under this guarantee/undertaking, at any time and/or from time to time to amend or vary the contract and/or any of the terms and conditions thereof or relative to the said Advance and/or to extend time for performance of the said contract in whole or part and/or payment of the said Advance in whole or part or to postpone for any time and/or from time to time any of the said obligations of the Contractor and or the rights, remedies or powers exercisable by the Corporation against the Contractor and either to enforce or forbear from enforcing any of the terms and conditions of or governing the said Contract and/or the said Advance, or the securities, available to the Corporation and the Bank shall not be released from its liability under these Presents and the liability of the Bank shall remain in full force and effect notwithstanding any exercise by the Corporation of the liberty with reference to any or all the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, act or omission on the part of the Corporation or any indulgence by the Corporation to the Contractor or of any other act, matter or thing whatsoever which under any law could (but for this provision) have the effect of releasing the Bank from its liability hereunder or any part thereof and the Bank hereby specifically waives any and all contrary rights whatsoever.

iii) The obligations of the Bank to the Corporation hereunder shall be as principal to principal and shall be wholly independent of the Contract and it shall not be necessary for the Corporation to proceed against the Contractor before proceeding against the Bank and the guarantee/undertaking herein contained shall be enforceable against the Bank as Principal debtor notwithstanding the existence of any undertaking or security for any indebtedness of the Contractor to the Corporation (including relative to the said Advance) and notwithstanding that any such undertaking or security shall at the time when claim is made against the bank or proceedings taken against the Bank hereunder, be outstanding or unrealised.

iv) As between the Bank and the Corporation for the purpose of this undertaking, the amount stated in any claim, demand or notice made by the Corporation on the Bank with reference to this undertaking shall be final and binding upon the Bank as to be the amount payable by the Bank to the Corporation hereunder.

v) The liability of the Bank to the Corporation under this undertaking shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Contractor and the Corporation, the Contractor and/or the Bank and/or the Bank and the Corporation or otherwise howsoever touching or affecting these presents or the liability of the Contractor to the Corporation, and notwithstanding the existence of any instructions or purported instructions by the Contractor or any other person to the Bank not to pay or for any cause withhold or defer payment to the Corporation under these presents, with the intent that notwithstanding the existence of such difference, dispute or instruction, the Bank shall be and remain liable to make payment to the Corporation in terms hereof.

vi) This undertaking shall not be determined or affected by any change in the constitution of the Bank or that of the Contractor or the Corporation or any irregularity in the exercise of borrowing powers by or on behalf of the Contractor.

vii) Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by bank.

viii) Notwithstanding anything contained herein:

(i) The Bank's liability under this guarantee/undertaking shall not exceed (Amount in figures & words) ;

(ii) This guarantee/undertaking shall remain in force upto _____ and any extension(s) thereof; and

(iii) The Bank shall be released and discharged from all liability under this guarantee/undertaking unless a written claim or demand is issued to the Bank on or before _____ or the date of expiry of any extension(s) thereof if this guarantee/undertaking has been extended.

ix) The Bank doth hereby declare that Shri _____ who is the _____ (designation) of the Bank is authorised to sign this undertaking on behalf of the Bank and to bind the Bank thereby.

Yours faithfully,

Signature:_____

Name:_____

Designation & Name of the Branch:_____

Dated : _____

ANNEXURES

LIST OF ANNEXURES

1) The forms enclosed herein as per the list given below are included in the tender document solely for the convenience of Bidders so as to facilitate them to furnish the information/ details/ documentation as specified in the various clauses of tender documents. If the space in any schedule or annexure thereof is insufficient, pages shall be separately added.

2) Bidders shall furnish, along with Techno-commercial part of the bid, the requisite information/ data/ detail, etc. strictly in prescribed formats wherever required by the tender documents and shall be supported by necessary documents. In case of default in this regard, the bid submitted shall be considered substantially un-responsive to the tender documents, in every respect, and shall result in summary rejection of the bid. Decision of the Owner, in this regard, shall be final & binding on the Tenderer.

3) Wherever explicitly stated or not the forms annexed hereto shall be submitted on company letter head duly signed & stamped by authorised signatory or on the non-judicial stamp paper of appropriate value duly notarised/ attested.

S.N.	Annexure No.	Description
1	Annexure-A	Form of Tender (For Commercial Bid)
2	Annexure-B	Form of Tender (For Price Bid)
3	Annexure-C	Checklist for submission of offer
4	Annexure-D	Undertaking for acceptance of tender terms & conditions
5	Annexure-E	Schedule of Exceptions & Deviations
6	Annexure-F	Declaration of Black listing/ Holiday listing
7	Annexure-G	Undertaking for non-engagement of child labour
8	Annexure-H	Declaration of relationship with Directors of IOCL
9	Annexure-I	Information About the Tenderer
10	Annexure-J	Format for giving consent and bank details
11	Annexure-K	Declaration of Applicable GST
12	Annexure-L	Format for submitting GST Registration
13	Annexure-M	Experience Questionnaire
14	Annexure-N	Performa of Indemnity Bond (For Work Completion Certificate)
15	Annexure-O	Undertaking for compliance of EPF Act 1952
16	Annexure-P	New Tax Clause in GCC for GST in service contracts/Composite contracts
17	Annexure-Q	Undertaking for Abiding by Labour Laws

Annexure-A

FORM OF TENDER (FOR COMMERCIAL BID)

Serial No.: **Date:**

From

_____

_____

To
Indian Oil Corporation Ltd.
(Pipelines Division)
Guwahati Siliguri Pipeline,
Noonmati, Guwahati-781020 (Assam)

Tender No. GSPL/GHY/TS/2018-19/16

Dear Sir,

Having examined the Tender Documents consisting of the Tender Notice, General Instructions to Tenderers, General Conditions of Contract, Special Instructions to Tenderers, Special Conditions of Contract, Technical Specifications, Plans (Exhibits _____to_____), Drawings (Exhibits _____to_____), Time Schedule, Form of Contract, Form of Schedule of Rates, and Corrigendum(s)/ Addendum(s) to the Tender Documents, and having understood the provisions of the said Tender Documents and having thoroughly studied the requirements of Indian Oil Corporation Ltd. relative to the work tendered for in connection with the **"Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector"** and having conducted a thorough study of the job site(s) involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability, the transport and communication facilities, the availability and suitability of borrow areas, the availability of land for right of way and temporary office accommodation and quarters and all other facilities and things whatsoever necessary for or relative to the formulation of the tender or the performance of work, I/we hereby submit my/our tender offer for the performance of proposed work in accordance with the terms and conditions and within the time mentioned in the Tender Documents.

In consideration of the sum of Rupee 1/- (Rupee one only) paid to me/us by Indian Oil Corporation Ltd., by adjustment in the price of Tender Documents, I/We further undertake to keep my/our this tender offer open for a period of not less than 4 (Four) months from the scheduled date of opening of Tenders as specified in the General Instructions to Tenderers forming part of the Tender Documents.

I/We hereby further state that I/We/None of us (in the case of partnership firm) and none of our Directors (in the case of a Company) was/were employed as Directors of Indian Oil Corporation Ltd., during the period of 2 (Two) years immediately preceding the date hereof OR I/We hereby declare that I/Shri _____ one of our partners (in the case of partnership firm/Directors in the case of a Company) was employed as a Director in Indian Oil Corporation Ltd., during the period of 2 (Two) years immediately preceding the date hereof and that Indian Oil Corporation General Conditions of Contract.

I/Shri _____have/has obtained previous permission of Indian Oil Corporation Ltd. to make this tender.

I/We have annexed to this Bid the following documents:

(i) Schedule of Rates in the prescribed form.

(ii) Original Power of Attorney or other proof of authority of the person who has signed the Tender OR copy of Power of Attorney attested by a Gazetted Officer or a Notary Public in proof of the authority

of the person who has signed the Tender.

(iii) Information regarding Tenderer in the form annexed to the Form of Tender.

(iv) Information regarding experience of the Tenderer in the performance of work of a comparable nature in the form annexed to the Form of Tender.

(v) Information regarding construction organization and equipment in the form annexed to the Form of Tender.

(vi) Set of Tender Documents, as issued duly signed.

(vii) Additional Documents as specified anywhere in the tender documents.

I/We hereby undertake that the statements made herein/information given in the Annexures referred to above are true in all respects and that in the event of any such statement or information being found to be incorrect in any particular, the same may be construed to be a misrepresentation entitling Indian Oil Corporation Ltd. to avoid any resultant contract.

I/We further undertake as and when called upon by Indian Oil Corporation Ltd. to produce, for its inspection, original(s) of the document(s) of which copies have been annexed hereto.

I/We confirm having deposited Earnest Money of **Rs.** _____ **(Rupees** _____ **only) through online banking.**

Dated this ..... day of ..... 2018 .

Signature(s) of the Tenderer(s)

Name & Designation of authorized person signing the Tender on behalf of the Tenderer(s)

Full Name and address of the Tenderer(s):

Witness:

Signature:

Name:

Occupation:

Annexure-B

FORM OF TENDER (FOR PRICE BID)

Serial No. **Date:**

From

_____

_____

To
Indian Oil Corporation Ltd.
Pipelines Division
Guwahati Siliguri Pipeline
Noonmati, Guwahati-781020 (Assam)

Tender No. GSPL/GHY/TS/2018-19/16

Dear Sir,

Having examined the Tender Documents consisting of the Short Tender Notice, General Instructions to Tenderers, General Conditions of Contract, Special Instructions to Tenderers, Special Conditions of Contract, Specifications, Plans (Exhibits _____ to _____), Drawings (Exhibits _____ to _____), Time Schedule, Form of Contract, Form of Tender, Form of Schedule of Rates, and Addendum(a) to the Tender Documents, and having understood the provisions of the said Tender Documents and having thoroughly studied the requirements of Indian Oil Corporation Ltd. relative to the work tendered for in connection with **"Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector"** and having conducted a thorough study of the job site(s) involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability, the transport and communication facilities, the availability and suitability of borrow areas, the availability of land for right of way and temporary office accommodation and quarters and all other facilities and things whatsoever necessary for or relative to the formulation of the tender for the performance of work, I/we hereby submit my/our tender offer for the performance of proposed work in accordance with the terms and conditions and within the time mentioned in the Bid Documents at the rate(s) quoted by me/us in the accompanying Schedule of Rates based on the Form of Schedule(s) of Rates included within the Tender Documents and arrived at a total contract value of Rs (**as indicated in the price bid)** based on an application of the rates tendered in the accompanying Schedule(s) of Rates to the relative quantities indicated in the Form of Schedule(s) of Rates forming part of the Tender Documents.

If the work or any part thereof is awarded to me/us, I/ We undertake to perform the work in accordance with the Contract Documents as defined in the Form of Contract forming part of the Tender Documents and accept the terms and conditions of Contract as laid down therein and undertake within 10 (ten) days of receipt of acceptance of Tender to pay to and/or deposit with the **Accounts Officer, GSPL Guwahati, Indian Oil Corporation Ltd. (Pipelines Division)** a sum which together with the amount of earnest money deposited by me/us in terms hereof, shall make 2½% (two and one-half percent) of total contract value as specified in the Acceptance of Tender for the purpose of security deposit, by any one or more of the modes of payments specified in this behalf in the General Conditions of Contract, and to commence work at each job site(s) involved within 10 (ten) days of handing over the job site or any part thereof to me/us, and to sign the formal Contract in the terms of the form of contract forming part of Tender Documents, within 10 (ten) days of receipt of Letter of Acceptance from and on behalf of Indian Oil Corporation Ltd., in this behalf failing

which Indian Oil Corporation Ltd., shall be at liberty, without reference to me/us and without prejudice to any of its rights or remedies, to terminate the Contract and/or to forfeit the earnest money deposited in terms hereof.

In consideration of the sum of Rupee 1/- (Rupee one only) paid to me/us by Indian Oil Corporation Ltd., by adjustment in the price of Tender Documents, I/We further undertake to keep my/our this tender offer open for a period of not less than 4 (four) months from the scheduled date of opening of Tenders as specified in the General Instructions to Tenderer forming part of the Tender Documents.

I/We have annexed to this Bid the following documents:

(i) Schedule of Rates in the prescribed Form.

(ii) Original Power of Attorney or other proof of authority of the person who has signed the Tender OR copy of Power of Attorney or other authority duly certified by a Gazetted Officer or a Notary Public in proof of authority of the person who has signed the Tender.

I/We hereby undertake that the statements made herein/information given in the Annexures referred to above are true in all respects and that in the event of any such statement or information being found to be incorrect in any particular, the same may be construed to be a misrepresentation entitling Indian Oil Corporation Limited to avoid any resultant contract.

I/We further undertake as and when called upon by Indian Oil Corporation Ltd. to produce, for its inspection, original(s) of the document(s) of which copies have been annexed hereto.

Signature(s) of the Tenderer(s)

Name & Designation of authorized person signing the Tender on behalf of the Tenderer (s)

Full Name and address of the Tenderer(s):

Witness:

Signature:

Name:

Occupation:

Annexure-C

CHECK LIST FOR SUBMISSION OF OFFER

Bidders are requested to upload this check list on e-tender portal duly filled. It shall also be ensured that all the details and copies of all the relevant documents mentioned below must be uploaded on e-tender portal.

Name of the Bidder: _____

IOCL Vendor Code (If Available): _____

Address for Correspondence: _____

_____

Telephone No.: _____

Mobile No.: _____

Fax No.: _____

Email Address:

(In case of any change in the above details, same may please be communicated to this office)

S. N.	DESCRIPTION	DETAILS
1	Earnest Money Deposit (EMD) The scanned copy of the e-payment slip shall be uploaded	**E payment Slip No:** _____ **Dated:** _____ **Amount:** _____ **Name & Address of Issuing Bank:** _____
2	**Are you registered under Micro, Small or Medium enterprise Development Act 2006 and claiming exemption from payment of EMD? If yes, Copy of registration certificate scanned & uploaded.**	**Yes / No** **Submitted/ Not Submitted/ Not Applicable**
3	Validity of offer is up to 120 (One Hundred Twenty) days from the date of opening of **Part-I: Techno-commercial Bid.**	**Yes/ No** **If no, valid up to:** _____
4	Confirm that you have quoted for complete scope of work, supply, services and as per terms & conditions of subject tender.	**Yes / No**
5	Is your organization Proprietary / Partnership / Private Limited Companies / Public Limited Company / Others	_____
6	Power of Attorney (If applicable)	**Submitted/ Not Submitted/ Not Applicable**
7	Partnership Deed/ Memorandum of Association/ Certificate of Incorporation/ MOU/ JV Agreement (As applicable)	**Submitted/ Not Submitted/ Not Applicable**

S. N.	DESCRIPTION	DETAILS		
8	Digitally signed Techno-commercial Volumes of tender documents along with Corrigenda/ Addenda/ Clarification(s) (If any)	**Submitted/ Not Submitted**		
9	Annual Turnover Details and Audited Balance Sheets/ Profit & Loss Account Statement/ Certificate from a practicing Chartered Accountant along with copy of Income Tax return of last three preceding financial years i.e. F.Y. 2015-16, 2016-17 & 2017-18	**Financial Year**	**Annual Turnover (Rs.)**	**Submitted/ Not Submitted**
		2015-16		**Yes/ No**
		2016-17		**Yes/ No**
		2017-18		**Yes/ No**
10	Single work order value for similar nature work along with completion certificate of executed work	**Work Order**	**Value (Rs.)**	**Submitted/ Not Submitted**
		1st WO		**Yes/ No**
		2nd WO		**Yes/ No**
		3rd WO		**Yes/ No**
11	Copy(ies) of similar nature work order(s) and completion/ experience certificate(s)	**Submitted/ Not Submitted/ Not Applicable** Copies of Work Order(s) enclosed: **Yes/ No** Completion certificate(s) enclosed: **Yes/ No**		
12	Income Tax PAN Card	**PAN No.:** _____ **Submitted/ Not Submitted/ Not Available**		
13	GST Registration Certificate	**GST Reg. No.:** _____ **Submitted/ Not Submitted/ Not Available**		
14	Provident Fund Code Allotment Letter	**PF Code No.:** _____ **Submitted/ Not Submitted/ Not Available**		
15	"Form of Tender" (**For commercial bid**) in Performa attached as **Annexure-A**	**Submitted/ Not Submitted**		
16	"Form of Tender" (**For price bid**) in Performa attached as **Annexure-B**	**Submitted/ Not Submitted**		
17	Undertaking of the Tenderer in Performa attached as **Annexure-D**	**Submitted/ Not Submitted**		
18	Confirm that you have not taken exception or proposed any deviation to any technical, commercial or contractual condition in the tender documents	**Yes/ No** **OR** Deviations have been enclosed in Performa as per **Annexure-E**: **Yes/ No**		
19	Declaration of Blacklisting/ Holiday Listing in Performa attached as **Annexure-F**	**Submitted/ Not Submitted**		
20	Undertaking for non-engagement of child labour in Performa attached as **Annexure-G**	**Submitted/ Not Submitted**		
21	Declaration of relationship with Directors of IOCL in Performa attached as **Annexure-H**	**Submitted/ Not Submitted**		

S. N.	DESCRIPTION	DETAILS
22	Information about the Tenderer in Performa attached as **Annexure-I**	**Submitted/ Not Submitted**
23	Bank details & consent to accept payment of bills through direct credit to their bank account in Performa attached as **Annexure-J**	**Submitted/ Not Submitted** **Cancelled Cheque Attached: Yes/ No**
24	Declaration of applicable GST in Performa attached as **Annexure-K**	**Submitted/ Not Submitted**
25	Details of experience of the Tenderer in execution of similar nature works duly filled in "Experience Questionnaire" (Performa attached as **Annexure-M**) along with supporting documents	**Submitted/ Not Submitted/ Not Applicable**

Date:

Place: **Seal and Signature of Tenderer**

Annexure-D

UNDERTAKING BY THE TENDERER

Name of the Work: "**Carrying out coating survey (CAT/ DCVG/ CIPL) of GSPL Mainline Pipe in Assam & West Bengal Sector**"

Tender No.: **GSPL/GHY/TS/2018-19/16**

I/ We _____ **(Name of the Tenderer)** hereby represent that we have gone through & fully understood the tender documents (including but not limited to all corrigendum/ addendum issued, if any) and the Technical Requirements specified therein. We confirm that our bid has been prepared accordingly in compliance with the requirements stipulated in the said documents and we have quoted the rates in the tender considering inter-alia the:

1. Minutes of pre-bid meeting (If conducted)
2. Price Bid (BoQ)
3. Scope of Work
4. Special Conditions of Contract
5. General Conditions of Contract
6. Technical Specifications
7. Plans & drawings
8. Corrigenda/ Addenda/ Clarification(s), If any

I/ We are submitting tender documents including all the corrigendum/ addendum issued (if any) as part of our bid duly signed and stamped on each page as a token of our acceptance of all the terms and conditions specified therein (except for the one specified in Schedule of Exceptions & Deviations as per **Annexure-E**) and shall form part of our bid. In the event of award of contract to us, all the parts shall be considered for constitution of Contract Agreement.

I/We confirm that I/We have downloaded the entire tender documents from the internet site https://iocletenders.nic.in and I/we have not tampered/ modified the tender forms in any manner and have uploaded the un-tampered documents. In case, if the same is found to be tampered/ modified, I/We understand that my / our tender will be summarily rejected and I/We am/are liable to be banned from doing business with and/or prosecuted.

Date: **Name of Tenderer(s)**

Place: **Seal and Signature of Tenderer**

Annexure-E

SCHEDULE OF EXCEPTIONS & DEVIATIONS

The Bidder may stipulate here exceptions and deviations to Bidding Document, if considered unavoidable separately for technical and commercial clauses.

Sr. No.	Bid Volume No., Chapter No., Page No. of Bid Document	Clause No.	Description of Clause	Deviation proposed by Bidder

Note:

1. Bidders to note that this Annexure has been included in the bidding document solely for the convenience of Bidders so as to facilitate them to list out the deviations/ exceptions both of technical and commercial nature from/ to the Bidding Document**.**
2. **The Owner will not recognise any deviations/ exceptions which are not listed in this format. No cognizance will be taken of any exceptions/ deviations brought out elsewhere in the bid and the same shall be treated as null & void.**
3. Any remarks/ comments to any clause may also be submitted in the above Performa.
4. **In case of no exceptions & deviations, "NIL" shall be marked by the Bidder.**

Date: **Seal and Signature of Tenderer**

Place:

Annexure-F

PROFORMA OF DECLARATION OF BLACK LISTING/ HOLIDAY LISTING

In the case of a Proprietary Concern:

I hereby declare that neither I in my personal name or in the name of my proprietary concern M/s _____ which is submitting the accompanying Bid/Tender nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a Managing Partner have been placed on black list or holiday list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum & Natural Gas), except as indicated below: **(Here give particulars of blacklisting or holiday listing, and in absence thereof state "NIL")**

1. _____
2. _____

In the case of a Partnership Firm:

We hereby declare that neither we, M/s _____, submitting the accompanying Bid/Tender nor any partner involved in the management of the said firm either in his individual capacity or as proprietor or managing partner of any firm or concern have or has been placed on blacklist or holiday list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum & Natural Gas), except as indicated below: **(Here give particulars of blacklisting or holiday listing and in the absence thereof state "NIL")**

1. _____
2. _____

In the case of Company:

We hereby declare that we have not been placed on any holiday list or black list declared by Indian Oil Corporation Ltd. or its Administrative Ministry (presently the Ministry of Petroleum and Natural Gas), except as indicated below: **(Here give particulars of black listing or holiday listing and in the absence thereof state "NIL")**

1. _____
2. _____

It is understood that if this declaration is found to be false in any particular, Indian Oil Corporation Ltd. or its Administrative Ministry, shall have the right to reject my/our bid, and if the bid has resulted in a contract, the contract is liable to be terminated.

Date: **Seal and Signature of Tenderer**

Place:

Annexure-G

UNDERTAKING FOR NON-ENGAGEMENT OF CHILD LABOUR

I/We hereby declare that:

a) We are committed to elimination of child labour in all its forms.

b) Neither we nor any of our nominated sub-contractor(s) are engaging Child Labour in any of our work(s) in terms of the provisions of The Child Labour (Prohibition and Regulation) Act, 1986 and other applicable laws.

c) We as well as our nominated sub-contractor(s) undertake to fully comply with provisions of The Child Labour (Prohibition and Regulation) Act, 1986 and other applicable labour laws, in case the work is awarded to us.

d) It is understood that if I/We, either before award or during execution of Contract, commit a transgression through a violation of Article b/c above or in any other form, such as to put my/our reliability or credibility in question, the Owner is entitled to disqualify us from the Tender process or terminate the Contract, if already executed or exclude me/us from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Owner. Such exclusion may be for a period of 1 year to 3 years as per the procedure prescribed in the guidelines for holiday listing of the Owner.

e) I/We accept and undertake to respect and uphold the Owner's absolute right to resort to and impose such exclusion.

Date: **Seal and Signature of Tenderer**

Place:

Annexure-H

DECLARATION OF RELATIONSHIP WITH DIRECTORS OF IOCL

The Tenderer shall declare the following information in exhaustive details:

Whether proprietor is a Director or is related to any director of IOCL at present or retired within the past two years from the due date of submission of Bids?	**Yes/ No**
Whether any partner or member of the firm is a Director or is related to any Director of IOCL at present or retired within the past two years from the due date of submission of Bids?	**Yes/ No**
Whether any of the Directors of the Company is a director or is related to any director of IOC at Present or retired within the past two years from the due date of submission of Bids?	**Yes/ No**

To view the list of present Directors of the IOCL, please "Ctrl+Click" on the link below or copy the link & paste it in your Internet browser:

http://iocl.com/Aboutus/Management.aspx

Date: **Seal and Signature of Tenderer**

Place:

Annexure-I

INFORMATION ABOUT THE TENDERER

1. **IN CASE OF INDIVIDUAL:**

1.1 Name of Business:
1.2 Whether his business is registered:
1.3 Date of Commencement of business:
1.4 Whether he pays Income Tax over Rs.10,000/- per year:
1.5 Whether he is a Director or is related to any Director of IOC present or retired within the past 2 years:
1.6 Permanent Account Number:
1.7 What are his profits/losses for the past 3 (Three) years with a copy of Balance Sheets and Profit & Loss Account for the past 3 (Three) years:
1.8 What are his concurrent job commitments:
1.9 How does he propose to finance the work if awarded to him

2. **IN CASE OF PARTNERSHIP:**

2.1 Name of Partners:
2.2 Whether partnership is registered:
2.3 Date of establishment of firm:
2.4 Whether each of the partner of the firm pays Income Tax over Rs.10,000/- per year and if not, which of them pays the same:
2.5 Whether any partner of the firm is a Director or is related to any Director of IOC present or retired within the past 2 years:
2.6 Permanent Account Number:
2.7 What are the firm's profits/losses for the past 3 (Three) years with a copy of audited Balance Sheets and Profit & Loss Account for the past 3 (Three) years:
2.8 What are the firm's concurrent job commitments:
2.9 How does the firm propose to finance the work if awarded to them:

3. **IN CASE OF LIMITED COMPANY OR COMPANY LIMITED BY GUARANTEES:**

3.1 Amount of paid up capital:
3.2 Name of Directors:
3.3 Date of Registration of Company:
3.4 Copies of the audited Balance Sheet of company of the last 3 (Three) years:
3.5 Whether any of the Directors of the company is a Director or is related to any Director of IOC present or retired within the past 2 years:
3.6 Permanent Account Number:
3.7 What are the company's profits/losses for the past 3 (Three) years with a copy of audited Balance Sheets for the past 3 (Three) years:
3.8 What are the company's concurrent job commitments:
3.9 How does the company propose to finance the work if awarded to it:

Date: **Seal and Signature of Tenderer**

Place:

Annexure-J

FORMAT FOR GIVING CONSENT & BANK DETAILS

Date:

To,
M/s. Indian Oil Corporation Limited,
(Pipelines Division)
Guwahati Siliguri Pipeline,
Sector 3, Noonmati
Guwahati,
Distt. Kamrup Metro- 781020 (ASSAM)

Dear Sir,

With reference to subject tender enquiry no. **GSPL/GHY/TS/2018-19/16**, we hereby give our consent to accept the related payments of our claims/ bills on IOCL through Internet based online e-payments system at the sole discretion of IOCL. Our Bank account details for the said purpose are as under:

1	Name and address of the Beneficiary	
2	Account Number of Beneficiary	
3	Account Classification (CA/ CC-11 or 29) & SB-10 as per Cheque leaf	
4	Name and address of the Bank Branch (where payments are to be sent by IOCL)	
5	Branch Name/ Code	
6	The 9 Digit MICR code of the Branch (as appearing on the MICR Cheque) *	
7	IFSC Code of the Bank Branch for RTGS mode	
8	IFSC Code of the Bank Branch for NEFT mode	
9	E mail ID of Beneficiary for advice of payment by Bank	
10	Any other Particulars (to be advised by Beneficiary for the E payments purposes)	
11	PAN No.	
12	Name in PAN	
13	Legal Status of PAN holder**	
14	Vendor Code (to be filled by IOC's Dept only)	
15	Mobile Number (For SMS Alerts)	

(*Please attach one cheque/ photocopy of cheque duly cancelled to enable us to verify the details mentioned above.)

Continued to next page.....

We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the company responsible.

Date:
Place:

Signature of Account Holder
with Company Stamp (if a Company)

BANK CERTIFICATE

We certify that _____ has a account no. _____ with us and we confirm that the details given above are correct as per our records.

Date:

Place:

(Authorised Official of Bank)

**Note: Legal status of the PAN holder to be selected suitably from the following table:*

Legal Status (4th & 5th Letter of PAN)	Description
AJ	Artificial Juridical Person
AP	Association of Persons (AOP)
BI	Body of Individuals
CB	Banks
CD	Domestic Company
CP	PSU's other than Bank
FE	Foreign Entity
GO	Government
HU	HUF (Hindu Undivided Family)
LA	Local Authority
PF	Partnership Firm
PI	Individual
PP	Proprietorship Entity
TT	Trust

Annexure-K

Declaration of Good & Service Tax claimed

Bidders to note that the prices quoted for the subject work shall be **exclusive of the applicable Goods & Services Tax**.

Tender No.: GSPL/GHY/TS/2018-19/16		
Name of Bidder:		
GSTIN Registration No.:		
Item as per SOR / BOQ	**Applicable rate of Goods & Services Tax**	**In case the Bidder will charge different Goods & Services Tax rate, the same to be indicated here**
All items of SOR	**18%**	

Note: In case the bidder seeks any deviation w. r. t. GST rate as pre-determined by IOCL, Bidder should provide the details with proper justification.

Date:

Place:

Seal and Signature of Tenderer

Annexure-L

FORMAT FOR SUBMISSION OF GST REGISTRATION

(to be submitted on vendors letter head along with copy of GST registration)

Vendor Code	Vendor Name	Email - ID	Mobile No	GST Registration No. (State Wise)

Seal and Signature of Tenderer

Annexure-M

EXPERIENCE QUESTIONNAIRE

Details of similar nature of works executed during last 05 (five) preceding years ending on the start date for download of this tender:

Sr. No.	Details of Work executed	Name & Address of client with Phone Number	Contract Value W.O. ref. & date	Date of commencement	Schedule date of completion	Actual date of completion	Remarks if any

Note: Please attach supporting documents in form of work order(s) with satisfactory completion/ execution/ experience certificate issued by the client.

Date:

Place:

Seal and Signature of Tenderer

Annexure-N

PROFORMA OF INDEMNITY BOND TO BE SUBMITTED BY CONTRACTOR ALONG WITH REQUEST FOR ISSUANCE OF COMPLETION CERTIFICATE

This indemnity bond is executed on this _____ at _____ by _____ hereinafter referred to as 'Indemnifier' which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, authorized representatives and assignees, having its address at_____.

In favour of

Indian Oil Corporation Limited (hereinafter referred to as 'Indemnified') which expression shall, unless repugnant to the context include its successors and assignees, having its Corporate Office at 3079/3, J. B. Tito Marg, Sadiq Nagar, New Delhi – 110049.

WHEREAS; the Indemnifier has been awarded the contract of _____ vide _____ (Hereinafter referred to as Contract)

WHEREAS; the Indemnifier declares that the work was completed on _____

WHEREAS; the Indemnifier under the contract, is inter alia bound by Clause 5.5.2.0 of the General Conditions of Contract forming the part of contract signed by him with the Indemnified.

WHEREAS; Indemnifier, in pursuant to Clause 5.5.2.0 (ix) of the General Conditions of Contract, declares that he has cleared all dues, in totality of the following:

1. Labour/ Piece Rate Workers
2. Sub – contractors
3. Suppliers
4. Vendors
5. Income Tax
6. Sales Tax
7. Octroi and Service Tax
8. Excise and Customs
9. Provident Fund
10. ESI and Royalties

AND WHEREAS the indemnifier has applied for issuance of completion certificate along with all the documents required under Clause 5.5.2.0 of General Conditions of Contract.

NOW THIS INDENTURE WITNESSETH that in the event the Completion Certificate is issued by the Indemnified to the Indemnifier.

Then, the Indemnifier shall and will keep the said Indemnified fully and effectively and irrevocably indemnified from and against all claims, demands, actions, suits and/or proceedings that maybe made or taken by any person, body or authority claiming any interest whatsoever in respect of the amount which has to be paid to the Indemnifier.

Further, the said Indemnifier shall and will keep the said Indemnified fully and effectively and irrevocably indemnified from and against all claims, demands, actions, suits and/or proceedings that may be made or taken by any Third party such as any person, body or authority claiming any amount or interest either against the indemnified directly or indirectly on account of the third party claiming to have remained unpaid by the

indemnifier for any work whatsoever undertaken by such third party upon instructions from the Indemnifier.

Further, the said Indemnifier shall and will keep the Indemnified fully and effectively and irrevocably indemnified from and against all loss or damage that may be to and or costs, charges, claims or expenses that may be suffered or incurred by the said Indemnified on account of any of the declarations as given by the Indemnifier (in terms of Clause 5.5.2.0 (ix) of General Conditions of Contract) being untrue in totality or in part thereof:

It is expressly agreed that this indemnity is independent of any other indemnity, guarantee, etc. provided by the Indemnifier otherwise under the Contract.

Shri _____ who has signed this indemnity bond is duly authorised to sign this indemnity bond and to confer the authorities herein conferred for and on behalf of the Contractor.

Signed By:

(Indemnifier Name)
Authorized
Representative

Place:

Date:

WITNESSES:

_____

_____

Note:

This indemnity bond is to be stamped for the aggregate value of stamp duty payable on an indemnity bond in the State in which it is executed.

This indemnity bond is to be signed on behalf of the Contractor by a Director or other officer either authorized by the Board to execute this indemnity bond or generally authorized to execute contracts and powers of attorney on behalf of the Contractor.

The signature of this indemnity bond is to be Notary Attested.

Annexure-O

UNDERTAKING FOR COMPLIANCE OF EPF ACT 1952.

"I/We do hereby agree to submit PF code no. or sign an indemnity bond/undertaking for compliance with EPF act 1952 in the prescribed format along with the acceptance of work order if the contract is awarded to me/us failing which the work order will be liable for cancellation."

(SEAL & SIGNATURE OF TENDERER)

Annexure –P

New Tax Clause in GCC for GST in service contracts/Composite contracts

Notwithstanding anything to the contrary elsewhere provided in these General Conditions of Contract:

(i) The vendor will be under the obligation for invoicing correct rate of tax/duties as prescribed under the GST law to IOCL, and pass on the benefits, if any, after availing input tax credit, in calculating the revised price for settlement due to impact of GST.

(ii) Any invoice issued on introduction of GST Law shall contain the following particulars

(a) Name, address and GSTIN of the supplier of service;
(b) A consecutive serial number of the invoice;
(c) Date of issue;
(d) Name, address and GSTIN or UIN, if registered of the recipient;
(e) Name and address of the recipient and the address of the delivery, along with the State and its code,
(f) Accounting Code of services;
(g) Description of services;
(h) Total value of supply of services;
(i) Taxable value of supply of services taking into account discount or abatement if any;
(j) Rate of tax (Central Tax, State Tax, Integrated Tax (for inter-state supply), Union Territory Tax or cess);
(k) Amount of tax charged in respect of taxable services (Central Tax, State Tax, Integrated Tax (for inter-state supply),Union Territory Tax or cess);
(l) Place of supply along with the name of State, in case of supply in the course of inter-state trade or commerce;
(m) Address of the delivery where the same is different from the place of supply; (n) whether the tax is payable on Reverse Charge basis and
(o) Signature or digital signature of the supplier or his authorized representative.

(iii) In case of any advance given against any supplies contract, the supplier of the goods shall issue receipt voucher containing the following particulars-

(a)Name, address and GSTIN of the supplier;
(b) Serial number of the voucher;
(c) Date of its issue;
(d) Name, address and GSTIN or UIN if registered of the recipient;
(e) Description of goods;
(f) Amount of advance taken;
(g) Rate of tax (Central Tax, State Tax, Integrated Tax (for inter-state supply), Union Territory Tax or cess);
(h) Amount of tax charged in respect of taxable goods or services (Central Tax, State Tax, Integrated Tax (for inter-state supply), Union Territory Tax or cess);
(i) Place of supply along with the name of State and its code, in case of supply in the course of inter-state trade or commerce;
(j) Whether the tax is payable on Reverse Charge basis and
(k) Signature or digital signature of the supplier or his authorized representative.

Annexure-Q

UNDERTAKING FOR ABIDING BY LABOUR LAWS

Tender No. : GSPL/GHY/TS/2018-19/16

I/We hereby declare that:

a) We undertake to fully comply with provisions of applicable labour laws and their latest amendments, for the work awarded to us.

b) I/We shall be responsible for strict compliance of and shall ensure strict compliance by our sub-contractors, servants and agents of all laws, rules or regulations having the force of law affecting the relationship of employer and employee between I/We/sub-contractors and our respective employees and/or otherwise concerning labour, social welfare and provident fund, pension, bonus, gratuity and other benefits to employees. Without prejudice to the generality of this provision, I/We shall comply with and ensure that our sub-contractors and other agencies employed by him comply with the provisions of the Payment of Wages Act 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1961, Mines Act, 1952, Contract Labour (Abolition & Regulation) Act, 1970, Payment of Bonus Act, Gratuity Act, Factories Act and the Employees Provident Fund and Miscellaneous Provisions Act, 1952 as amended from time to time and all rules, regulations and schemes framed thereunder from time to time.

c) I/We shall ensure that wages (as per the latest guidelines) are paid by us or by our sub-contractors to our workmen/drivers directly through e-payments and proof of payment shall be submitted to EIC upon insistence.

d) We shall assure our registration under the Employees Provident Fund and Miscellaneous Provisions Act, 1952 and the Employees State Insurance Act, 1948 and we shall duly pay our contributions and our employees' contributions to the Authorities prescribed under the said Acts and any Schemes framed thereunder in respect of all labour employed by him for the execution of the contract.

Date:

Place: **Seal & Signature of Tenderer**

FORM OF SCHEDULE OF RATES

PREAMBLE TO SCHEDULE OF RATES

1. The preamble is an integral part of the Schedule of Rates and any definition and explanation given herein shall have as much force as though they are incorporated in to the description of the item themselves in the Schedule of Rates.
2. Unless otherwise specifically stated in the contract, all work under the contract shall be covered and paid for in accordance with the items and relative rates mentioned in the Schedule of Rates.
3. The description given under the items of work in the Schedule of Rates shall be deemed to include, **wherever applicable**, mobilization, labour, equipments, materials, cartage, hoisting, setting, fitting and fixing in position of all materials and equipments, disposal of waste outs and all other labour and operations necessary whether specifically stated/ implied or not, for the full and entire execution and completion of the relative works in all respects according to the Contract.
4. The description given under the items of work in the Schedule of Rates shall be deemed to include the relative provisions in the specification and other contract documents for the execution of the works in accordance therewith and as per the instructions of the Engineer-in-Charge/ Site Engineer.
5. The expression used in the Schedule of Rates are only selected abbreviations desired to give a general indication of the work covered by the item, and it is intended that each item shall encompass the entire work and operations involved in and relative to the performance of work as envisaged in terms of the contract documents and shall include all operation auxiliary, ancillary or incidental to or in connection therewith and all other matters, risks and cost whatsoever provided for under the Schedule of Rates. It is, therefore, necessary that the Contractor should read and construe the Schedule of Rates with reference to the contract document as a whole for proper description undertaking of the work (s), responsibilities, duties, obligations and liabilities covered by each item of the Schedule of Rates on the understanding that items in the Schedule of Rates cover the entire work under the contract split under different heads for the purpose of convenience in computing payment due to the Contractor and enabling the Contractor to quote.
6. Without prejudice to any other right(s), the Owner may have under the contract, the Owner reserves the right to operate any and all items of work appearing in the Schedule of Rates whether quantities are indicated or not against any particular item/ items of work.
7. The quantities in the SOR are only indicative and may increase or decrease to any level as per works requirement.
8. **The Bidder shall quote the rates in figures for various items in protected BOQ (MS Excel File) only. The Bidder shall not fill/ change/ quote against any of the items of "Form of Schedule of Rates". Any such rate quoted/ indicated anywhere in Techno-commercial Bid (Part-I) shall be ignored.**
9. **The rates quoted by the Bidder shall be inclusive of all taxes, duties, levies & cess thereon but excluding GST. The GST shall be paid extra as per provisions of SCC Clause 22.5.0 & associated sub-clauses thereof. The rates quoted by the Bidder shall be firm & not be subject to any escalation due to any change in duties & taxes (including custom duty).**

Schedule of Rates

Service Required for Plant: 9210 ,GSPL - Guwahati Siliguri Pipe

O.Lev. Sr.No.	Item No Item Description	Quantity	Unit	Rate	Amount
RFQ ITEM NO.00010 Group A- Assam Sector					
00010	Group A- Assam Sector				
00020	"Pipeline Identification and marking using suitable Pipeline Locator,measuring distances, GPS tracking, Conducting CAT, CIPS and DCVG Survey, Collection of data and compiling with respect to pipeline / ROW features/ references, calculation of %IR Loss, bell hole inspection and repair, identification of coating holidays and prioritisation as per the items below:"				
00030	Carrying out Current Attentuation Survey(CAT) at 100 M interval over the burried pipeline and measuring current loss along the mainline pipe and complete the entire work in all respect including locating the pipeline and supply of equipment, consumables, manpower, transportation including all taxes etc. in all respects as per the given specificaitons ,Procedure and directions of Site Engineer/ Engineer-in-Charge.	**235.000**	**KM**	**5,063.29** Rs.FIVE THOUSAND SIXTY-THREE & PAISE TWENTY-NINE ONLY	**1,189,873.15** Rs.ELEVEN LAC EIGHTY-NINE THOUSAND EIGHT HUNDRED SEVENTY-THREE & PAISE FIFTEEN ONLY
00040	"Conducting Direct Current Voltage Gradient Survey (DCVG) over the buried line to identify / pin point the coating defects in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications and approved procedures, identification of	**25.000**	**KM**	**4,150.13** Rs.FOUR THOUSAND ONE HUNDRED FIFTY & PAISE THIRTEEN ONLY	**103,753.25** Rs.ONE LAC THREE THOUSAND SEVEN HUNDRED FIFTY-THREE & PAISE TWENTY-FIVE ONLY

RATE NOT TO BE QUOTED HERE

O.Lev. Sr.No.	Item No Item Description	Quantity	Unit	Rate	Amount
		areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects as per directions of Site Engineer / Engineer-in-Charge. "			
00050	Conducting Close Interval ON/OFF Potential Logging (CIPL) Survey at an interval of 1 m over the buried line in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications, and approved procedures identification of areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects and directions of Site Engineer / Engineer-in-Charge.	**235.000 KM**	**3,569.48** Rs.THREE THOUSAND FIVE HUNDRED SIXTY-NINE & PAISE FORTY-EIGHT ONLY	**838,827.80** Rs.EIGHT LAC THIRTY-EIGHT THOUSAND EIGHT HUNDRED TWENTY-SEVEN & PAISE EIGHTY ONLY
00060	"Dig site verification/ Bell hole inspection by manual excavation around the pipe and exposing upto bottom of the pipeline, inspection of coating visually & through holiday detector and backfilling complete as required	**10.000 EA**	**8,318.41** Rs.EIGHT THOUSAND THREE HUNDRED EIGHTEEN & PAISE FORTY-ONE ONLY	**83,184.10** Rs.EIGHTY-THREE THOUSAND ONE HUNDRED EIGHTY-FOUR & PAISE TEN ONLY

RATE NOT TO BE QUOTED HERE

O.Lev. Sr.No.	Item No / Item Description	Quantity	Unit	Rate	Amount
	"				
00070	Repair of Coating Defects Exposed in Bell Hole Inspection using Owner Supplied Cold Applied Tape as per the detailed scope of work specified in special conditions of contract and specifications of the tender document and direction of Site Engineer/ Engineer in charge.	10.000	EA	2,028.90 Rs.TWO THOUSAND TWENTY-EIGHT & PAISE NINETY ONLY	20,289.00 Rs.TWENTY THOUSAND TWO HUNDRED EIGHTY-NINE ONLY

Total Value of item 00010 (Rs.): 2,235,927.30
Rs.TWENTY-TWO LAC THIRTY-FIVE THOUSAND NINE HUNDRED TWENTY-SEVEN & PAISE THIRTY ONLY
Service Required for Plant: 9212 ,GSPL - Madarihat

O.Lev. Sr.No.	Item No / Item Description	Quantity	Unit	Rate	Amount

RFQ ITEM NO.00020 Group B- West Bengal Sector

00010	Group B- West Bengal Sector				
00020	"Pipeline Identification and marking using suitable Pipeline Locator,measuring distances, GPS tracking, Conducting CAT, CIPS and DCVG Survey, Collection of data and compiling with respect to pipeline / ROW features/ references, calculation of %IR Loss, bell hole inspection and repair, identification of coating holidays and prioritisation as per the items below:"				
00030	Carrying out Current Attentuation Survey(CAT) at 100 M interval over the burried pipeline and measuring current loss along the mainline pipe and complete the entire work in all respect including locating the pipeline and supply of equipment, consumables, manpower, transportation including	187.000	KM	5,063.29 Rs.FIVE THOUSAND SIXTY-THREE & PAISE TWENTY-NINE ONLY	946,835.23 Rs.NINE LAC FORTY-SIX THOUSAND EIGHT HUNDRED THIRTY-FIVE & PAISE TWENTY-THREE ONLY

RATE NOT TO BE QUOTED HERE

RATE NOT TO BE QUOTED HERE

O.Lev. Sr.No.	Item No Item Description	Quantity	Unit	Rate	Amount
	all taxes etc. in all respects as per the given specificaitons ,Procedure and directions of Site Engineer/ Engineer-in-Charge.				
00040	"Conducting Direct Current Voltage Gradient Survey (DCVG) over the buried line to identify / pin point the coating defects in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications and approved procedures, identification of areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects as per directions of Site Engineer / Engineer-in-Charge. "	**19.000**	**KM**	**4,150.13** Rs.FOUR THOUSAND ONE HUNDRED FIFTY & PAISE THIRTEEN ONLY	**78,852.47** Rs.SEVENTY-EIGHT THOUSAND EIGHT HUNDRED FIFTY-TWO & PAISE FORTY-SEVEN ONLY
00050	Conducting Close Interval ON/OFF Potential Logging (CIPL) Survey at an interval of 1 m over the buried line in the right of way including the cost of all expert manpower, transportation and camping facilities etc. to their employees, materials, test instruments, equipments, consumables etc., required for the survey as per the standard specifications, and approved procedures identification of areas/locations where coating repair is required alongwith suggestion for remedial measures etc. including the submission of draft	**187.000**	**KM**	**3,569.48** Rs.THREE THOUSAND FIVE HUNDRED SIXTY-NINE & PAISE FORTY-EIGHT ONLY	**667,492.76** Rs.SIX LAC SIXTY-SEVEN THOUSAND FOUR HUNDRED NINETY-TWO & PAISE SEVENTY-SIX ONLY

O.Lev. Sr.No.	Item No Item Description	Quantity	Unit	Rate	Amount
		reports in 2 sets and incorporation of owner's comments in the draft report and final reports in 6 sets including one soft copy containing the survey results in the graphical as well as tabular forms computerised colour print and complete in all respects and directions of Site Engineer / Engineer-in-Charge.			
00060	**10.000**	**EA**	**8,318.41**	**83,184.10**	
	"Dig site verification/ Bell hole inspection by manual excavation around the pipe and exposing upto bottom of the pipeline, inspection of coating visually & through holiday detector and backfilling complete as required "			Rs.EIGHT THOUSAND THREE HUNDRED EIGHTEEN & PAISE FORTY-ONE ONLY	Rs.EIGHTY-THREE THOUSAND ONE HUNDRED EIGHTY-FOUR & PAISE TEN ONLY
00070	**10.000**	**EA**	**2,028.90**	**20,289.00**	
	Repair of Coating Defects Exposed in Bell Hole Inspection using Owner Supplied Cold Applied Tape as per the detailed scope of work specified in special conditions of contract and specifications of the tender document and direction of Site Engineer/ Engineer in charge.			Rs.TWO THOUSAND TWENTY-EIGHT & PAISE NINETY ONLY	Rs.TWENTY THOUSAND TWO HUNDRED EIGHTY-NINE ONLY

Total Value of item 00020 (Rs.): 1,796,653.56
Rs.SEVENTEEN LAC NINETY-SIX THOUSAND SIX HUNDRED FIFTY-THREE & PAISE FIFTY-SIX ONLY

Total Estimated Value(Rs.): 4,032,580.86
Rs.FORTY LAC THIRTY-TWO THOUSAND FIVE HUNDRED EIGHTY & PAISE EIGHTY-SIX ONLY

RATE NOT TO BE QUOTED HERE