



URANIUM CORPORATION OF INDIA LIMITED

(A Govt. of India Enterprise)

Tummalapalle

P.O.M.C.PALLE, VEMULA MANDAL,

YSR DISTRICT A.P.-516349 Ph.No.08588-282707/04, Fax:282704/707

E-mail: uranium_tmpl@yahoo.co.in

URANIUM ORE PROCESSING PROJECT
AT
TUMMALAPALLE, ANDHRA PRADESH

TENDER DOCUMENT

FOR

NIT NO.TMPL/CIVIL-62

**NAME OF THE WORK : Maintenance work of Tailing Dam at
Tummalapalle**

March 2014

URANIUM CORPORATION OF INDIA LIMITED

(A Govt. of India Enterprise)

TUMMALAPALLE

**PO:Mabbuchintalapalle, Mandal: Vemula,
Dist: YSR DISTRICT – 516349 A.P.**

Hyd. Office: Plot No.37, Road No.3, Sunrise Homes,
Upparpally, P.O.Hyderguda,
Ranga Reddy District, HYDERABAD - 500 048.

Head Office: P.O.Jaduguda Mines, Dist. Singhbhum (East)
JHARKHAND – 832 102.

NOTICE INVITING TENDER NO. TMPL/CIVIL –62

ITEM RATE TENDER

FOR

Maintenance work of Tailing Dam at Tummalapalle

1. Tenders to be deposited in the/at the office of Addl. Manager [Personnel], Uranium Corporation of India Ltd., Tummalapalle Project, A.P.-516349 on 16/04/2014 up to 2.30 PM.
2. Tenders shall be opened in presence of Tenderers who may like to present at 3.00 PM on 16/04/2014 at office of Addl. Manager [Personnel], Uranium Corporation of India Ltd., Tummalapalle, A.P.-516349.

Issued to : _____
(Name of the Contractor / Tenderer)

Signature of Officer
Issuing the Tender Documents : _____

Designation : _____

Date : _____

Cash Memo / Receipt No. : _____

I N D E X

SECTION	DESCRIPTION
I	Notice Inviting Tender
II	General Information
III	Conditions of Tendering
IV	Forms
V	General Conditions of Contract
V (a)	General Terms & Conditions of Contract
VI	Special Conditions of Contract
VII	Safety of Contractor's Employees
VIII	Schedule of Item with Quantities
•	Declaration Sheet

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TUMMALAPALLE

P.O - M.C.PALLE, VEMULA MANDAL, YSR DISTRICT, A.P. - 516349

Tel./Fax 08588- 282704/07, E-mail: ucil_tmpl@yahoo.co.in

NO. UCIL/TMPL/CIVIL/ 62/2014

Date: 24/03/2014

NOTICE INVITING TENDER NO. TMPL/CIVIL - 62

Sealed item rate quotations (in one original plus two sets each self contained in all respects) are invited by UCIL, Tummalapalle Project from bonafide, reliable and resourceful contractors for execution of the following work:-

Name of the work	Cost of tender document	Period of completion	Earnest Money Deposit	Date for issue of tender document	Date for submission of tender	Date of opening of tender
Maintenance work of Tailing Dam at Tummalapalle	Rs.600/-	03 (three) months	Rs.7000/-	From 26/03/2014 To 15/04/2014	16/04/2014 upto 2.30 P.M	16/04/2014 at 3.00 P.M

If, UCIL. Tummalapalle Office happens to be closed on the last date and time mentioned for any of the above events, the said event will take place on the next working day at the same time and venue.

Intending tenderers are requested to submit their application for issue of Tender documents along with tender fee of Rs.600/- (non-refundable) in cash.

Full details, terms, conditions & specification of work as well as detailed conditions of tendering shall be available in the above mentioned tender document, which can be had from the office of the Addl.Manager [Pers.], Uranium Corporation of India Ltd., Tummalapalle, A.P. during office hours on payment of cost of tender document (non – refundable) on all working days of UCIL except Sundays & Holidays between 8.30 A.M to 12.30 P.M. & 2.30 p.m. to 3.30 P.M, Telex, Telegraphic or e-mail tenders will not be entertained.

Sealed tenders will be received in the tender box kept in the office of Addl. Manager (Personnel), UCIL, Tummalapalle office at the above mentioned address and the same will be opened in the presence of tenderers who may like to be present.

Tenders received without Earnest Money deposit will be summarily rejected.

The tender document can also be downloaded from UCIL's website www.ucil.gov.in in which case the cost of tender document must be submitted along with the offer in form of DD drawn in favour of "M/s URANIUM CORPORATION OF INDIA LIMITED" payable at State Bank of India, Pulivendula (Branch Code:0989) failing which the offer will not be considered. *The Corporation reserves the right to accept or reject any or all tender(s) if necessary without assigning any reason.*

For Uranium Corporation of India Ltd.

-sd-

[A.R.De]

Chief Supdt.(Civil)

GENERAL INFORMATION AND GUIDANCE FOR CONTRACTOR

- 1.00 The information given below is only for the Tenderers guidance and shall not relieve him of the responsibility for having full detailed first hand site investigation of his own before tendering.
- 2.00 The Tenderer is required to deposit the Earnest Money at the prescribed rate in a separate envelope along with the tender document. **Tenders received without requisite Earnest Money Deposit as prescribed above, shall be summarily rejected.** No interest shall be allowed on the Earnest Money Deposit.
- Requisite EMD shall be payable **“Uranium Corporation of India Limited”** in the form of properly executed Demand Draft payable at State Bank of India, Pulivendula.
- 2.01 Rates: The tenderers are required to quote the rates in ***triplicate*** against all items of the Schedule of Quantities in words and figures clearly; failure in this respect is liable to render the tender incomplete.
- 2.02 The tenderer shall submit along with the tender a list of construction equipment and machinery in their possession and which they shall bring at site for these construction works.
- 2.03 If any clarifications regarding specifications, condition of contract etc. or schedule of quantities is required the same can be obtained by the Tenderers from the Uranium Corporation of India Limited.
- 2.04 In the event of the tender being submitted by a firm (Partnership) it must be signed separately by each member thereof, or in the event of the absence of any partner it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian partnership Act.
- 2.05 Receipts for payments made on account of a work when executed by a firm (Partnership) must also be signed by the several partners except where the contractor are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts for the firm.
- 2.06 Any person who submits a tender shall fill up the usual prescribed form stating at what rate he is willing to undertake each item of the work. The quantities shown therein are approximate only, being given as an indication of the scope of the work in accordance with the estimate of their cost, so that in the event of any increase or decrease in the quantity of any item of the work, the actual quantities executed may be paid for at the rate stated for the particular item of work, subject only to any adjustments that may be provided for in the General Conditions. It is to be clearly understood that no work will be paid for under more than one item or more than once under any item. Any individual item may vary up to any extent subject to gross variation of maximum $\pm 15\%$ (fifteen percent) of contract value. Contractor is liable to execute above variation at the same rate, terms and conditions stipulated in the contract.
- 2.07 The tenderer is required to deposit the Earnest Money at the prescribed rate in a separate envelope along with the tender document, furnishing complete details of the amount and mode of payment being made. Tenders received without requisite Earnest Money Deposit as prescribed above, shall be summarily rejected. No interest shall be allowed on the Earnest Money Deposit.

- 2.08 **Security Deposit:** The Amount of Security Deposit including the amount of Earnest Money shall be 10% of the awarded value of work.

Upon acceptance of the tender, the successful Tenderer shall within three days of the written acceptance of his tender, deposit with the Corporation the requisite amount to make the Security Deposit 5% (five percent) of the value of the works at the accepted rates. Such sum shall be deposited by the Contractor in cash/ Demand Draft payable at State Bank of India, Pulivendula.

In addition to the above, further amounts to the extent of 5% of the awarded value of the work will be deducted from the running monthly bill by way of percentage deductions; such percentage deductions shall be at 10% of the running monthly bills till the full amount of Security Deposit is released/retained by the Corporation.

- 2.09 If after the tender has been accepted, the Tenderer fails to pay the Security Deposit as specified above, after written notice to him of such acceptance, the sum deposited by him as Earnest Money may be forfeited. The Tenderer shall not be allowed to increase/withdraw his tender within **(3) Three Months** from the date of opening of the tender and if he does so the Earnest Money Deposit may be forfeited.
- 2.10 The Officer inviting tenders shall have the right to reject all or any of the tenders, and will not be bound to accept the lowest.
- 2.11 The memorandum, the form of tender and the schedule of materials to be supplied by the Corporation and their issue rates shall be filled and completed in the office of the Corporation before the tender form is issued, If a form is issued to an intending Tenderer without having been so filled in and completed, he shall request the Corporation to have this done before he complete and delivers his tender.
- 2.12 The Tenderer shall furnish satisfactory evidence that he has a true appreciation of the scope of the work, the ability and experience to perform the various classes of work involved, and that he has sufficient capital and plant to enable him to execute the same successfully and to complete it in the time named in the contract. In compliance with this, the Tenderer shall along with tender furnish, a list of major works executed by him during three previous years, the Bank with which he has dealings, the Bankers Certificate a copy of the profit and loss account and balance sheet for the year the proceeding the year in which the tender shall be submitted and Income Tax and Sales Tax Clearance Certificate, for the latest years.
- 2.13 Each of the tender documents is required to be signed by the person or persons submitted the tender in his/their handwriting in token of his/their having acquainted himself/themselves with the General Conditions of Contract, General Specifications, and Special Conditions etc. as laid down. Any tender with any of the documents not so signed will be liable to rejection.
- 2.14 The tender form must be filled in English and all entries must be made by handwritten in ink. **All the rates must be filled both in words and figures.** If any of the documents is missing or unsigned, the tender will be considered invalid. All erasures and alterations made while filling the tender must be attested by dated initials of the Tenderer. Over-writing of figures is not permitted. Failure to comply with any of these conditions will render invalid. No advice of any change in rate or conditions after the opening of the tender will be entertained.
- 2.15 Item rates should be submitted in triplicate and the copies other than original shall necessarily be Xerox/Carbon copy of the original copy duly signed by the Tenderer.

SECTION - III

CONDITIONS OF TENDERING

3.00.00 PREPARATAION OF TENDER

3.01.00 Tenderer to study

3.01.01 Before submission of the tender, the Tenderers are requested to make themselves fully conversant with the Conditions of Tendering. General Conditions, Special Conditions, Site Conditions, Specifications, Schedules, drawings and all other relevant information so that no ambiguity may arise in these respects subsequent to the submission of the tender.

3.01.02 It shall be the responsibility of the Tenderer to request for any missing document. In absence of any such request the Tenderer will be deemed to have received and read all documents.

3.01.03 The Tenderer shall submit his tender strictly in accordance with the tender specifications and terms and conditions laid down in the tender document.

Should there be any discrepancy in Or any doubt or obscurity, to the meaning of any of the clauses of the tender document, or as to anything to be done or not to be done by the accepted Tenderer or as to these instructions observed by the intending Tenderer, the Tenderer must set forth in sorting such discrepancy, doubt or obscurity, and submit the same in duplicate to Chief Supdt. (Civil),/ any authorized person in UCIL, Tummalapalle Project so as to reach him two days in advance before the date of tender opening mentioned in the NIT for such purpose. The elucidation given by the designated officer shall be final and binding on the Tenderers.

3.01.04 By submitting a tender for the work & Tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work, if so required and that the rates quoted by him in the tender will be adequate to complete the work in all respects according to the specifications, and other conditions and that he has taken into account all conditions and difficulties that may be encountered during its progress whether or not expressly provided in the tender document but necessary for the completion of assignment to the entire satisfaction of UCIL.

3.01.05 Tenderers must be submitted on the attached prescribed forms and / or copies thereof. The schedule shall be filled in, item by item, in accordance with the instructions and notes supplementary thereto.

3.02.00 SUBMISSION OF TENDER

3.02.01 Tenders to be in one part.

3.02.02 Tenders (one original plus one Xerox copy in all respects) shall be submitted duly signed by the tenderer with the seal of the firm / agency.

(a) Tenderer's covering letter.

(b) Document showing deposit of Earnest Money in original in a separate sealed cover attached with cover / envelope of technical part.

- (c) Signed NIT tender document in original along with two Xerox copies which comprise of the below.
 - Notice Inviting Tender
 - General Information
 - Forms
 - Conditions of Tendering
 - Special conditions of contract
 - Safety of Contractor's Employees
 - Drawings and documents enclosed with the specifications.
 - Price Part in Triplicate.
- (d) Certificate / proof of registration of the firm / company with the Registrar of firm / companies have to be submitted.
- (e) Other document, if any required as may be required to be submitted along with the tender in accordance with Technical specifications, Special Conditions and General Conditions of NIT Tender Documents.

3.03.0 EARNEST MONEY

- 3.03.01 The Tenderer shall submit the tender which satisfy each and every condition laid down in the notice, failing which the tender will be liable to be rejected.
- 3.03.02 The Corporation reserves to themselves the right of accepting the whole or any part of the tender and Tenderer shall be bound to perform the same at quoted rates.
- 3.03.03 Income Tax / Work contract Tax/Service Tax/Cess or any other Tax in respect of this contract, if any shall be payable by the Tenderer and the Corporation will not entertain any claim whatsoever in this respect.
- 3.03.04 **SECRECY:-** The Tenderer (Whether his tender is accepted or not) shall treat the details of the Tender specifications and other documents attached thereto, as private and confidential. The Tenderer shall take necessary steps to ensure that all persons employed in any work in connection with his tender have noticed that the Indian Atomic Energy Act.1962 (X X X I I I of 1962) applied to them and shall continue so to apply even after award of the contract (Whether his tender is accepted or not).

SECTION - IV, FORMS

4.01 **DETAILS OF CREDENTIALS/INFORMATION SHEET ABOUT THE TENDERER/CONTRACTOR**

(To be filled-in by the Tenderer/Contractor)

1. Name of the Firm/Company of the Tenderer : _____
2. Name & Address of the Chief Executive/
Chairman and Managing Director of the
firm with Telephone No. if any : _____
3. Registered Office and Address of the firm
with Telephone No. and Fax No. if any. : _____
4. Address for Correspondence/all
communication with the firm : _____

5. Name, designation, address of the person
authorized to deal with this tender/work : _____
6. Nature of the registration of the firm
Limited Co./Private Ltd./Partnership Co./
Proprietorship firm : _____
7. Registration No. with date and Registering
Authority : _____

Name of Directors / Partners	Occupation	Address

8. Address of the office/work site of the Tenderer,
nearest to the place of the Work being
tendered : _____
: _____
9. Particulars about the professional persons employed by the firm:

Name of the professional Persons & Address	Qualification	Experience in No. of years	Nature of experience	Date of Joining

4.02

FORM OF TENDER

To
 The Chairman & Managing Director,
 M/s.Uranium Corporation of India Ltd.,
 P.O.Jaduguda Mines,
 Dist. Singhbhum (East),
Jharkhand - 832 102.

Dear Sir,

With reference to the tender invited by you for _____
 _____ I/We have examined special conditions and General Conditions, Articles of Agreement, Tender Notice, Specifications and Schedule of Quantities for the above work. I/We hereby offer to execute the whole of the said works in conformity with the same Special Conditions, Articles of Agreement, General Conditions, Tender Notice, Specifications and Schedule of Quantities for the sum of Rs._____/ - (_____) at the respective rates mentioned in the Schedule of items.

I/We undertake to complete and deliver the whole lot comprised in the contract within _____
 _____ calender months from the date of commencement of work.

I/We have deposited as Earnest Money a sum of Rs._____ with _____ which amount is not to bear any interest and I/We do hereby agree that this sum shall be forfeited by me/us if the event of the Uranium Corporation of India Limited accepting my/our tender. I/We fail to execute the Contract when called upon to do so.

I/We hereby agree that unless and until a formal agreement is prepared and executed in accordance with the Articles of Agreement, this tender together with your written letter of acceptance thereof, shall constitute a binding contract between us.

I/We understand that you are not bound to accept the lowest or any tender you may receive.

Yours faithfully,
 Signature: _____

Address: _____

Name of Partners of the Firm:

1. _____
2. _____
3. _____
4. _____

ARTICLES OF AGREEMENT made at _____ this _____ day of _____ between (hereinafter referred to as the Corporation which expressions shall include its successors and assigns) of the one part and M/s. _____ (hereinafter referred to the other part of WHEREAS THE Corporation is desirous to have consultancy services for that certain _____ and has _____ accepted _____ a _____ Tender _____ submitted _____ by _____.

NOW THE AGREEMENT WITNESSETH as follows:

1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the General Conditions and Special Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement viz:
 - (a) Tender Notice No. _____ Dated _____
 - (b) The Drawings
 - (c) The Tender
 - (d) The General Conditions of Contract
 - (e) The Specifications
 - (f) The Special Conditions
 - (g) The Schedule of items.
 - (h) Design Data and Technical Specifications (if any)
 - (i) General Information and Guidance for Tenderers
 - (j) Any other document specifically mentioned herein as forming a part of the Agreement
3. In consideration of the payment to be made by the Corporation to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Corporation to execute, complete and maintain the work in conformity in all respects with provisions of the Contract.
4. The Corporation hereby covenants to pay to the Contractor in consideration of the execution; completion and maintenance of the work of contract price at the time and in the manner prescribed the contract.
5. All disputes arising out of or in anyway connected with this Agreement shall deemed to have arisen in HYDERABAD and only competent court in the District Hyderabad/Ranga Reddy shall have jurisdiction to determine the case.
6. You shall provide the guarantee in the agreement that you will be held responsible for the good conduct of labour engaged by you.
7. The several parts of this contract have been read to us and fully understood by us.

AS WITNESS OUR HAND THIS _____, signed by the said M/s Uranium Corporation of India Limited., Tummalapalle Project.

In the presence of

Executive Director (P-S)
SIGNED & DELIVERED for and
on behalf of URANIUM CORPORATION OF INDIA LTD.

1)

2)

Authorized Signatory of the party with seal

4.05

SCHEDULE - B**MATERIALS FOR ISSUE TO THE CONTRACTOR**

Sl. No.	Particulars	Rate at which material will be issued		Place of issue
		Unit	Rate (Rs.)	
1	N I L	—	—	—

N.B.: All materials shall have to be procured by the contractor at his own cost.

Signature of
Issuing Officer _____

Signature of
Contractor _____

Date : _____

Date : _____

4.07

SCHEDULE - D

Sl. No.	Category of Labour	Wage per day	Remarks
1	Unskilled Labour	Minimum wages to be paid as fixed by Asstt. Labour Commissioner (C), Hyderabad from time to time.	

Signature of Contractor: _____

Date : _____

4.08**SCHEDULE - F**REFERENCE TO GENERAL CONDITIONS OF CONTRACT

- | | |
|--|--|
| 1. Accepting Authority | : Chairman & Managing Director |
| 2. For Non schedule items Market Rate + Percentage addition to cover overhead and Profit | : Ten percent |
| 3. Retention Money | : 10 (Ten) percent |
| 4. Date of Commencement | : Within ten days from the date on which written order is issued to commence the work. |
| 5. Date of Completion | : 03(three) months from the date of commencement of work. (Date of commencement of work will be reckoned 10(ten) days after issue of written order). |
| 6. Installment after virtual completion | : <u>05 (Five)</u> Percent |
| 7. Agreed Liquidated Damage | : Up to a maximum of 10(Ten) percent of the contract sum |
| 8. Defect Liability Period | : <u>06 (six) months</u> from the date of handing over the site by Contractor after his rectifying all defects pointed out during joint inspection on virtual completion of the work. |
| 9. Insurance | : As directed |
| 10. On Account Payment | : <u>Monthly</u> |
| 11. Authority for appointing Arbitrator | : Chairman & Managing Director |

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SECTION - V, GENERAL CONDITIONS OF CONTRACT

- 5.01. "C.P.W.D. specification for works/latest IS codes" shall be followed for execution of the work.
- 5.02. **SITE INVESTIGATIONS**: The tenderers are advised to visit the site to acquaint themselves as to the nature and location of the work in general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of Labour, water, electric power and road, as also uncertainties of weather or similar physical conditions of the site, the formation and conditions of the site, the formation and conditions of the ground, the character, quality of surface and sub-surface materials to be encountered, including sub-soil water levels, the character of equipments and facilities needed, preliminary to and during the progress of the work or the cost thereof under the contract.
- 5.03. All tools/tackles/equipments (other than specified for free supply of UCIL) required for the Contractor at his own cost shall arrange execution of work. The Contractor must furnish list of equipment's owned/proposed to be deployed by him for execution of the work.
- 5.04. The Contractor has to take all precaution and make necessary arrangements for smooth and safe execution of the stretch of the construction activities during execution of the work. All related arrangements like providing barriers, danger signals, etc. as considered necessary, shall be made by the Contractor at his own cost during the entire execution of work and Contractor shall be solely and fully held responsible for resulting any untoward incident for not having taken adequate precautions for safe execution of the construction activities during and after the working hours.
- 5.05. **GOVERNMENT LABOUR ACT**: The Contractor has to follow strictly the Government Labour Act, which are and will be in force during the period of execution of work. All necessary arrangements for Labourer's Security, Insurance, will have to be made by the Contractor at his own cost.
- 5.06. **CONTRACT LABOUR ACT**: According to provision of Contract Labour (Regulation & Abolition) Act of 1970 and Contract (Regulation & Abolition) General Rules, 1971, Contractors engaging 20 or more contract labour on any day are required to obtain the license from the Regional Labour Commissioner. In the event of the breach of the aforesaid condition, the Contractor shall be open for action as deemed fit by the concerned labour authorities of the State/Central Government.
- 5.07. **Rate quoted by the Tenderer shall be inclusive of all taxes, royalty, cess etc. complete and all statutory requirements as applicable in this regard, shall have to be honored by the Contractor. Final Bill of the Contractor shall be cleared only on furnishing of necessary proof as required, for having complied with all statutory provisions in this regard.**
- 5.08. **PRICE ESCALATION**
No any escalation will be paid. Rates quoted by the contractor shall remain firm and valid till the completion of work in all respect as per terms, conditions and specification of the work.

- 5.09. Contractor must ensure that workman/staff engaged by him for execution of work are personally known to him and any misconduct on the part of labour/staff engaged, Contractor shall be held responsible.
- 5.10. If the tenders cannot be opened on the notified date and time as per the tender notice due to natural calamity, civil commotion, floods, strikes or any other unavoidable circumstances, this will be opened on a subsequent date, which shall be notified to the tenderers by the Corporation.
- 5.11. Canvassing in any form shall be prohibited and the tender shall be rejected, if the Tenderer indulges in the same.
- 5.12. All the pages of Tender documents has to be signed with seal of the firm/Agency by the Tenderer as token of acceptance of the same without which tenders are likely to be rejected.
- 5.13. Transfer of tender documents, purchased by the Tenderer to another, is not permitted and tender submitted on the tender document purchased by any other party, shall be rejected.
- 5.14. The Contractor shall execute the agreement with the Corporation in the proforma approved by the Corporation for the execution of the Work, within one month or as directed from the date of issue of letter of intent/work order on non judicial stamp paper of requisite value of Rs.100/- (Rupees one hundred only), which shall be provided by the Contractor at his own cost.
- 5.15. The Corporation may for any reason ask the Contractor to suspend the work fully or partially and the Contractor shall comply with same without having any claim whatsoever, for suspension.
- 5.16. The period of contract stipulated in the agreement for the awarded quantity may be extended for execution of the work beyond the awarded period, at the awarded rate/rates at the discretion of the Corporation. This shall however be without prejudice to the right of the Corporation to impose penalty as stipulated in General Terms and Conditions of the Contract.
- 5.17. The Corporation shall have the right to give any instruction to the Contractor necessary for the safe and orderly execution of the work and/or forthwith remedy/modify remove/stop any work matter/practice considered pre-judicial to the interest of the public for which no specific provision has been made in these terms and conditions and the Contractor shall be obliged to comply with the same without any claim for compensation for the same.
- 5.18. The Corporation shall have full right to deduct any excess payment/penalties/claims/ dues/taxes/levies etc. deductible/recoverable from the Contractor as per the terms and conditions of the contract or as provided in law from the bills or security deposit of the Contractor and/or from any amount payable to him against this contract or any other contract with the Corporation.
- 5.19. The Contractor shall not engage any person of less than 18 years of age and females as required by relevant law.

- 5.20. The Contractor shall prepare the wages sheet for his employees in duplicate. A copy shall be regularly submitted to the Engineer-in-charge.
- 5.21. In the case of any danger accident in the course of execution of the work the Contractor shall take immediate steps in his own or as directed by the Corporation or statutory authority to remove the danger and ensure safety of employees of the Contractor or Corporation.
- 5.22. In the matters not expressly provided in these terms and conditions or the matter concerning interpretation of the terms and conditions contained herein, the decision of the competent authority shall be final and binding on the Contractor.
- 5.23. The Contractor shall familiarize himself and fully comply with the provision of all the Acts./Rules/Regulations/Bye-laws and orders of the local authority/Municipality/State Govt./Central Govt. applicable to the work e.g. Mines Act, Workmen's Compensation Act, Contract Labour Act (Regulation & Abolition), etc. and shall be fully responsible and liable for due observance of the same. The Corporation shall have no responsibility/liability whatsoever on these accounts.
- 5.24. In case of all claims arising out of any dispute, reference or award, in connection with or due to non-payment/short payment by the Contractor or his employee or any accident involving the employees/equipments of the Contractor or any accident to third party or damage to its property or penalties imposed for non-compliance of any provision(s) of any act/rules/regulations/bye-laws/orders by the Contractor the Contractor shall have full responsibility and liability for the same and the Corporation shall stand fully indemnified by the Contractor against all such claims.
- 5.25. If the Corporation suffers any loss on account of suspension of production or idleness of its equipments/employees or on any other account or damage to its property due to any failure on the part of the Contractors representative/employees or from the equipments of the Contractor, the value of the same as assessed by the Corporation shall be recovered from the Contractor's bill/Security Deposit. The decision of the Corporation on this regard shall be final and binding on the Contractor.
- 5.26. The Corporation shall have the right to award damage on the Contractor subject to maximum of 10% of the value of work for any default, irregularity, breach of terms and conditions, refusal to comply/non-compliance of the instructions etc. for which no specific penal provision has been made in these terms and conditions and decision of the competent authority in this regard shall be final and binding on the Contractor. This will be in addition to the right of the Corporation to terminate the contract in the above eventualities.
- 5.27.
- (a) The Contractor shall post adequate no. of competent, experienced, skilled and disciplined persons having good antecedents for satisfactory execution of the work. A list of all such persons shall be kept in the office of the Contractor and a copy of the same be furnished to the Engineer-in-charge.
 - (b) The Contractor shall issue Identity Card/Employment Card to each employee with photograph duly attested by him which the employee shall always carry with him while on work and produce for inspection whenever required.

5.28. The Engineer-in-charge shall have the authority to ask for the immediate removal of any employees of the Contractor from the site for any reason and Contractor or his authorized representative shall be bound to comply with the instructions in this regard or else the contract may be terminated.

5.29.

- (a) In case of any accident to any employee of the Contractor arising out of any reason in the course of employment, the Contractor shall be liable to pay full compensation under the workmen's compensation Act 1923 or any amendment thereof. The Corporation shall have no responsibility whatsoever in this regard and shall stand fully indemnified by the Contractor against all claims in this regard.

The Contractor may also be called upon by the Corporation to pay funeral expenses and/or any other exgratia amount to the dependent(s) of the deceased employee as payable in the case of Company's employees.

- (b) In case of failure on the part of the Contractor to pay the said compensation/funeral expenses/ex-gratia amount the same may be paid by the Corporation and cost/charges/expenditure incurred or spent by the Corporation in this regard shall be recovered from the Contractor's bills/dues/security deposit.

5.30. The employees of the Contractor shall at no stage during the execution or after the termination of the Contractor have any claim whatsoever for employment with the Corporation and the Corporation shall have no obligation/liability whatsoever to take into employment any employees of the Contractor on any ground whatsoever.

5.31. The Contractor shall comply with the provisions of Mines Act/Regulations Rules / applicable to the work and exercise due diligence and take all steps/actions on his own or as directed by the Corporation or statutory authorities to ensure the safety of the employees/equipments deployed by him at his own cost.

5.32. The Corporation may terminate the contract by giving 30 days notice without assigning any reasons whatsoever for the same.

5.33. Without prejudice to the right of the Corporation as contained in clause - 34 above, the contract may be terminated partly or fully and security deposit forfeited at the direction of the Corporation without any notice to the Contractor in the following eventualities.

- (a) If the work is not progressing to the satisfaction of Corporation.
- (b) Pertaining to the safety or satisfactory execution of the work, breach of any terms and conditions of the contract or violation of any statutory Act / Regulations/Rules Bye-laws/orders by the Contractor.
- (c) Stoppage of work on his own accord or unsatisfactory performance by the Contractor, Assessment of the Competent Authority in this regard shall be final.
- (d) Offering or giving or agreeing to give any person in the Corporation's service or to any other persons on his behalf, or any gift or consideration or any kind of inducement or reward for doing or for bearing to do or having done or having forborne to do any act on relation to obtaining of execution of this or any other contract from the Corporation.
- (e) If the Contractor is declared insolvent or the firm/company goes into liquidation.

- (f) If the Contractor/assigns/transfer/sublets or attempts to assign/transfer/ sublet the entire work or any portion thereof.
 - (g) If it is found that the Contractor has not been complying with the rules, regulations and statutory obligations pertinent to his force. The decision of the competent authority in this regard shall be final.
 - (h) If the Contractor indulges in any corrupt practice/illegal activity/irregularity/misconduct.
 - (i) If it comes to the notice of the competent authority that the Contractor has engaged any bonded labour.
 - (j) For any other reasons which the Corporation considers prejudicial to its own interest or to the interest of the public.
- 5.34. In the event of termination of contract under clause – 35 above the Corporation shall have the right to get the balance work executed by engaging any alternative agency/agencies or incurring expenditure and recover from the Contractor the said expenses/extra expenses incurred in this regard.
- 5.35. After termination of contract the work executed by the Contractor shall be jointly measured. In case, the Contractor or his representative does not attend the joint measurement in spite of being notified in this regard, such measurement shall be carried out by the Corporation on it's own and the measurement so arrived shall be final and binding on the Contractor. The final bill shall be prepared on the basis of such measurement and payment made after affecting deductions of all penalties/recoveries etc.
- 5.36. The Contractor shall strictly comply with all the statutory guidelines of AERB, DGMS as well as directives of Safety Officer of UCIL from time to time.
- 5.37. The successful tenderers will have to release their workmen employed against this work for training under the Mines VT Rules, 1966, ISO 9000 Quality Assurance System & ISO 14000 Environmental Management System at any suitable place prescribed by the Engineer-in-charge and have to comply with any kind of orders issued by DGMS, AERB or any other statutory body at their own cost.
- 5.38. The rate quoted by the Tenderer shall be treated as complete in all respects including Tax/Duties and other levies of the Government/Local authorities. The rates quoted shall be valid for the complete duration of the contract and in no account a change in the rate will be entertained.
- 5.39. The quantum of work as stipulated in the tender and the work order should be completed within the time stipulated. For delay in completion of work the Contractor will be fully responsible and the Corporation shall have the right to get the balance work left over after expiry of the stipulated time completed through other party(s) and the expenditure involved shall be recoverable from the Contractor. In the event of failure of Contractor to carry out the work within the prescribed time and in the manner as per advise of Corporation representative the Contractor shall be responsible for the extra expenditure incurred by the Corporation who shall have the right to get the balance work done through any other party at the Contactor's risk and responsibility and cost. Such recovery shall be made by the Corporation from any payment due to the Contractor for this or other works.

- 5.40. The Contractor shall give an undertaking in writing indemnifying the Corporation against all risks and liabilities whatsoever arising out of accident etc. during the course of execution of work. Further the Contractor shall indemnify (UCIL) against payment of compensation, levies etc. arising there from, under the Central or Stage Government Rules/Orders on the subject as amended from time to time during the entire period of execution of the work and the Corporation shall have no liability/responsibility on this account.
- 5.41. Construction work shall be carried out, during two running shift i.e. 'A' & 'B', from 8.00 Hours to 16.00 Hours and 16.00 Hours to 24.00 Hours respectively. The works if necessary shall have to be carried out on Sunday/Holidays and also in 'C' shift in working days with the written permission of Engineer-in-charge.
- 5.42. Upon Contractor's request, Temporary Gate passes for each workman and staff of contractor shall be issued on submission of their proof of identity with two pass port size photographs along with copy of insurance through concerned Engineer-in-charge. Temporary Gate Pass issued for Contractor's Workmen & staff during the execution of work, shall have to be surrendered with SPF authorities on completion of work. Contractor's Supervisor shall be responsible for collecting workmen's gate pass every evening at the end of day's work, to prevent the scope of loss of Gate Pass. On completion of work, clearance certificate shall be obtained by Contractor from SPF regarding handing over of the expired as well as valid Gate Passes issued in the name of Contractor's workmen.

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URANIUM CORPORATION OF INDIA LIMITED
(A Govt. of India Enterprise)

Sunrise Homes, Hyderguda, Hyderabad – 500 048 .

V(a) **General Terms and conditions of contract**

5 (a).00 INTRODUCTION AND DEFINITIONS

5 (a).01 **Singular and Plural**

Where the context so requires, words imparting the singular only, shall also include the plural and vice versa.

5 (a).02 **Headings and Marginal Notes to Conditions**

Heading and Marginal notes to these General Conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.

5 (a).03 **Definitions**

- (a) The Owner / Corporation / Client / Company /Employer / Purchaser shall mean Uranium Corporation of India Ltd. (UCIL), having its Regd. Office at Jaduguda Mines, post office and Town – Jaduguda Mines – 832 102, in the State of Jharkhand and includes a duly authorized representative of the Corporation or any other person empowered in this behalf by the Corporation to discharge all or any of its functions.
- (b) The 'Accepting Authority' shall, mean the authority mentioned in Schedule 'F'.
- (a) The 'Contract' shall mean the notice inviting the tender, the tender and acceptance thereof and the formal agreement, if any, executed between the Corporation and the Contractor together with the documents referred to therein including these Conditions with appendices and any special conditions, the specifications, designs, drawings, schedule of quantities with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- (b) The 'Contractor' shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal representatives of such individual or persons composing such firm or company as the case may be and permitted assigns of such individual or firm or company.
- (c) The 'Contract Sum' shall means:
 - (i) In the case of Lump Sum Contracts the sum for which the tender is accepted
 - (ii) In the case of percentage Rate Contracts the estimated value of the works as mentioned in the tender adjusted by the Contractor's percentage.
 - (iii) In the case of item Rate contracts the cost of the work arrived at after multiplying of the quantities shown in Schedule of Quantities by the Item Rate quoted by the Tenderer or as finally accepted for the various items.
- (d) A 'Day' shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
 'Engineers-in-charge' shall mean the Engineering Officer appointed by the undertaking or his duly authorized representative who shall direct, supervise and be-in charge of the works for purpose of this contract.
- (e) 'Excepted Risks' are risk due to riots (otherwise than among Contractor's Employee) and civil commotion (in so far as both these are uninsurable), war (whether declare or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, damage from aircraft, acts of God, such as earthquake, lighting and unprecedented floods and other cause over which the Contractor has no control and accepted as such by the Accepting Authority.
- (f) 'Market Rate' shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed, plus the percentage mentioned in schedule 'RF' to cover all over-heads and profit.
- (g) Schedule (S) referred to in these conditions shall mean the relevant Schedule(s) annexed to the tender papers issued by the Corporation or the standard Schedule of rates prescribed by the Corporation and the amendment there to issued from time to time.

- (h) The 'Site shall mean the lands and/or other places on, under in or through which the work is to be executed under the contract including any the lands of places which may be allotted by the Corporation's or used for the purposes of the contract.
- (i) 'Temporary Works' shall mean all temporary works of every kind required in or about the execution, completion, maintenance of works.
- (j) 'Urgent Works' shall mean any urgent measures, which, in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk of accident or failure of which become necessary for security.
- (k) A "Week' shall mean seven days without regard to the number of hours worked any day in that week.
- (l) The 'Work' shall mean the works to be executed in accordance with the Contract or part(s) thereof as the case may be and shall include all extra or additional, altered or substituted works or temporary and urgent works as required for performance of the contract.

SCOPE AND PERFORMANCE

5 (a).04 Contract Documents

The Contractor shall be furnished, free of charge, two certified true copy of the contract documents except standard specifications and the Schedule of Rate and of all further drawings, which may be issued during the progress of the works. He shall keep one copy of these documents on the site in good order and the same shall at all reasonable times be available for inspection and use by the Engineer-in-charge, his representatives or by other inspecting officer.

SCOPE OF WORK

The scope of work of this tender will be generally as per specifications, working drawings. Schedule of quantities and general condition of Contract and as directed by Engineer-in-Charge on behalf of purchaser. However the major work is described as follows:-

- **Earth filling in rain cuts at downstream of the starter dam**
- **Concreting at spill way gate**
- **Cleaning of RCC Hume pipes & drain**

1. None of these documents shall be used by the Contractor for any purpose other than that of this contract.
2. The Contractor shall take necessary steps to ensure that all persons employed on any work in connection with Contract have notified that the Indian Official Secret Act 1923 (XIX of 1923) applied to them and shall continue so to apply even after the execution of such works under the contract.

5 (a).05 **Work to be carried out**

The work to be carried out under the Contract shall except as otherwise provided in these conditions, include all labour, materials, tools, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The description given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles.

5 (a).06 **Inspection of Site**

The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the quantities and nature of work and materials necessary for the completion of the works and the means of access to the Site, the accommodation he may require, availability of labour, water, electric power and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which influence or affect his tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

5 (a).07 **Sufficiency to Tender**

Description of item in the schedule of Quantities is brief and therefore, shall be read in conjunction with the relevant drawings and specifications and the Contractor's rate shall be deemed to be for such complete work unless otherwise specified by the Contractor while tendering. No claim whatsoever shall be entertained by the Corporation on account of insufficiency of any rate as quoted in the Schedule of Quantities and Rates. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender of the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion, maintenance of the works and shall also cover the cost of necessary protection, including labour, materials and equipment to ensure safety and protection against all risks, accidents compensation for injury to life and damage to property, if any, caused by the Contractor's operation's connected with the work. The rates shall be firm and shall not be subject to change due to variations during the entire period of execution of the work in cost of materials, labour conditions or any other conditions whatsoever. The rates quoted by the tenderer shall be inclusive of all taxes, duties and other statutory levies.

5 (a).08 **Discrepancies and Adjustment of Errors**

The Several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in performance to small scale drawings and figured dimensions in preference to scale and Special Conditions in preference to General Conditions.

1. If there are varying or conflicting provisions made in any one document forming part of the Contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document.

2. Any error in description quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the Execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under Contract.
3. If on check there are found to be differences between the rates given by the Contractor in words and figures or in the amount worked out by him in the Schedule of Quantities and General Summary, the same shall be adjusted in accordance with the following rules:-
 - (a) In the event of a discrepancy between description in words and figures quoted by a Tenderer, the description in words shall prevail.
 - (b) In the event of an error occurring in the amount column of Schedule of Quantities as a result of wrong extension of the unit rate and quantity the unit rate shall be regarded as firm and extension shall be amended on the basis of the rate.
 - (c) All errors in totaling in the amount column and carrying forward totals shall be corrected
 - (d) The totals of various sections of Schedule of Quantities amended shall be carried over to the General summary and the tendered sums amended accordingly. The tendered sum so allotted shall, for the purpose of the tender, be substituted for sum originally tendered and considered for acceptance instead of the original sum quoted by the Tenderer. Any rounding off of totals in various sections of Schedule of Quantities or in General summary by the Tenderer shall be ignored.

5 (a).09 **Security Deposit**

The Contractor shall permit the Corporation at the time or making any payment to him for work done under the Contract to deduct such sums as will along with the amount of the Earnest Money already deposited amount to 10% on the gross amount of bill till the sums and deducted amount to the figure shown in 9 (c) of Schedule-F.

- (a) All Compensation or other sums of money payable by the Contractor under the terms of this contract or any other contract or any other account whatsoever may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising there from or from any sums which may be due or become due to the Contractor by the Corporation on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid the Contractor shall within fourteen days of receipt of notice of demand from the Engineer-in-charge make good the deficit.
- (b) **Refund of Security Deposit:** One half of the Security Deposit refundable to the Contractor worked out on the basis of the value of work completed shall be refunded to the Contractor on the Engineer-in-charge certifying in writing that the work has been completed.
- (c) On expiry of the Defects liability period refund to Contractor the remaining portion of the Security Deposit provided the Engineer-in-charge is satisfied that there is no demand outstanding against him.

5 (a).10 **Deviation/Variation Extent & Pricing**

The Engineer-in-charge shall have power (i) to make alteration in omissions from, addition to, or substitution for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons, and the Contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-charge and such alterations, omissions, additions or substitution shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the works, shall be carried out by the Contractor on the same conditions in all respects including price on which agreed to do the main works, except as hereinafter provided. Works, which radically changes the original nature of the contract, Contractor shall nevertheless carry it out and the disagreement as to the nature of the work and the rate to be paid thereof shall be resolved in manner described hereunder.

5 (a).10.1 The time or completion of the works shall, in the event of any deviations resulting in additional cost over the Contract sum being ordered, be extended as follows if requested by the Contractor.

- (a) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original Contract Sum; pls.
- (b) 25% of the time calculated in (a) above or such further additional time as may be considered reasonable by the Engineer-in-charge.

Rates or such additional altered or substituted work shall be determined by the Engineer-in-charge as follow:-

- (i) If the rate for additional, alter or substituted item of work is specified in the Schedule of Quantities, the Contractor shall carry out the additional, altered or substituted item at the same rate. In the case of composite tenders; where two or more Schedules of Quantities may form part of the contract, the applicable rate shall be taken from the Schedule of Quantities of that particular part in which the deviation is involved, failing that at the lowest applicable rate or the same item on work in the other Schedule of Quantities.
- (ii) If the rate for any altered, additional or substituted item or work is not specified in the Schedule of Quantities the rate for that item shall be derived from the rate or the nearest similar item specified therein. In case of composite tenders where two or more Schedule of Quantities form part of the contract, the rate shall be derived of quantities from that part of the Contractor, the rate shall be derived from the nearest similar item in other Schedule of Quantities.
- (iii) If the rate from any additional, altered or substantial item of work cannot be determined in the manner specified in sub-paras (i) and (ii) above, then such item of work shall be carried out at the rate entered in the C.P.W.D. Schedule of Rates current rate then, plus/minus the percentage by which the tendered amount of work actually awarded is higher or lower than the estimated amount of the works actually awarded. (Applicable to Measurement Contracts based on item rates or Lump-sum contracts based on Bills or Quantities or percentage Rate Contracts).

- (iv) If the rate for any altered, additional or substituted item of work cannot be determined in the manner specified in sub-Para (i) to (iii) above, the Contractor shall, within 14 days of the date of receipt of the order to carry out the said work, inform the Engineer-in-charge of the rate which he proposed to claim or such item of work, supported by analysis of the rate claimed, and the Engineer-in-charge shall, within three months thereafter, after giving due consideration to the rate claimed by the Contractor, determine the rate on the basis of market rate(s). In the event of the Contractor failing to inform the Engineer-in-charge within the stipulated period of time, the rate which he proposed to claim, the rate for such item shall be determined by the Engineer-in-charge on the basis of market rate(s). For this purpose the purchase voucher etc. will be produced by the Contractor to the Engineer-in-charge.

5 (a).11 **Suspension of Works**

The Contractor shall on receipt of the order in writing off the Engineer-in-charge suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-charge may consider necessary for any of the following reasons: -

- (i) on account of any default on part of the Contractor or
- (ii) for proper execution of the works or part thereof for reasons other than the default of the Contractor, or
- (iii) for safety of the work or part thereof

5 (a).12.1 **Time and Extension for Delay**

The time allowed for execution of the works as specified in the Schedule 'F' or the extended time, in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from the date of 15th day after the date on which the Engineer-in-charge issues written orders to commence the work or from the date of handing over the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Corporation shall without prejudice to any other right or remedy be at liberty to forfeit the Earnest Money/Security Deposit absolutely.

- 5 (a).12.2 As soon as possible after the contract is concluded the Engineers-in-charge and the Contractor shall agree upon a Time bound Progress Chart. The chart shall be prepared in direct relation to the time stated in the contract documents for completion of all items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades or section of the work and may be amended as necessary by agreement between the Engineer-in-charge and the Contractor with the limitation of time imposed in contract documents, and further ensure good progress during the execution of the work. The Contractor shall in all cases in which the time allowed for any work exceeds one month (save for special jobs) complete 1/8th of the whole of work before 1/4th of the whole time allowed in the contract has elapsed: 3/8th of work before one half of such time has elapsed and 3/4th before 3/4th of such time has elapsed.

- 5 (a).12.3 If the works be delayed by

- (a) force major, or
- (b) abnormally bad weather, or

- (c) serious loss or damage by fire, or
- (d) civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work or
- (e) delay on the part of other Contractors tradesman engaged by Corporation in executing work not forming part of the Contractor.
- (f) non-availability of materials.
- (g) non-availability or break-down of Tools and plants to be supplied by Corporation, or
- (h) any other cause which in the absolute discretion of the Corporation, is beyond the Contractor's control

Upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use continuously his best endeavor to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the work.

- 5 (a).12.4 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such request the period for which extension is desired.
- 5 (a).12.5 In any such case the Corporation may give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the Contractor by the Engineer-in-charge in writing within 3 months of the date of receipt of such request by the Engineer-in-charge.
- 5 (a).13 The Contractor shall arrange at his own expenses all tools, plant and equipment (hereinafter referred to as T & P) required for execution of the work.
- 5 (a).13.1 The Contractor requires any item of T & P on hire from the Corporation, the Corporation will, if such item is available and the same can be spared, hire it to the Contractor at a rate to be fixed by the Engineer-in-charge.
- 5 (a).13.2 The period of hire will be reckoned from the commencement of the day of issue upto the end of the day of the day of return (including all recognized holidays) irrespective of the actual hour of issue and return. The Contractor will be exempt from levy of any charges for the number of days he is called upon in writing by the Engineer-in-Charge to suspend execution of the work, provided Corporation's T & P in question has, in fact, remained idle with the Contractor because of the suspension, provided the Contractor, in case the period of suspension exceeds 11 days, returns Corporation's T & P to the place from where it was issued.
- 5 (a).13.3 The Contractor shall be responsible for care and custody of Corporation's T & P (including employment of chowkidar's) during the period Corporation's T & P remain with him and any damage (fair wear and tear excepted) to any of the equipment shall be made good at the Contractor's expense to the satisfaction of Engineer-in-charge unless such damage is caused because of negligence or crew provided by the Corporation.
- 5 (a).13.4 The Corporation gives no guarantee in respect of output of his T & P hired to the Contractor and no reduction in rates or any compensation shall be allowed on the ground that the performance of Corporation's T & P was not upto Contractor's expectation.

5 (a).13.5 Corporation's T & P hired to the Contractor shall be returned at the place of issue (unless otherwise directed) by the Contractor to the Engineer-in-charge on completion of the work or section of work or earlier on termination of the hire by the Corporation. Engineer-in-charge shall be entitled to terminate the hire on two days notice without assigning any reason whatsoever and the Contractor shall have no claim to any payment of compensation or otherwise whatsoever on account of termination of hire of Corporation's T & P by the Corporation. In such an event, however, a reasonable extension of time shall be given by the Engineer-in-charge.

5 (a).13.6 A Log Book for recording hours during which every item of Corporation's T & P issued to the Contractor has worked each day shall be maintained by the member of the crew in-charge.

5 (a).14.00 **MATERIALS**

- a. The Contractor shall at his own expense, provide all materials required for the works other than those, which are to be supplied by the Corporation
- a.1. All materials to be provided by the Contractor shall be in conformity with the specifications laid down in the relevant Indian standard and the Contractor shall, if requested by the Engineer-in-charge furnish proof, to the satisfaction of the Engineer-in-charge, that the materials so comply.
- a.2 The Contractor shall, at his own expense and without delay, supply to the Engineer-in-charge samples of materials proposed to be used in the works. The Engineer-in-charge shall within seven days of supply of samples or within such further period as he may require and intimate to the Contractor in writing whether samples are approved by him or not, If sample are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-charge for his approval fresh samples complying with the specifications laid down in the Contract.
- a.3. The Engineer-in-charge shall have full powers to require removal of any or all of the materials brought to site by the Contractor which are not in accordance with the contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials the Engineer-in-charge shall be at liberty to have them removed by other means. The Engineer-in-charge shall have full powers to procure other proper materials to be substituted for rejected materials and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means. All cost, which may accrue upon such removal and/or substitution, shall be borne by the Contractor.
- a.4. The Contractor shall indemnify the Corporation servant or employee of the Corporation against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design or any alleged patent or design rights and shall pay any royalties or other charges which may be payable in respect of any article or material or part thereof included in the contract. In the event of any claim being made or action being brought against Corporation in respect of any such matters as aforesaid, the Contractor shall immediately be notified thereof.

Provided that such indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by the Corporation but the Contractor shall pay any royalties or other charges payable in respect of any such

use, the amount so paid being reimbursed to the Contractor only if the use was the result of any drawing and/or specification issued after submission of the tender.

- a.5. All charges on account of Octroi terminal or sales tax and other duties on materials obtained for the works from any source (excluding materials supplied by the Corporation) shall be borne by the Contractor.
- a.6. The Engineer-in-charge shall be entitled to have test carried out for any materials supplied by the Contractor other than these for which satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities, which the Engineer-in-charge may require for the purpose.

5 (a).15.00 **Delay in Obtaining Materials by the Corporation**

- 15.a.7. Materials to be supplied by the Corporation are shown in Schedule-B, which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof.
- 15.b.1. If after acceptance of the tender the Contractor desires the Corporation to supply any other materials, such materials may be supplied by the Corporation, if available at rates to be fixed by the Engineer-in-charge and on payment before the materials are issued to the Contractor.
- 15.b.2. For the materials listed in Schedule-B, which the Corporation has agreed to supply the Contractor, he shall give a reasonable notice in writing to his requirements to the Engineer-in-charge in accordance with the agreed phased programme. Such materials shall be set off or deducted, as and when materials are consumed in items or work for which payment is being made to the Contractor, from any sums then due or which payment is being made to the Contractor, from any sums then due or which may after become due or which may after become due to the Contractor, under the Contract. At the time of submission of bills the Contractor shall properly account for the materials issued to him to the satisfaction of the Engineer-in-charge, certify that balance of materials supplied is available at site.
- 15.b.3. The Contractor shall bear the cost of loading, transporting to site, unloading, storing under cover as required, assembling and joining the several parts together as necessary incorporating of fixing materials in the works including all preparatory work of whatsoever description as may be required.
- 15.b.4. All materials issued to the Contractor by the Corporation for incorporation or fixing in the works (including preparatory work) shall on completion or on foreclosure of the work be returned by the Contractor at his expense, at the place of issue, after making due allowance for actual consumption reasonable wear and tear and/or waste. If the Contractor is require to deliver such materials at a place other than the place of issue, he shall do so and the transportation charges from the site to such place, less the transpiration charges which would have been incurred by the Contractor had such materials been delivered at the place of issue, shall be borne by the Corporation.
- 15.b.5. Surplus materials returned by the Contractor shall be credited to him by the Engineer-in-charge at rates not exceeding these at which these were originally issued to him after taking into consideration any deterioration of damage, which may have been caused to the said materials list in the custody of the Contractor.
- 15.b.6. If on completion of works the Contractor fails to return surplus materials out of these supplied by the Corporation then in addition to any other liability which the Contractor would incur the Engineer-in-charge may, by a written notice to the Contractor require him to pay within a fortnight of receipt of the notice, for such unreturned surplus materials at double the issue rate.

- 15.b.7. Owing to difficulty in obtaining certain controlled and other materials in the market, the Corporation has undertaken to supply them as specified in Schedule-B. There may be delay in obtaining these materials by the Corporation and the Contractor is therefore, required to keep himself in touch with the day to day position regarding the supply of materials from the Engineer-in-charge and to so adjust the progress of the work that their labour may not remain idle in obtaining the materials. It should be clearly understood that no claim whatsoever shall be entertained by the Corporation on account of delay in supplying materials.

5 (a).16.00 **GENERAL**

- 16.c. Materials required for the works, whether brought by the Contractor or supplied by the Corporation, shall be stored by the Contractor only at place approved by the Engineer-in-charge. Storage and safe custody of materials shall be the responsibility of the Contractor.
- 16.c.1 Corporation's official concerned with the contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the works, either on the site or at factory or work shop or other places where such materials are assembled, fabricated, manufactured, obtained and the Contractor shall give such facilities as may be required for such inspection and examination.
- 16.c.2 Materials supplied by the Corporation and brought to the site by the Contractor shall not be removed of the site without the prior written approval of the Engineer-in-charge. But whenever the works are finally completed the Contractor shall at his own expense forthwith return the all surplus materials originally supplied to him as per stipulation in the contract.

5 (a).17.00 **LABOUR**

The Contractor shall engage labour in sufficient number to maintain the required rate or progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-in-charge. The Contractor shall not employ in connection with the works any person who has not completed eighteen years of age.

- 17.1 The Contractor shall furnish to the Engineer-in-charge at the intervals mentioned in Schedule-F a distribution return of the number and description by trades of the work people employed on the works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (i) the accident that occurred during the said fortnight showing the circumstances and or which happened and the extent of damages and injury caused by them and (ii) the number of female workers who have been allowed maternity benefit as provided in the Maternity Benefit Act 1961 or Rules made there under and the amount paid to them.
- 17.2 The Contractor shall pay to labour employed by him wages not less than fair wages as defined in the Contract Labour (Regulation & Abolition) Act, 1970 and Rules made there under.
- 17.3 The Contractor shall in respect of labour employed by him comply with or cause to be complied with the Contract Labour (Regulation & Abolition) Act, 1970 and Rules made there under in regard to all matters provided therein.
- 17.4 The Contractor shall comply with the provisions of the payment of wages Act, 1938, Workmen's Compensation Act, 1923, Industrial dispute Act, 1947, Maternity

Benefit Act, 1961 and Mines Act, 1952 or any other law relating there to and rules made there under.

- 17.4(a) The Contractor shall be liable to pay his contribution to the Employees State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "the Employee State Insurance Act, 1945" as amended from time to time and as applicable in this case. In case the Contractor fails to submit full details of his account of labour employed and the contribution payable, the Engineer-in-charge shall recover from the running bills of Contractor an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable under Employees State Insurance Scheme.
- 17.5 The Engineer-in-charge shall on a report having been made by an inspecting staff as defined under the Contract Labour ((Regulation & Abolition) Act, 1970 and Rules made there under have the power to deduct the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or deductions made from his or their wages which are not justified by the terms of the contract or nonobservance of the said Act.
- 17.6 The contractor shall indemnify the Corporation against any payment to be made under and for observance of the Contract Labour (Regulation & Abolition) Act, 1970 and Rules made there under without prejudice to his right to claim indemnity from his sub-Contractors.
- 17.7 In the event of the Contractor committing a default or breach of any of the provisions of aforesaid Acts and Rules made there under/amended from time to time or furnishing any information or submitting or filling any from/Register/Slip under the provisions of the law which is materially incorrect, then on the report of Inspecting Officer, the Contractor shall without prejudice pay to the Corporation a sum not exceeding liabilities for such defaults including liquidated damages etc., for every default, breach of furnishing, making submitting, filling materially incorrect statement as may be fixed by the labour department and the Contractor should indemnify the Corporation against all such liabilities.

5 (a).18.00 **Model Rules for Labour Welfare**

- 18.01 The Contractor shall at his own expense comply with or cause to be complied with Model Rules for labour welfare as provided under the rules framed by the appropriate Government from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid the Engineer-in-charges shall be entitled to do and recover the cost thereof from the Contractor.

Failure to comply with model rules for labour welfare, Safety code or the provisions relating to report on accident and to grant maternity benefits to female workers shall make the Contractor liable to pay to the Corporation as liquidation damages an amount not exceeding Rs.50.00 for each default or materially incorrect statement. The decision of the Engineer-in-charge in such matters based on reports from the Inspecting Officer shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

- 18.02 The Contractor shall not be permitted to enter (other than for inspection purpose) or take possession of the site until instructed to do so by the Engineer-in-charge in writing. The portion of the site to be occupied by the Contractor shall be indicated by the Engineer-in-charge at site and the Contractor shall on no account be allowed to extent his operations beyond these areas.

In respect of any land allotted to the Contractor for purposes of or in connection with the contract, the Contractor shall be a license subject to the following and such other terms and conditions as may be imposed by the licenser:-

- i) that he shall pay a nominal license fee of Rs.1.00 per year or part of a year for use and occupation, in respect of each and every separate area of land allotted to him;
- ii) that such use or occupation shall not confer any right of tenancy of the land to the Contractor;;
- iii) That the Contractor shall be liable to vacate the land on demand by the Engineer-in-charge.
- iv) That the Contractor shall have no right to any construction over this land without the written permission of the Engineer-in-charge. In case he is allowed to construct any structure he shall have to demolish and clear the same before handing over the completed work unless agreed to the Contractor.

- 18.03 The Contractor shall provide, if necessary or if required on the site, all temporary access, there to and shall alter, adapt and maintain the same as required from time to time and shall take up and clear them away as and when no longer required and as and when ordered by the Engineer-in-charge and make good all damage done to the site.

5 (a).19.00 **Setting out the works**

The Engineer-in-charge shall supply dimensioned drawings, levels and other information necessary to enable the Contractor to set out the works. The Contractor shall provide all labour and setting out the works and responsible for the accuracy of the same. He shall amend at his own cost and to the satisfaction of the Engineer-in-charge any error found at any stage, which may arise through inaccurate setting out unless such error is based on incorrect data furnished in writing by the Engineer-in-charge, in which case the cost or rectification shall be borne by the Corporation. The Contractor shall protect and preserve all bench marks used in setting out the works till end of the Defect Liability period unless the Engineer-in-charge directs their earlier removal.

5 (a).20.00 **Site Drainage**

All water, which may accumulate on the site during the progress of the works or in trenches and excavation, shall be removed from the site to the satisfaction of the Engineer-in-Charge at the Contractor's expense.

5 (a).21.00 **Contractor's supervision – Site Supervision Staff**

The Contractor shall engage and keep at site, qualified technical staff/Engineer with necessary supporting supervisory staff or sufficient experience of all types of works covered by this contract and they should have all necessary authority to receive materials from the Corporation, issue valid receipt for the same, engage labour etc. and proceed with the work as required for speedy execution of the work.

5 (a).22.00 **Duties and Powers of Engineer-in-charge's Representative**

The duties of the Representatives of the Engineer-in-charge are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with works. He shall have no authority to order any work involving any extra payment by the Corporation nor to make any variation in the works.

22.01 The Engineer-in-charge may from time to time in writing delegate to his representative any of the powers and authorities vested in the Engineer-in-charge and shall furnish to the Contractor copy of all such written delegation of powers and authorities, Any written instruction or written approval given by the Representative of the Engineer-in-charge to the Contractor within the terms of such delegation shall bind the Contractor and the Corporation as though it had been given by the Engineer-in-charge.

22.02 Failure of the Representatives of the Engineer-in-charge to disapprove any work or materials shall not prejudice the power of the Engineer-in-charge there after to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.

22.03 If the Contractor shall be dis-satisfied with any decision of the Representative of the Engineer-in-charge he shall be entitled to refer matter to the Engineer-in-charge who shall thereupon confirm, reverse or vary such decision.

5 (a).23.00 **Removal of Workmen**

The Contractor shall employ in and about the execution of the works only such persons as are skilled and experienced in their several trades and Engineer-in-charge shall be at liberty to object to and require the Contractor to remove from the works any person employed by the Contractor, in or about the execution of the work who in the opinion of the Engineer-in-charge misconducts himself or incompetent or negligent in the proper performance of his duties and such person shall not be again employed upon the works without permission of the Engineer-in-charge.

5 (a).24.00 **Working during Night or on Sundays and Holidays**

Subject to any provision to the contrary contained in the contract, none of the permanent works shall be carried out during night or on Sundays or on authorized holidays without the permission in writing of Engineer-in-charge except when the work is unavoidable or absolutely necessary for the safety of life, property of works in which case the Contractor shall immediately advise the Engineer-in-charge accordingly.

5 (a).25.00 **Completion Certificate**

25.01. As soon as the work is completed, the Contractor shall give notice of such completion to the Engineer-in-charge and within ten days of receipt of such notice the Engineer-in-charge shall inspect the work and shall furnish the Contractor with a certificate of completion indicating (a) the date of completion. (b) defects to be rectified by the Contractor and/or (c) items for which payment shall be made at reduced rates. When separate periods of completion have been specified for items or groups or items, the

Engineer-in-charge shall issue separate completion certificate for such items or groups of items. No certificate of completion shall be issued, until Contractor shall have removed from the premises on which the work has been executed all scaffolding, sheds and surplus materials except such as are required for rectification of defects, rubbish and all huts and sanitary arrangements required for his workmen on the site in connection with the execution of the work, as shall have been erected by the Contractor for the workmen and cleared all dirt from all parts of building (s) in, upon or about which work has been executed or which he may have had possession for the purpose of the execution thereof and cleaned floors, gutters and drains, cased doors and sashes, oiled locks and fastening leveled keys clearly and handed them over to the Engineer-in-charge. If the Contractor shall fail to comply with any of the requirements of this conditions as aforesaid on or before the date of completion of the works, the Engineer-in-charge may at the expense of the Contractor fulfill such requirements and dispose of the scaffolding, surplus materials except for any sum actually realized by the sale thereof less the cost of fulfilling the requirements and any other amount that may be due from the Contractor. If the expense of fulfilling such requirements is more than the amount realized or such disposal as aforesaid, the Contractor shall furnish on demand pay such excess,

25.02 If at any time before completion of the entire work, items of groups of items for which separate periods of completion have been specified, have been completed, the Engineer-in-charge with the consent of the Contractor take possession of any part or parts of same (any such part being hereinafter in this conditions referred to as the relevant part) then not with-standing anything expressed or implied elsewhere to this contract.

- (a) Within ten days of the date of completion of such items or groups of items or of possession of the relevant part the Engineer-in-charge shall issue completion certificate for the relevant part as in Condition 32 (01) above provided the Contractor fulfils his obligations under that condition for the relevant part.
- (b) The defects liability period in respect of such items and the relevant part shall be deemed to have commenced from the certified date of completion of such items or the relevant part as the case may be.
- (c) The Contractor may reduce the value insured to extent of full value of the completed items or relevant part as estimated by the Engineer-in-charge for this purpose. This estimate shall be applicable for this purpose only and for no other.
- (d) For the purpose of ascertaining compensation for delay in completion of the work relevant part will be deemed to form a separate item or group with date of completion as given in the Contractor as extended under the relevant condition and actual date of completion as certified by the Engineer-in-charge under this condition.

5 (a).26.00 **Compensation for Delay**

26.01 If the Contractor fails to maintain the required progress in terms of the condition of this contract or to complete the work and clear the site on or before the contract or extended date/period of completion, he shall, without prejudice to any other right or remedy of the Corporation on account of such breach, pay as agreed compensation amount calculated as stipulated below or such similar

amount as the contract value of the work for every week that the progress remains below that specified or that the work remain incomplete.

This will also apply to items or group of items for which separate period of completion has been specified.

For this purpose the terms 'Contract Value' shall be the value at contract rates of the works as ordered

- (a) Completion period (as originally stipulated) : @ 1 percent per week not exceeding 6 months
- (b) Completion period (as originally stipulated) : @ ½ percent per week Exceeding 6 months and not exceeding 2 years
- (c) Completion period (as originally stipulated) : @ ¼ percent per week Exceeding 2 years

27.02 Providing always that the total amount of compensation for delays to be paid under this condition shall not exceed the under noted percentage of the contract value of the item or group of items of work for which a separate period of completion is given.

- (a) Completion period (as originally stipulated) : 10 percent not exceeding 6 months
- (b) Completion period (as originally stipulated) : 7 ½ percent Exceeding 6 months and not exceeding 2 years
- (c) Completion period (as originally stipulated) : 5 percent Exceeding 2 years

27.03 The amount of compensation may be adjusted or set of against any sum payable to the Contractor under this or any other contract with the Corporation.

5 (a).28.00 **Defects Liability Period**

The Contractor shall be responsible to made good and remedy at his own expenses within such period as may be stipulated by the Engineer-in charge any defect which may develop or may be noticed before the expiry of the period mentioned in Schedule-F hereto from the certified date of completion and intimation of which has been sent to the Contractor within seven days of the expiry of the said period by a letter sent by hand delivery or by registered post.

28.01 From commencement to completion of the works, the Contractor shall take full responsibility for the care thereof and for taking precaution to prevent loss or damage and to minimize, loss or damage to greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof and all government T & P from any cause whatsoever (save and except the Excepted Risks) and shall at his own cost repair and make good the same so that at completion, the works and all Corporations T & P shall be in good order and conditions and in conformity in every respect with the requirements of contract and instructions of the Engineer-in-charge.

- 28.02 Provided always that the Contractor shall not be entitled to payment unless the Contractor shall insure the works (from commencement to completion), the Corporation's T & P hired by the Contractor and all materials at site, to their full value (as to Corporation's T & P according to the value indicated in Schedule – C, against the risk of loss or damage from whatever cause arising other than the excepted risks. The said insurance shall be in the joint names of the Corporation and the Contractor. The Contractor shall deposit with the Engineer-in-charge the said policy or policies. All moneys payable by the insurance under such policy or policies shall be recovered by the Corporation and shall be paid to the Contractor in installments by the Engineer-in-charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged as the case may be provided however if the amount payable by the insurers in respect of any claim under such a policy is not in excess of the amount mentioned in Schedule-F the same may be recovered by the Contractor directly from the insurers and shall be utilized by him for the purpose of re-building or replacement or repairs of the work and/or goods destroyed or damaged as the case may be.
- 28.03 If the Contractor has a blanket insurance policy for all his works and the policy covers all the items to be insured under this conditions, the said policy shall be assigned by the contract in favour of the Corporation; provided however if any amount is payable under the policy by the insurer in respect of works other than the work under this contract the same may be recovered by the Contractor directly from the insurers.
- 28.04 Where the Corporation building or a part thereof is rented by the contract he shall insure the entire building if the building or any part thereof is used by him for the purpose of storing or using materials of combustible nature, as to which the decision of the Engineer-in-charge shall be final and binding.
- 28.05 The Contractor shall indemnify and keep indemnified the Corporation against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of works and against all claims, demands proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto PROVIDED always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify, the Corporation against any compensation or damage caused by the Expected Risks.
- 28.06 The Contractor shall at all times indemnify the Corporation against all claims, damages, or compensation under the provisions of payment of wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, the Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947 and the Maternity Benefit Act, 1961 or any modification thereof any other persons in or about the works, whether in the employment of Contractor or not, (save and except where such accident or injury has resulted from any act of the Corporation, its agents, or servants) and against all sum or sums which may with the consent of Contractor be paid to compromise or compound any such claim. Without limiting his obligations and liabilities as above provided, the Contractor shall insure against all claims, damages or compensation payable under the Workmen's Compensation Act, 1923 or any modification thereof or any other law relating thereof.
- 28.07 The aforesaid insurance policy/policies shall provide that they shall not be cancelled till the Engineer-in-charge has agreed to their cancellation.

28.08 The Contractor shall prove to the Engineer-in-charge from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defect Liability period.

28.09 The Contractor shall ensure that similar insurance policies are taken out by his sub-Contractor (if any) and shall be responsible for any claims or losses to the Corporation resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his sub-contractors (if any) as the case may be the relevant policy or policies and premium receipts as and when required by the Engineer-in-charge.

28.10 If the Contractor and/or his sub-Contractor (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the contract, then and in any such case the Corporation may, without being bound to, effect and keep in force any such insurance and pay such premium or premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Corporation from any money due or which may become due to the Contractor or recover the same as debt due from the Contractor.

28.11 Termination of Contract for Death

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies then unless the Accepting Authority is satisfied that the legal representatives of the individual Contractor or of the Proprietor of the proprietary concern and in the case of partnership, the surviving partners are capable of carrying out the work, shall proceed to cancel the contract as to its in completed part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and/or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Accepting Authority that the legal representatives of the deceased Contractor are unable to complete the contract shall be final and binding on the parties. In the event of such cancellation the Corporation shall not hold the estate of the deceased contract and/or the surviving partners of the Contractor's firm liable in damages for not completing the Contract.

5 (a).29.00 **Cancellation of Contract in full or part**

If the Contractor:

- (a) At any time makes default in proceeding with the works with due diligence and continue to do so after a notice in writing of 7 days from the Engineer-in- charge: or
- (b) Commits default in complying with any of the terms and condition of the Contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-charge: or
- (c) Fails to complete the works or items or work with individual dates of completion, and does not complete them white in the period specified in a notice given in writing in that behalf by the Engineer-in-charge.

- (d) Commits default in unauthorized transfer/removal from the work site of any material for which payment has been claimed or indulges in unauthorized transfer/removal of materials/Tools and plants issued by the Corporation for incorporation/use in the specific work without the written permission of Engineer-in-charge.
- (e) Shall offer or give or agree to give to any person in Corporation's service or to any other person on his behalf any gift or consideration of any kinds as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for the Corporation; or
- (f) Shall enter into a Contract with the Corporation in connection with which commission has been paid or agreed to be paid by him or to his knowledge unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to the Accepting Authority/Engineer-in-charge: or
- (g) Shall obtain a contract with the Corporation as a result cartel tendering or by other non-bonafide methods of competitive tendering; or
- (h) Being an individual, or if a firm, any partner thereof, shall at any time be adjudged insolvent or have a receivers order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force for the sequestration of his estate or
- (i) Being a Corporation, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a receiver or manager on behalf of the debenture holders shall be appointed or a circumstances shall arise which entitle the Court to appoint a receiver or manager; or
- (j) Shall suffer an execution being levied on his good and allow it to be continued for a period of 21 days; or
- (k) Assigns, transfers, sublets (engagement of labour on a piece work basis or of labour with materials not to be incorporated in the work shall not be deemed to be subletting) or attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the Accepting Authority.

The Accepting Authority may, without prejudice to any other right to remedy which shall have accrued or shall accrue thereafter to the Corporation by written notice cancel the Contract as whole or only such items of work in default from the Contract.

5 (a).30.01 The Accepting Authority shall on such cancellation have powers to:

- (a) take possession of the site and any materials, constructional plant, implements, stores, etc., thereon, and/or
- (b) Carry out the incomplete work by any means at the risk and cost of the Contractor.

5 (a).31.02 On cancellation of the Contract in full or in part the Engineer-in-charge shall determine what amount, if any, is recoverable from the Contractor for completion of the works or part of the works or in case the works or part the works is not be completed, the loss or damage suffered by the Corporation. In determining the amount, credit shall be given to Contractor for the value of the

work executed by him upto the time of cancellation, the value of Contractor's materials taken over and incorporated in the work, and use of tackle and machinery belonging to the Contractor.

5 (a).32.03 Any excess expenditure incurred or to be incurred by the Corporation in completing the works or part of the works or the excess loss or damages suffered or may be suffered by the Corporation as aforesaid after allowing such credit shall be recovered from any money due to the Contractor on any account and if such moneys are not sufficient the Contractor shall be called upon in writing to pay the same within 30 days

5 (a).33.04 If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days. The Engineer-in-charge shall have the right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of the sale thereof towards the satisfaction of any sums due from the Contractor under the Contract and if thereafter there by any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the Contract.

5 (a).34.05 Any sums in excess of the amounts due to the Corporation and unsold materials, constructional plant, etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Corporation of the works is less than the amount which the Contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Contractor.

5 (a).35.00 **Liability for Damage, Defects or Imperfections and Rectification thereof**

If the Contractor or his workman or employees shall injure or destroy any part of the building in which they may be working or any building road, fence etc. contiguous to the premises on which the work or any part of its being executed or if any damage shall happen to the work while in progress the Contractor shall upon receipt of a notice in writing in that behalf make the same good at his own expense. If it shall appear to the Engineer-in-charge or his Representative at any time during construction or reconstruction or prior to the expiry of the Defects liability period that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials are of a quality interior to that contracted for; or otherwise not in accordance with the Contract or that any defect, shrinkage or other fault have appeared in the work arising out of defective or improper materials or workmanship, the Contractor shall, upon receipt of a notice in writing in that behalf from the Engineer-in-charge, forthwith rectify or remove and reconstruct the work so specified in whole or in part, as the case may be at his as own expense, within the period to be specified by the Engineer-in-charge, who may rectify or remove and re-execute the work and/or remove and replace with others the materials or articles complained of, as the case may be, by other means at the risk and expense of the Contractor, in the event of Contractor's failure to comply with the instruction of Engineer-in-charge.

VALUATION AND PAYMENT

5 (a).36.00 Records and Measurement

The Engineer-in-charge, shall except as otherwise stated ascertain and determine the value of the works done in accordance with the measurement recorded and the contracted rates for each such items of work.

36.01 All items having a financial value shall be entered in Measurement Book, Level Book, etc. prescribed by the Corporation so that a complete record is obtained of all work performed under the contract.

36.02 Measurement shall be taken jointly by the Engineer-in-charge or his authorized representative and by the Contractor or his authorized representative.

36.03 Before taking measurement of any work, the Engineer-in-charge or the persons deputed by him for the purpose shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send as authorized representative for measurement after such a notice or fails to countersign or to record the objection within a week from the date of measurement, then in any such event, measurements taken shall be deemed to be correct measurements of the work.

36.04 The Contractor shall, without extra charge, provide assistance with every appliance, labour and other things necessary for measurement.

36.05 Measurement shall be signed and dated by both parties each day on the Site on completion of measurement. If the Contractor objects to any of the measurements recorded on behalf of the Corporation, a note to that effect shall to be made in the measurement book by both parties engaged in taking the measurement.

36.06 Where mode of measurement is not otherwise specified, the measurement shall be taken at Site as per the latest I.S. Code of practice at the time of tendering.

5 (a).37.00 Method of Measurement

Except where any general or detailed description of the work in quantities expressly shown to the contrary, Schedule of Quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure set forth in the Schedule of Rates/Specification notwithstanding any provision in the relevant Standard Method of Measurement or any general or local custom. In the case of items, which are not covered by the Schedule of Rates/Specification, measurement shall be taken in accordance with the relevant standard method of measurement issued by the Indian Standard Institution.

5 (a).38.00 Payment of Account

Interim bills shall be submitted by the Contractor at intervals mentioned in Schedule – F on or before the date fixed by the Engineer-in-charge for the work executed. The Engineer-in-charge shall then arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work.

38.01 Payment on account for amount admissible shall be made on the Engineer-in-charge certifying the sum to which the Contract is considered entitled by way of interim payment for all work executed, after deducting there from the accounts already

paid. The security deposit and such other amounts as may be deductible or recoverable in terms of the Contract.

38.02 Any interim certificate given relating to work done or materials supplied may be modified or corrected by any subsequent interim certificate or by the final certificate. No certificate of the Engineer-in-charge supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract.

38.03 Pending consideration of extension of date of completion interim payment shall continue to be made as herein provided.

5 (a).39.00 **Time Limit for payment of final Bill**

The final bill shall be submitted by the Contractor within three months of physical completion of the works. No further claims shall be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and at rates as approved by Engineer-in-charge, shall be made within the period specified hereunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-charge.

(a) Contract amount not exceeding Rs.5 lakhs : Four months

(b) Contract amount exceeding Rs.5 lakhs : Six months

5 (a).40.00 After payment of the amount of the final bill payable as aforesaid has been made, the Contractor may, if he so desires, reconsider his position in respect of the disputed portion of the final bill and if he fails to do so within 90 days his disputed claim shall be dealt with as provided in the Contract provided however no reimbursement or refund shall be made if the increase/decrease is not more than +10% of the said price, and if so the reimbursement or refund shall be made only on the excess over +10% provided that any increase will not be payable if such increase has become operative after the contract or extended date of completion of the works or items of work in question.

5 (a).41.00 **Over payments and Underpayments**

Whenever any claim for the payment of a sum of money to the Corporation arises out of or under this contract against the Contractor the same may be deducted by the Corporation from any sum then due or which at any time thereafter may become due to the Contractor under this contract and failing that under any other contract with the Corporation (which may be available with the Cooperation) or from his security deposit ; or he shall pay the claim.

41.01 The Corporation reserves the right to carry out post payment audit and technical examination of the final bill including all supporting vouchers, abstracts, etc. The Corporation further reserve the right to enforce recovery of any over payment when detected, notwithstanding the fact that amount of the final bill may be included by one of the parties as an item of dispute before an arbitrator appointed under condition 52 of this contract and notwithstanding the fact that the amount of the final bill figures the arbitration award.

- 41.02 If as a result of such audit and technical examination any over payment discovered in respect of any work done by the Contractor alleged to have been done by him under the Contract, it shall be recovered by the Corporation from the Contractor by any or all of the methods prescribed above or if any underpayment is discovered, the amount shall be duly paid to the Contractor by the Corporation.
- 41.03 Provided that the aforesaid right of the Corporation to adjust overpayment against amounts due to the Contractor under any other Contract with the Corporation shall not extend beyond the period of two years from the date of payment of the final bill or in case the final bill is a Minus Bill from the date the amount payable by the Contractor under the MINUS final bill is communicated to the Contractor.
- 41.04 Any amount due to the Contractor under this contract for underpayment may be adjusted against any amount then due or which may at any time thereafter become due before payment is made to the Contractor, from him to the Corporation on any other contract or account whatsoever.

ARBITRATION AND LAW

- 5 (a).42.00 Except where otherwise provided for in contract all questions and dispute relating to the meaning or the specifications, design, drawings and instructions herein before mentioned as to the quality of workmanship or materials used on the work or as to any other question, claim right, matter of thing whatsoever in any way arising out of or relating to the contract designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or thereof shall be referred to the sole arbitration, or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Chairman and Managing Director of Uranium Corporation of India Limited, Jaduguda and if the Chairman and Managing Director is unable or unwilling to act to the sole arbitration of some other person appointed by the Chairman and Managing Director willing to act as such arbitrator. There will be no objection if the arbitrator so appointed is an employee of Uranium Corporation of India Limited, Jaduguda and that he had to deal with the matters to which the contract related and that in the course of his duties as such he had expressed views on all or any other matters in dispute or difference. The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such Chairman and Managing Director as aforesaid at the time of transfer vacation of office of inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by such Chairman and Managing Director, as aforesaid should act as arbitrator and if for any reason, that is not possible, the matter is not to be referred to arbitration at all. In all cases where the amount of the claim in dispute is Rs.50,000/- (Rupees Fifty thousand only) and above, the arbitrator shall give reasons for the award.

Subject as aforesaid the provisions of the Arbitration Act, 1940 or any statutory modification or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause. It is a term of the contract that the party involving arbitration under this clause with the amount or amounts claimed in respect of each such dispute.

The Arbitrator(s) may from time to time with consent of the parties enlarge the time, for making and publishing the award.

The work under the contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him.

The venue of Arbitrator shall be such place as may be fixed by the Arbitrator, in his sole discretion.

The award of the Arbitrator shall be final, conclusive and binding all parties to this contract.

LAWS GOVERNING THE CONTRACT

5 (a).43.00

This contract shall be governed by the Indian Laws for the time being in force and it shall be deemed to have executed at Tummalapalle Project Site, Tummalapalle, P.O. MC Palle, Vemula Mandal, District Kadapa, Andhra Pradesh State within the ordinary Civil Jurisdiction of the Competent Courts HYDERABAD and only competent court in the District Hyderabad/Ranga Reddy shall have jurisdiction to determine the case.

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SECTION - VI

6.00.00

SPECIAL CONDITIONS

6.01 .00 **SITE INVESTIGATIONS:**

The Tenderers are advised to visit the site to acquaint themselves as to the nature and location of the work, the general and local conditions particularly those bearing upon transportation, disposal handling and storage of materials, availability of labour, water, electric power and road, as also uncertainties of weather or similar physical conditions of the site, the formation and conditions and level of the ground, the character, quality and quantity of surface and sub-surface materials to be encountered, including sub-soil water levels, the character of equipment and facilities needed, preliminary to and during the progress of the work, and all other matters which can be of, in any way affect the work and the cost thereof under the contract.

6.02.00 **Cement & Steel:**

- i) Cement: Ordinary Portland cement (OPC) complying with the requirements of IS: 269 shall be used for making plain and reinforced concrete, cement grout and mortar.
Other types of cement may be used depending upon the requirements of certain jobs with the approval of the CONSULTANT/PURCHASER. These shall confirm to the following standards.

Portland Blast Furnace slag

Cement	IS: 455
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Rapid Hardening Portland

Cement	IS: 8041
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43 grade Ordinary Portland

Cement	IS: 8112
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Hydrophobic Cement	IS: 8043
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53 grade Ordinary Portland

Cement	IS: 12269
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Steel

For Reinforcement:

Reinforcing bars for concrete shall be round steel bars of the following types as may be shown on the drawing:

- a) Plain mild steel bars confirming to Grade I of IS:432 " Mild Steel and Medium Tensile Steel and hard Drawn Steel Wire for concrete Reinforcement."
- b) High Yield strength deformed bars confirming to IS: 1786 "Specification for High Strength Deformed Steel Bars & Wires for Concrete Reinforcement".
- c) Reinforcement fabrics conforming to IS: 1566 "Hard Drawn Steel Wire Fabric for Concrete Reinforcement."

All reinforcement bars shall be of uniform cross sectional area and be free from loose mill scales, dust, loose rust, coats of paint, oil or other coatings which may destroy or reduce bond.

- ii) The contractor shall construct at his own cost suitable godown at site of work for storing adequate quantity of cement in weather proof walls. The cement shall be stacked in rows of two bags each and not exceeding 10 bags in height. A clear walking space of at least 500 mm shall be left in between the two rows as also from the surface of side walls. No material shall be issued by department for construction of contractor's godown / hutment.

- iii) Steel Reinforcement: Steel bars of sections shall be stacked at site properly preferably on wooden sleepers, to prevent excessive rusting.

6.05.00 Final Bills will not be entertained unless the same is accompanied by **Royalty clearance certificate** issued by the Office of District Mining &Geology Office, Yerraguntla, District Kadapa, Andhra Pradesh

6.06.0 MODE OF MEASUREMENT

Mode of measurement of quantities, lead, lift, deduction of voice etc., shall be as per IS / CPWD specifications unless otherwise stated in the Schedule of Quantities enclosed with this tender document.

6.07.00 CONTRACTOR'S CAMP

Cement must be stored in the godown to be constructed/arranged by the contractor at their own cost in suitable place at work site. No claim for carriage of materials to the work site shall be entertained.

6.10.00 TESTING OF MATERIALS

Contractor shall arrange for the testing of materials at his own cost as and when required and instructed by the Engineer-in-charge or his representative (s). All materials should conform to IS/CPWD specifications. Contractor should establish site testing laboratory at their own cost for testing of cubes, construction materials, soil compaction test etc. and provide required materials/samples to carried out necessary testing related to the work as per latest IS/CPWD specification and test reports in prescribed format to be submitted to the concern Engineer.

6.11.00 WATER/ ELECTRICITY

Contractor should make their own arrangement for water & Electricity

6.12.00 Cement and Reinforcement bars required for construction of contractor's hutments, stores, go-down and site office shall be arranged by the contractor at his own cost.

6.13.00 In case of stoppage of work by local people/Bundh or any other reasons, no idle charges will be paid by corporation towards Labour, Plant and Machinery etc. to the contractor for this work.

6.14.00 No carriage / transportation for any material shall be paid by the department for this work. Contractor should quote their rates accordingly.

- 6.15.00 Unless specifically mentioned otherwise in the contract, the Tenderer shall quote for the finished items and shall provide for the complete cost towards labour, materials, erection and dismantling of necessary scaffolding, levies, all taxes, royalty, transport, storage, repairs, rectification, maintenance till handing over, revenue expenses, contingencies, overheads, profit and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to contract.
- 6.16.00 All the labour rules shall be flowed strictly as per Contract Labour (Regulation & Abolition) Act, 1970. All registers, forms stipulated under minimum wages Act should be maintained by the contractor and to be furnished to the corporation before commencement of the work. In case of non-submission of above registers / forms to the corporation regularly, contractor will not be allowed to continue to do the work. In the event of the breach of aforesaid conditions, the contractor shall be open for action as deemed fit by the concerned labour authorities of the State / Central Government.
- 6.17.00 In case payment of labourers engaged for this work, has not been made on stipulated payment day, Corporation shall compel the contractor to stop the work and necessary action will be taken.
- 6.18.00 Necessary workmen insurance coverage shall be obtained by the contractor for the workmen engaged at site and labour license, if applicable shall be obtained at his own cost for the whole period of the contract and shall be furnished to the corporation before commencement of the work without which contractor will not be allowed to start the work.
- 6.19.00 Contractor shall have to provide the facilities under the provision of Contract labour (Regulation & Abolition) Act, 1970 – Section – 16, 17, 18 and 19, Chapter – V – “Welfare and Health of Contract Labour.
- 6.20.00 **Quantity of any individual item may vary to any extent and be excluded altogether. Contractor will carry out all works upto a total variation of $\pm 15\%$ (Fifteen percent) on the contract price and all quoted rates shall remain firm within this limit.**
- 6.21.00 For bought-out items only acceptable brands and products of approved manufacturers against each item shall be used unless otherwise agreed (in writing) to by the Engineer.
- 6.22.00 Contractor shall strictly abide by the security rules and regulations enforced by the owner time to time. The contractor shall provide proper identity cards, badges etc. to his employees wherever directed by the Engineer.
- 6.23.00 **MEDICAL CARE:** The Contractor shall be fully responsible for any first aid and emergency medical treatment to his employees. Necessary arrangement for this purpose shall be made by the contractor at the site.
- 6.24.00 All temporary diversions of roads/drains required to commence/execute the job are to be done by the contractor at their own cost.
- 6.25.00 **Drawing:**
One copy of the construction drawing will be supplied by UCIL for reference of the contractor for execution of work.

- 6.26.00 **Rate:** The rates quoted by the Tenderer shall be inclusive of all taxes, royalty, cess etc. complete and all statutory requirements as applicable shall have to be complied in letter and spirit under the scope of contract.
- 6.27.01 All the materials should be mentioned in the schedule and should be strictly as per the specifications.
- 6.27.02 Material samples should be got approved by Engineer-in-Charge or his representative before installation.
- 6.27.03 Wherever required blasting / boring should be carried out by the contractor as no extra cost.
- 6.27.04 Care should be taken not to damage the roads and buildings. These should be repaired and put back to original condition if damaged to the satisfaction of Chief Supdt.[Civil] at no extra cost.
- 6.27.05 The bush cutting and cleaning of any obstructions shall be in scope of the contractor.
- 6.27.06 Before quoting, the bidder understand clearly the scope should get all doubts cleared, physically see the site. UCIL will not agree for any extra claims.
- 6.27.07 Against each item, the amount should be written in figures and in words. The total amount of the offer should be written in figures and in words.

ANNEXURE**SAFETY GUIDE FOR WORKS CONTRACTS****I N D E X****Sl. No.**

1. Introduction
2. General Safety Provisions
3. Traffic
4. Safe Means of Access
5. Excavation, trenching and Earth Removal
6. Concreting
7. Demolition
8. Personal Protective Equipment
9. Painting
10. Lifting Machines & Tackles
11. Welding and Gas cutting
12. Grinding
13. Electricity
14. House keeping
15. Fire safety
16. Safety Work Permit
17. Work in Radiation Area
18. Work in and around Water Bodies
19. Medical Facilities
20. Safety Officer and Safety Coordinator
21. Reporting of Accident
22. Public Protection
23. Other Statutory Provisions
24. Safety of contractor's employees

Annexure : Guidelines and General Procedures
For supply and Use of Electricity at Site

Forms

1. Form for completion certificate
2. Application for Service Connection by Contractor

SAFETY GUIDE FOR WORKS CONTRACT

1. INTRODUCTION

Many of the works of Department of Atomic Energy at its various sites are executed by the contractors. During these works, contractor's personnel are likely to be exposed to different types of hazards. Similarly, unsafe acts of contractor's personnel may generate hazards for Departmental staff and/or workmen of other contractors working at the site. Such unsafe acts may also pose danger to the existing installations and even to members of public. This guide is prepared to facilitate safe working during execution of contract works. It is hoped that units of DAE may issue this guide as a part of contract documents while awarding contracts.

2. GENERAL SAFETY PROVISIONS

- 2.1 The Contractor shall take all safety precautions during the execution of awarded work and shall maintain and leave the site safe at all times. At the end of each working day and at all times when the work is temporarily suspended, he shall ensure that all materials, equipment and facilities will not, cause damage to existing property, personal injury or interfere with the other works of the Project or Station. The Contractor shall comply with all applicable provisions of the safety regulations, cleanup program and other measures that are in force at the site.
- 2.2 The Contractor shall provide and maintain all lights, guards, fencing, warning signs, caution boards and other safety measures and provide for vigilance as and where necessary or as required by the Engineer or by any duly constituted authority for the protection of workers or for the safety of others. The caution boards shall also have appropriate symbols.
- 2.3 Adequate lighting facilities such as floodlights, hand lights and area lighting shall be provided by the Contractor at the site of work, storage area of materials and equipment and temporary access roads within his working area. The contractor shall obtain written approval of the Engineer to the lighting scheme and place of tapping prior to its installation.
- 2.4 The Contractor shall plan his operations so as to avoid interference with the other Departmental works, other Contractors or Sub-Contractors at the site. In case of any interference, necessary coordination shall be sought by the contractor from the Department for safe and smooth working.
- 2.5 The Contractor and his sub-contractor, if any shall comply with the instructions given by the Safety Engineer or his authorized nominee regarding safety precautions, protective measures, house keeping requirements, etc. The Safety Engineer with due intimation to Engineer shall have the right to stop the work of the Contractor, if in his opinion proceeding with the work will lead to an unsafe and dangerous condition.

Engineer shall get the unsafe condition removed or provide protective equipment at the contractors cost. The Contractor can employ his own Safety Engineer or nominate one of his officers for liaison with Departmental Safety Engineer for ensuring compliance of all safety rules. Contractor shall ensure that all his workmen are aware about the nature of risk involved in their work and have adequate training for carrying out their work safety.

- 2.6 The Contractor shall be held responsible for non-compliance of any of the safety measures and delays, implications, injuries, fatalities and compensation arising out of such situations or incidents.
- 2.7 The Contractor shall make elaborate safety arrangements and required supervision shall be there during execution of the job. In case of any fatal accident, fine or penalty will be imposed to the Contractor in addition to the compensation to be paid to the Victim as per the clauses mentioned elsewhere and/or prevailing safety rules. The amount of the penalty shall be decided by Committee of UCIL.
3. TRAFFIC
- 3.1 The contractor shall conduct his operations so as to interfere as little as possible with the use of existing roads at or near locations where the work is being performed.
- 3.2 When interference to traffic is inevitable, notice of such interference shall be given to the Engineer well in advance (at least 48 hours) with the details of start of the work and time required, storage of materials, and details of the proposed methods of providing the required facilities for safe and continuous use of roads and obtain his clearance.
- 3.3 The Contractor shall, at his own expense, make such approved temporary provisions as are required to maintain at least one lane of traffic by bridging the excavation, providing ramps over surface obstructions or providing suitable temporary by-pass around the obstructions. The Contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation, to the existing water supply, sewerages, power or telecommunication lines or any other services or works. The Contractor shall be required to provide and erect before construction, substantial barricades, guard-rails, and warning signs. He shall furnish, place and maintain adequate warning lights, signals, etc., as required by Engineer.
4. SAFE MEANS OF ACCESS
- 4.1 Adequate and safe means of access and exit shall be provided for all work places, at all elevations. Using of scaffolding members (avoiding a ladder) for approach to high elevations shall not be permitted.
- 4.2 Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short duration work as can be done safely from ladders. Ladder shall be of rigid construction having sufficient strength for the intended loads and made either of good quality wood or metal and all ladders shall be maintained well for safe working condition. An extra mazdoor shall be engaged for holding the ladder if ladder is not securely fixed. If the ladder is used for carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder. The ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal and 4 vertical). Ladders shall not be used for climbing carrying materials in hands. While climbing both the hands shall be free.
- 4.3 Scaffolding or staging more than 3.5m above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a standard guard rail properly attached, bolted, braced or otherwise secured at least 1.0m high above the floor or platform of such scaffolding or staging. The guard rail shall extend along the entire exposed length of the scaffolding with only such opening as may be necessary for the delivery of materials. Standard railing shall

have posts not more than 2m apart and an intermediate rail halfway between the floor or platform of the scaffolding and the top rail. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure. Scaffolding and ladder shall conform to relevant IS specification (IS:3696-1966). Timber/Bamboo scaffolding shall not be used.

- 4.4 Working platforms of scaffolds shall have toe boards at least 15cm in height to prevent materials from falling down.
- 4.5 A sketch of the scaffolding proposed to be used shall be prepared and approval of the Engineer obtained prior to start of erection of scaffolding. All scaffolds shall be examined by Engineer before use.
- 4.6 Working platform, gangways and stairways shall be so constructed that they shall not sag unduly or unequally and if the height of the platform or gangway or stairway is more than 3.5m above ground level or floor level, they shall be closely boarded, shall have adequate width for easy movement of persons and materials and shall be suitably guarded as described in 3.3 above.
- 4.7 The planks used for working platform shall not project beyond the end supports to a distance exceeding four times the thickness of the planks used. The planks shall be rigidly tied at both ends to prevent sliding and slippage. The thickness of the planks shall be adequate to take load of men and materials and shall not collapse.
- 4.8 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing, the minimum height of which shall be 1.0m, along with 15cm high sheet obstruction at floor level along the railing.
- 4.9 Safe means of access shall be provided to all working platforms and other elevated working places. Every ladder shall be securely fixed. No single portable ladder shall be over 9m in length. For ladders up to 3m in length the width between side rails in the ladder shall in no case be less than 300mm. For longer ladders this width shall be increased by at least 20mm for each additional meter of length. Step spacing shall be uniform and shall not exceed 300mm.
- 4.10 Adequate precautions shall be taken to prevent danger from electrical lines and equipment. No scaffolding, ladder-working platform, gangway runs, etc. shall exist within 3 meters of any un insulated electric wire. Whenever electric power and lighting cables are required to run through (pass on) the scaffolding or electrical equipments are used, such scaffolding structures shall have minimum two earth connections with earth continuity conforming to IS Code of Practice.

5. EXCAVATION, TRENCHING AND EARTH REMOVAL

- 5.1 All trenches 1.2m or more in depth shall at all times be supplied with at least one ladder for each spacing of 30m in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1m above the surface of the ground.
- 5.2 The sides of the trench which are 1.2m or more in depth shall be stepped back to give suitable slope (angle of repose) or securely held by timber bracing, so as to avoid the danger of sides from collapsing. The excavated material shall not be placed within 1.5m of the edges of the trench or half of the depth of the trench, whichever is more. Cutting shall be done from top to bottom. Under no circumstances mining or under-cutting shall be done.

- 5.3 The Contractor shall ensure the stability and safety of the excavation, adjacent structures, services and the works.
- 5.4 Open excavations shall be fenced off by suitable railing and warning signals installed at night at well lit places so as to prevent persons slipping or falling into the excavations.
- 5.5 All blasting operations shall be carried out on the basis of procedures approved by Inspector of Explosives. All works in this connection shall be carried out as per IS Code of Practice. Barricades, Warning Signs etc. shall be placed on the roads/open area. Prior approval of such operation shall be obtained from Safety Engineer/Engineer of Works.
- 5.6
- a) For removal of earth from an earth mound a written permission shall be obtained from the Engineer In-charge of the work and the Engineer of the earth mound.
 - b) As far as practical, earth shall be removed mechanically.
 - c) Wherever manual removal of earth is involved, earth shall be removed from the top by maintaining the proper slope equal to the angle of re-pose of the earth.
 - d) Such work shall be constantly supervised by the contractor's responsible person and frequently inspected by the departmental representative to ensure that no under-cutting is done.

6. CONCRETING

Shuttering and supporting structures shall be of adequate strength and approved by Engineer. This shall be ensured before concrete is poured. The procedure approved by Engineer shall be followed for mixing, transporting and pouring of concrete.

7. DEMOLITION

Before any demolition work is commenced and also during the progress of the work

- (a) All roads and open area adjacent to the work site shall either be closed or suitable protected. Appropriate warning signs shall be displayed for cautioning approaching persons.
- (b) Before demolition operations begin, the Contractor shall ensure that the power on all electric service lines is shut off and the lines cut or disconnected at or outside the demolition site. If it is necessary to maintain electric power during demolition operation, the required service lines shall be adequately protected against damage. Persons handling heavy materials/equipments shall wear safety shoes.
- (c) No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.
- (d) Entries to the demolition area shall be restricted to authorized persons only.

8. PERSONAL PROTECTIVE EQUIPMENT

All necessary personal protective equipment as considered necessary by the Engineer shall be kept available by contractor for the use of the persons employed on the site and maintained in a condition suitable for immediate use. Also the Contractor shall take adequate steps to ensure proper use of equipment by those concerned. The personal protective equipments are to be provided by the contractor at their own cost.

- (a) All persons employed at the construction site shall use safety helmets. For other types of works, persons working in that area shall also use safety helmets, if advised by Safety Engineer/Engineer.
- (b) Workers employed on mixing asphaltic materials, cement and lime mortars shall use protective goggles, protective feet wear and hand gloves. Use of proper respirators shall be an advantage.
- (c) Persons engaged in welding and gas cutting works shall use suitable welding face shields. The persons who assist the welders shall use suitable goggles. Protective goggles shall be worn while chipping and grinding.
- (d) Stone breakers shall use protective goggles. They shall be seated at sufficiently safe intervals of distance.
- (e) Persons engaged in or assisting in shot blasting operations and cleaning the blasting chamber shall use suitable gauntlets, overalls, dust-proof goggles, boots and protective hood supplied with fresh air at the minimum rate of 9m³/hr.
- (f) All persons working at heights more than 4.5m above ground or floor and exposed to risk of falling down shall use safety belts, unless otherwise protected by cages, guard railings, etc. In places where the use of safety belts is impractical, suitable net of adequate strength fastened to substantial supports shall be employed.
- (g) All powered two-wheeler motorcycle and scooter drivers and their pillion riders shall wear crash helmets inside the Project/Plant sites.
- (h) When workers are employed in sewers and inside manholes, which are in use, the Contractor shall ensure that the manholes are opened and are adequately ventilated at least for an hour. After it has been well ventilated, the atmosphere inside the space shall be checked for the presence of any toxic gas or oxygen deficiency and recorded in the register before the workers are allowed to get into the manholes. The manholes opened shall be cordoned off with suitable railing and provided with warning signals or caution boards to prevent accidents. There shall be proper illumination in the night.

9. PAINTING

As per scope of work & Technical specification and drawing to be issued.

10. LIFTING MACHINES AND TACKLES

Use of lifting machines and tackles including their attachments, anchorage and supports shall conform to the following standards or conditions.

- (a) Lifting machines and tackles shall be of good mechanical construction, sound material and adequate strength and free from any defects and shall be kept in good repair and in good working order.

Every rope used in hoisting or lowering materials or as a means of suspension shall be of good quality and adequate strength and free from any defect.

- (b) Every crane operator or lifting appliance operator shall be properly qualified. No person under the age of twenty one (21) years shall be in charge of any hoisting machine or give signal to operator of such machine.
- (c) In case of every lifting machine (and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or as means of suspension) the safe working load shall be ascertained and clearly marked. In case of lifting machine having a variable safe working load, each safe working load and the conditions 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. This shall be approved by the Safety Engineer.
- (d) In case of departmental machines, the safe working load shall be notified by the Engineer. As regards Contractor's machines, the Contractor shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get it verified by the Engineer, supported by a valid test certificate by the Competent Person.
- (e) Thorough inspection and load testing of lifting machines and tackles shall be done by a competent person at least once every 12 months and records of such inspection and testing shall be maintained.

- 10.2 Motors, gearing transmission, couplings, belts, chain drives and other moving parts of hoisting appliances shall be provided with adequate safeguards. Hoisting appliances shall be provided with such means as will reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced or lowered.

11. WELDING AND GAS CUTTING

As per drawings to be issued.

12. GRINDING

- 12.1 All portable grinders shall be used only with their wheel guards in position to reduce the danger from flying fragments should the wheel break during the use.
- 12.2 Grinding wheels of specified diameter only shall be used on a grinder – portable or pedestal – in order not to exceed the prescribed peripheral speed.
- 12.3 Grinding wheels of specified diameter only shall be used on a grinder – portable or pedestal – in order not to exceed the prescribed peripheral speed.

13. ELECTRICITY

Guidelines for providing temporary power supply at the site and general safety procedures for using electricity are given in the enclosed Annexure.

14. HOUSE KEEPING

14.1 The Contractor shall at all times keep his work spot, site office and surroundings clean and tidy from rubbish, scrap, surplus materials and unwanted tools and equipment.

14.2 Welding and other electrical cables shall be so routed as to allow safe traffic by all concerned.

14.3 No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Engineer may require the Contractor to remove any materials which are considered to be of danger or cause inconvenience to the public. If necessary, the Engineer may cause them to be removed at the Contractor's cost.

14.4 At the completion of the work, the Contractor shall have removed from the work premises all scaffoldings, surplus materials, rubbish and all huts and sanitary arrangements used/installed for his workmen on the site.

14.5 The Engineer has the right to stop work if the Contractor fails to improve upon the housekeeping after having been notified.

15. FIRE SAFETY

All necessary precautions shall be taken to prevent outbreak of fires at the construction site. Adequate provisions shall be made to extinguish fires should they still break out.

(a) Quantities of combustible materials like timber, bamboos, coal, paints, etc., shall be the minimum required in order to avoid unnecessary accumulation of combustibles at site.

(b) Containers of paints, thinners and allied materials shall be stored in a separate room which shall be well ventilated and free from excessive heat, sparks, flame or direct rays of the sun. The containers of paint shall be kept covered or properly fitted with lid and shall not be kept open except while using.

(c) Fire extinguishers as approved by the Engineer shall be located at the construction site at appropriate places.

(a) Adequate number of contract workmen shall be given education and training in fire fighting and extinguishing methods.

16. SAFETY WORK PERMIT

16.1 In order to ensure safety of work for hazardous operation (such as entry into confined spaces, welding/cutting on equipment/pipes where explosion hazard is present, works on high voltage and main medium voltage lines, blasting etc.,) special **Safety Work Permits (SWP)** shall be raised. The SWP's shall also to be obtained for any other work as recommended by Safety Engineer.

16.2 The Contractor shall strictly ensure all the safety conditions and requirements stipulated in the Safety Work Permit. The decision of the Safety Engineer shall be final in this regard.

17. WORK IN RADIATION AREA

The Contractor shall follow the stipulated procedure regarding work in the radiation area and other works related with radiography.

18. WORK IN AND AROUND WATER BODIES

When the work is done near any place where there is risk of drowning, all necessary rescue equipment such as life buoys and life jackets shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision shall be made for prompt first-aid treatment of all injuries likely to be sustained during the course of the work. Persons who do not know swimming shall not be engaged alone for any work where risk of drowning exists. Sufficient number of life buoys or life jackets shall be provided.

19. MEDICAL FACILITIES

19.1 The Contractor shall arrange adequate facilities for medical aid and treatment for his staff and workers engaged on the work site including the first-aid facilities if they are not available at the Project Site.

19.2 First-aid appliances including sterilized dressing, cotton wool and antiseptic cream shall be made available at readily accessible places at every work site. These shall be maintained in good order under the charge of a responsible person.

19.3 At large work places where hospital facilities are not available within easy reach of the works, first-aid posts shall be established and be manned by a trained compounder. An ambulance shall be available during the entire period of work for attending to injury cases.

19.4 Height pass shall be issued UCIL Safety Engineer to permit the workmen intended to work at heights without which they shall not be allowed to work.

20. SAFETY OFFICER/SAFETY CO-ORDINATOR

The Contractor shall have a Safety Officer or a supervisor to be designated as a Safety Coordinator in order to specifically look into the implementation of different safety requirements of the contract work. The person thus designated will in general co-ordinate with the Engineer on matters of safety and in particular ensure that the Safety Guide is complied with fully. His name shall be displayed on the Notice Board at a prominent place at the work site.

21. REPORTING OF ACCIDENT

21.1 All accidents leading to property damage and/or personnel injuries shall be reported to the Engineer immediately who shall inform SAROOP to be followed up with detailed accident reports in prescribed form.

21.2 Contractor shall also submit a monthly statement of accidents to Engineer by 4th of every month showing details of accident, nature of injury including disability, days lost, treatment required, etc., and the extent of property damage.

22. PUBLIC PROTECTION

The Contractor shall make all necessary provisions to protect the public. He shall be bound to bear the expenses for defense of every action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of any precaution required to taken to protect the public. He shall pay any damage and cost which may be awarded in any such suit, action or proceedings to any such person, or the amount which may be fixed as a compromise by any such person.

23. OTHER STATUTORY PROVISIONS

Notwithstanding the above clauses from 1 to 21 there is nothing in these to exempt the Contractor from the provisions of any other Act or Rules in force in the Republic of India. In particular all operations involving the transport, handling, storage and use of explosives shall be as per the standing instructions and conform with the Indian Explosives Act, 1884 and the Explosives Rules, 1983. Handling, transport, storage and use of compressed gas cylinders and pressure vessels shall conform with the Gas Cylinder Rules 1981 and Static and Mobile Pressure /vessels (Unfired) rules 1981. In addition, The Indian Electricity Act 1910 and Indian Electricity Rules 1956, the Atomic Energy Act, 1962, the Radiation Protection Rules 1971, Radiation Protection Manual of Nuclear Facilities and the Atomic Energy (Factories) Rules, 1988 and various rules and Act related to mining shall also be strictly complied with.

24. SAFETY OF CONTRACTOR'S EMPLOYEES

The contractor shall at all times, take all reasonable precautions for the safety of employees, including those of sub-contractors in the performance of his contract and shall comply with all applicable additions, to the safety provision already including the safety requirements recommended by the V.T. Centre. Tummalapalle for a specific contract.

In the event that the contractor fails to comply with these provisions, the Engineer may, without prejudice to any other legal or contractual rights, issue an order stopping all or any parts of the work, thereafter a start order for resumption of work may be issued at the discretion of the contracting office. The contractor shall make no claim for an extension of time or stoppage.

Contractors shall have a full time safety office/ Engineer when the contractor employs 500 or more persons or when engaged in specially hazardous work. In the case of contractors employing fewer than 500 persons, his safety representative shall be employed in high supervisory capacity and his safety duties may be in addition to other technical or administrative duties.

Contractor shall have at least one person fully trained in first – aid present at the site of work all the times.

Contractor must report to the V.T. Centre, Tumalapalle through their Engineer-in-Charge every accident involving their personnel UCIL property or personnel Property or personnel of other contractors working on the site.

Contractor must report to V.T. Centre, Tumalapalle through immediately on becoming aware of any accident of Type – A (See Appendix – 1) giving the following information.

Name of the informant

Nature and location of incident being reported

Name of Supervisor/Engineer-in-Charge, Location and Telephone No. where he can be reached

Contractor shall submit their investigation reports, through their Engineer-in-Charge, to V.T. Centre immediately but not later than three working days after the occurrence of accident in the Form – A (see Appendix – 2).

In the case of Type – B accidents (see Appendix – I), Contractor shall submit their investigation reports, through their Engineer-in-Charge, to V. T. Centre immediately but not later than three working days after the occurrence of accident in the Form – A.

Monthly summary of accidents and cases of fire shall be prepared by each contractor in Form – B (see Appendix – B) and be sent to V. T. Centre, Narwapahar / Turamdih by the seventh of next month.

Principal contractor shall report the man days lost and occurrence of accidents under the jurisdiction of sub-contractors.

Contractor shall submit a narrative report on safety activities and fire incidents for each month along with Form – B. The review should contain such items as personnel and programme change, major project started and major problems.

APPENDIX – I

CLASSIFICATION OF ACCIDENTS

Type – A

1. Fatal Injuries
2. Serious Injuries such as fracture, dislocation, severe burns etc. necessitating hospitalization.
3. Any Injury to give or more persons
4. Accidents resulting in damage by fire, explosion etc.

Type – B

1. Minor Injuries, which result in abrasion, contusion etc.
2. **Disabling injuries but not requiring hospitalization.**

ANNEXURE**GUIDELINES AND GENERAL PROCEDURES FOR SUPPLY AND USE OF ELECTRICITY AT SITE****1. GENERAL**

Following safety requirements shall be complied with before the Contractor uses the power supply.

- 1.1 The Contractor shall submit a list of licensed electrical staff to be posted at site.
- 1.2 It shall be the responsibility of the Contractor to provide and maintain complete installation on the load side of the supply point with regard to the safety requirements at site. All cabling and installation shall comply with the appropriate statutory requirements given below and shall be subject to approval of the Departmental Engineer/Electrical engineer.
 - a) Indian Electricity Act, 1910
 - b) Electricity (Supply) Act, 1948
 - c) Indian Electricity Rules, 1956
 - d) National Electric Code 1985
 - e) Other relevant rules of Local Bodies and Electricity Boards.

After installation of the electrical power wiring works by the contractor, form of completion certificate as per IS:732 (Form SGCW-1) shall be submitted by the contractor duly signed by the authorized valid licensed electrical contractor and/or supervisor along with one copy of the contractor's license and/or competency certificate of supervisor issued by the electricity Board/Government Electricity Organizations as per the enclosure.

The power supply shall be regulated as per the terms and conditions of the supply of the respective electricity boards.

- 1.3
 - (a) For purposes of electrical load and power planning by the electrical section, the contractor shall furnish along with the tender, the estimated load requirement of electric power for the execution of the contract works in terms of maximum kilo Watt or KVA demand during various periods/months of the contract period along with the details of the construction electrical equipment/machinery with their individual load details and location/locations of power supply required for availing temporary electric power supply in the standard proforma enclosed (Form SGCW – 2).
 - (b) The electric power supply will generally made available at one point in the works site of the contractor by the department.
 - (c) Where distribution boards are located at different places the Contractor shall submit schematic drawing indicating all details like size of wires, Over Head or cable feeders, earthing etc. the position and location of all equipment and switches shall be given.
- 1.4 The Contractor shall make his own arrangements for main earth electrode and tapplings thereof. The existing earth points available at site can be used at the discretion of the Departmental Electrical Engineer with prior permission. Method of earthing,

installation and earth testing results shall conform to relevant I.S Specifications (IS-3043).

- 1.5 All three phase equipment shall be provided with double earthing. All light fixtures and portable equipment shall be effectively earthed to main earthing.
- 1.6 All earth terminals shall be visible. No gas pipes and water pipes shall be used for earth connection. Neutral conductor shall not be treated as earth wire.
- 1.7 The Contractor shall not connect any additional load without prior permission of Departmental Electrical Engineer. For obtaining additional power required, test reports of the tests mentioned in (d) of Form SGCW – 1 shall be submitted.
- 1.8 Joints in earthing conductors shall be avoided. Loop earthing of equipment shall not be allowed. However tapings from an earth bus may be done.
- 1.9 The entire installation shall be subjected to the following tests before energisation of installation including portable equipment:
 - a) Insulation resistance test
 - b) Polarity test of switches
 - c) Earth continuity test
 - d) Earth electrode resistance.

The test procedures and their results shall conform to relevant IS Specifications. The Contractor shall submit a test report for his complete installation every 2 months or after rectifying any faulty section in the specimen test report. Once such test report for the complete installation shall be submitted before onset of monsoon.

2 **The following are provided for general guidance of the Contractor and shall be read as specific requirement, in addition to complying with Indian Electricity Act, Indian Electricity Rules and IS Specification.**

2.1 **Installation**

- a) Only persons having valid wireman's licence/competency certificate shall be employed for carrying out electrical work and repair of electrical equipment, installation and maintenance at site. The job shall be supervised by a qualified licenced Supervisor.
- b) Electrical equipment and installations shall be installed and maintained as to prevent danger from contact with live conductors and to prevent fires originating from electrical causes like short circuits, overheating etc. Installation shall not cause any hindrance to movement of men and materials.
- c) Materials for all electrical equipment shall be selected with regard to working voltage, load and working environment. Such equipment shall conform to the relevant standards.
- d) The minimum clearance to be maintained for all overhead lines along roads and across roads shall be as per the statutory requirements as listed in clause 1.2 of Annexure.

- e) Grounding conductor of wiring system shall be of copper or other corrosion-resistant material. An extra grounding connection shall be made in appliances/equipment where a chance of electric shock is high.
- f) Electric fuses and/or circuit breakers installed in equipment circuits for short circuit protection shall be of proper rating. It is also recommended that high rupturing capacity (HRC) fuses be used in all circuits. For load of 5 KW or more earth leakage circuit breaker shall be provided in the circuits.
- g) Wherever cables or wires are laid on poles, a guard wire of adequate size shall be run along the cables/wires and earthed effectively. Metallic poles as a general rule, shall be avoided and if used shall be earthed individually. Anticlimbing guards and danger notices shall be provided on poles. Each equipment shall have individual isolating switches.
- h) Wires and cables shall be properly supported and an approved method of fixing shall be adopted. Loose hanging of wires & cables shall be avoided. Lighting and power circuits shall be kept distinct and separate.
- i) Reinforcement rods or any metallic part of structure shall not be used for supporting wires and cables, fixtures, equipment, earthing etc.
- j) All cables and wires shall be adequately protected mechanically against damages. In case the cable is required to be laid under ground, it shall be adequately protected by covering the same with bricks, Plain Cement Concrete (PCC) tile or any other approved means.
- k) All armoured cables shall be properly terminated by using suitable cable glands. Multistranded conductor cables shall be connected by using cable lugs/sockets. Cable lugs shall preferably be crimped. They shall be of proper size and shall correspond to the current rating and size of the cable. Twisted connections will not be allowed.
- l) All cable glands, armouring and sheathing of electric cables, metal circuits and their fittings, metallic fittings and other non-current carrying parts of electrical equipment and apparatus shall be effectively grounded.
- m) All the Distribution Boards, Switch Fuse units, Bus bar chambers, ducts, cubicles etc. shall have MS enclosures and shall be dust, vermin and water proof. The Distribution Boards, switches etc. shall be so fixed that they shall be easily accessible. Changes shall be done only after the approval of the Departmental Electrical Engineer.
- n) The contractor shall provide proper enclosures/covers of approved size and shape for protection of all the switch board, equipment etc. against rain. Exposed live parts of all electrical circuits & equipment shall be enclosed permanently. Crane trolley wires and other conductors which cannot be completely insulated shall be placed such that they are inaccessible under normal working conditions.
- o) Iron clad industrial type plug outlets are preferred for additional safety.
- p) Open type Distribution Boards shall be placed only in dry and ventilated rooms; they shall not be placed in the vicinity of storage batteries or otherwise exposed to chemical fumes.

- q) Isolating switches shall be provided close to equipment for easy disconnection of electrical equipment or conductors from the source of supply when repair or maintenance work has to be done on them.
- r) In front of distribution boards a clear space of 90cm shall be maintained in order to have easy access during an emergency.
- s) Adequate working space shall be provided around electrical equipment which require adjustment or examination during operation.
- t) As far as possible electrical switches shall be excluded from a place where there is danger of explosion. All electrical equipment such as motors, switches and lighting fittings installed in work room where there is possibility of explosion hazard shall be explosion proof.
- u) All connections to lighting fixtures, starters or other power supplies shall be provided with PVC insulated, PVC sheathed twin/three/four core wires to have better mechanical protection for preventing possible damage to equipment or injury to personnel. Taped joints shall not be allowed and the connections may be made in looping system. Electric starter of motors, Switches shall not be mounted on wooden boards. Only sheet steel mounting or iron frame work shall be used.
- v) All the lighting fixtures and lamp holders shall be of good quality and in good condition. Badly repaired or broken holders, etc. shall not be used.
- w) Only PVC insulated and PVC sheathed wires or armoured PVC insulated and sheathed cables shall be used for external power supply connections of temporary nature. Weatherproof rubber wires shall not be used for any temporary power supply connections. Taped joints in the wires shall not be used.
- x) The bulbs/lamps used for illumination and testing purpose shall have cover or guard to protect them from accidental breakages. Only 24V supply system shall be used for hand lamps etc., while working inside metallic tanks or conducting vessels.
- y) After installation of new electric system and or other extensive alternations to existing installations, thorough inspection shall be made by Departmental Electrical Engineer before the new system or new extension is put in use.
- z) Contractor shall ensure that power factor for their loads shall be maintained at 0.85. In case the power factor falls below 0.85, necessary capacitor units shall be provided by the contractor.

2.2

Operation & Maintenance

- a) All persons who work with electrical installation/equipment shall be aware of the electrical hazards, use of protective devices and safe operational procedures. They shall be given training in fire fighting, first aid and artificial resuscitation techniques.
- b) The supervisor shall instruct the workers in the proper procedure, specify and enforce the use of necessary protective equipment such as adequately insulated pliers, screw drivers, fuse pullers, testing lamps and similar hand tools. Only wooden ladders shall be used to reach the heights in electrical work.

- c) No material or earthwork shall be allowed to be dumped below or in the vicinity of the bare overhead line conductors.
- d) Separate work permits shall be issued for individual group leaders working on the same system which shall be returned after the completion of the work to Safety Supervisor and no system shall be energized without the clearance of safety supervisor.
- e) Before any maintenance work is commenced on electrical installations/equipment, the circuits shall be deenergised and ascertained to be dead by positive test with an approved voltage testing device. Switches shall be tagged or the fuse holders withdrawn before starting the work. Adequate precautions shall be taken in two important aspects viz.
 - i) That there shall be no danger from any adjacent live parts and
 - ii) That there shall be no chances of reenergization of the equipments on which the persons are working.
- f) While working on or near a circuit, whenever possible the use of one hand may be practiced even though the circuit is supposed to be dead. The other hand may preferably be kept in pocket.
- g) When it is necessary to touch electrical equipment (for example when checking for overload of motors) back of the hand may be used. Thus, if accidental shock were to cause muscular contractions, one would not 'freeze' to the conductor.
- h) Operation of electrical equipment shall be avoided when standing on wet floor or when hands are wet.
- i) Before blown fuses are replaced, the circuit shall be locked out and an investigation shall be made for the cause of the short circuit or overload.
- j) When two persons are working within reach of each other, they shall never work on different phases of the supply.
- k) When structural repairs, modification or painting work are to be undertaken, appropriate measures shall be taken for the protection of persons whose work may bring them into the proximity of live equipment/circuit.
- l) It shall be ensured that the insulation and wire size of extension cords are adequate for the voltage and current to be carried.
- m) While tapping electricity from the socket, plug top must be used. It shall be ensured that no extension boards are over loaded while tapping. Only standard three pin plugs shall be used for tapping electricity. Broken sockets/plugs shall be replaced immediately with good ones. Only joint free cables shall be used for connecting equipment/apparatus.
- n) Floors shall be kept free from trailing electrical cables to avoid tripping hazard.
- o) Power supply to all the machines and lighting fixture shall be switched off when not in use.

- p) Temporary electrical connections shall be removed as soon as the stipulated work is over. After completion of the works, the Contractor shall dismantle the distribution boards and the other facilities he may have erected.
- q) Unauthorized tapping of power by others from distribution boards under the control of the contractor shall be prohibited at all circumstances.
- r) No flammable materials shall be stored in any working area near the switch boards.
- s) Safety work permits shall be used for switching off the main feeder and equipment by the contractor.
- t) "MEN ON LINE" "DO NOT SWITCH ON" "DANGER" or "CAUTION" board as applicable shall be used during maintenance works on the electrical equipment.

2.3 Portable Electrical Equipment

- a) Portable electrical equipment shall be regularly examined, tested and maintained to ensure that the equipment and its leads are in good order. Register shall be maintained for inspection recording the testing dates and results of the equipments.
- b) All portable appliances shall be provided with three core cable and three pin plug. The third pin of the plug shall invariably be earthed. It shall be ensured that the metal part of the equipment shall be effectively earthed.
- c) All connections to portable equipment or machines from the panel/distribution board/extension board shall be taken using 3 core double insulated PVC flexible copper wire in one length. No joints shall be allowed in this flexible wire. In case single length of wire is not sufficient for a particular location then the supply can be tapped by providing another extension board comprising of switch and socket.
- d) Flexible cables for portable lamps, tools, and apparatus shall be regularly examined, tested periodically and maintained to ensure safety.

FORM NO. SGCW – 1**FORM FOR COMPLETION CERTIFICATE**
(Prescribed under Cl. 1.2 of Annexure)

I/We certify that the installation detailed below has been installed by me/us and tested and that to the best of my/our knowledge and belief, it complies with Indian electricity Rules, 1956 as well as IS:732-1963 code of practice for Electrical Wiring Installations. (System voltage not exceeding 650 Volts (Revised)).

Electric installation at.

Voltage and system of supply

a) <u>Particulars of work</u>	<u>Number</u>	<u>load</u>	<u>Type of system of wiring</u>
i) Light Points			
ii) Fan Points			
iii) Plug Points (3 Pin)			
iv) Motors			
b) If the work involves installation of overhead lines and/or underground cable			
c) Earthing :			
Description of earthing electrode, size of earth wire and number of electrodes provided:			
d) Test results :			
1. Insulation resistance for the whole installation :			
i. Between conductors			
ii. Between each conductor and earth			
2. Resistance of earthing electrode or earthing system.			
3. Maximum earthing resistance of installation _____			

Signature of Supervisor
Name and address of Supervisor

Signature of Contractor
Name and address of Contractor

FORM NO. SGCW - 2**'A' APPLICATION FOR SERVICE CONNECTION BY CONTRACTOR****(Prescribed under Cl. 1.3 of Annexure)****(To be filled in triplicate)**

1. Name & address of Contractor :
 2. Reference to Tender & Work Order :
 3. Completion period :
 4. Connected load details (please attach details in separate sheet) :
 5. Max. demand anticipated :
 6. Nature of service connection required (whether single or three phase) :
 7. Place where service required :
 - a) Works :
 - b) Colony :
 8. If supply of electricity is free or chargeable (Please enclose extract of conditions from the
 9. Details of meter provided :
 - a) If meter required from the Department, whether SD is paid :
 - b) Details of SD (Security Deposit) :
 - c) Whether meter is tested or not, if tested, attach test report, if not, details of testing fee deposited. :
 10. Name of Supervisor/Electrical in charge of installation and maintenance :
 11. Electrical license No. of person mentioned against Col. 10 :
 12. Electrical safety appliances available for use. :
 13. Fire extinguishers available for :
 14. First - Aid facility/box available for use, if any. :
- Date : (Signature of the Contractor)

Name :

'B' CERTIFICATE BY THE CONTRACTOR

Certified that my/our installations have been carried out in accordance with T.E. Rules and that I/We have employed competent persons handle the installations.

I/We am/are agreeable to the bills, in respect of this service connections being raised on the basis the connected load furnished above, in case the actual consumption falls below the one stipulated by the tender conditions.

(Signature of the contractor)

Name :

Address :

Date :

'C' CERTIFICATE BY THE CONTRACT CONTROL ENGINEER

Verified the particulars and forwarded to the Engineer In-charge

(Signature of Contract Control Engineer)

Name :

Section : Civil/Electrical/Mechanical.

'D' CERTIFICATE BY THE ENGINEER

Certified that the particulars furnished by the Contractor are true to the best of my knowledge and belief and that I have satisfied my self as to the safe conditions of electrical installations for which the service connection is applied for.

Signature :

Name :

Date :

Designation with section :

'E' CERTIFICATE BY THE SAFETY ENGINEER

Certified that I have inspected the electrical installations referred herein and after satisfying myself about the safe conditions of the installation, I hereby recommend that the service connection be given to the contractor.

Signature of Safety Engineer

Name :

Date :

'F' AUTHORISATION BY THE ELECTRICAL ENGINEER

Service connection may be/may not be given for the reasons noted hereunder.

Signature :

Name :

Date :

Designation :

'G' 'REPORT OF COMPLIANCE'

Service connection is given by me on

a) Meter Nos.

- 1.
- 2.
- 3.

b) Initial readings :

- 1.
- 2
- 3

c) Locations :

- 1.
- 2.
- 3.

d) Meter sealings

Signature of Electrical Engineer
(Metering and Billing)

Name :

Date : Designation :

Note :

1st copy to Contract Control Engineer

2nd copy to Safety Engineer

And 3rd copy to Electrical Engineer

} After all the formalities are completed and Report of compliance in (G) are filled up by the Electrical Engineer after power supply is given.

SECTION-VIII

Schedule of quantities

DECLARATION SHEET

I _____ hereby certify that all the data and information as furnished in this proposal are correct and true covered by our formal proposal No._____, dated _____. I hereby certify I am duly authorized representative of tenderer whose name appears above my signature.

Tenderer's Name

Authorised representative's Signature

Contractor's intent : The Contractor hereby agrees fully to comply with the requirement and intent of this specification for the period indicated.

Authorized representative's Signature