

GENERAL TERMS & CONDITIONS FOR CONSULTANCY WORK

1. DEFINITIONS:

For the purpose of agreement, the following are expressions shall have the meaning hereby assigned to them, except where the context otherwise requires:-

- i) **‘Employer’** means the Board of Governor, which shall unless excluded by or repugnant to the context include employer’s representative.
- ii) **‘Approved’** means approved by employer’s representative in writing including subsequent confirmation of previous approval and **‘Approval’** means approval by employer’s representative in writing.
- iii) **‘Employer’s Representative’** means the Executive Engineer, Institute Works Department or any other person authorized by him, as would be in-charge of the work and would sign the agreement on behalf of the Board of Governors.
- iv) **‘Contract’** means the documents forming the quotation, letter of acceptance thereof and the formal agreement executed between the employer and the consultant, together with the documents referred to therein including these general terms and conditions for consultancy works.
- v) **‘Consultant’** means a person to whom the work of providing consultancy services is assigned for the work of Environment impact assessment, obtaining Environment clearance, consent to establish, consent to operate for “Construction of Indian Institute of Science Education and Research (IISER Bhopal) at Bhopal.

2. SCOPE OF WORK:

I PRELIMINARY STAGE : BASELINE STATUS OF STUDY AREA

The consultant shall,

- a) Prepare programme of work assigned to him for all items of consultancy services.
- b) Coordinate with all the consultants architectural, Plumbing, Electrical, structural etc. and collect all information about the project.
- c) Reconnaissance survey exploration conducted to gain information.
- d) Baseline status - Existing infrastructure, Demography, Economy and Resource Base, Health status, Cultural and aesthetic attributes.
- e) Information of location of metropolitan cities, national parks, sanctuaries, lakes, forests, biosphere reserves, rivers railways and highways etc.

- f) Information on places of archaeological, historical, cultural and religious, significance and tribal areas.
- g) Changes anticipated with respect to current developmental activities within the study area.
- h) Preparation of preliminary report and submission for obtaining terms of reference to SEIAA.

II. DETAILED STAGE BASELINE ENVIRONMENT STUDY :

a) Land Environment

- a) Assessment of exiting land-use, agricultural pattern, vegetation, forestry, human settlements and other wastelands etc.
- b) Classification of land for agricultural, forests, wasteland, government/private land.
- c) Assessment of soil quality, soil profile will be determined around the study area.
- d) Significant physio-chemical characteristics of the soil will be determined for colour, texture, soil type, pH, conductivity etc.
- e) Geological history including topography, rock type, soil stability, weathering characterizes, seismic detail will be studied.

b) Air Environment

- a) Existing status of ambient air quality within 10 km radius of the study areas will be monitored for **four season** for R-EIA at the selected locations in four cross directions at the increasing distance as per monitoring network design (sampling point selection), for assessing the maximum ground level concentration for specific parameters SO₂, NO_x, SPM, RSPM.
- b) Collection of meteorological data viz. Wind speed, Direction, Humidity, Temperature etc. during period of sampling.
- c) Identification, prediction, quantification and evaluation of other potential emission within the impact zone and prediction of air emission using appropriate air quality simulation model.

c) Noise Environment

Monitoring and assessment of present status of noise levels within the 10 km. radius at selected locations twice for 24 hours in various zones like industrial, commercial, residential and sensitive locations will be undertaken.

d) Water Environment

- a) Study of water resource availability and water bodies in the study area.
- b) Trend of surface and ground water use for irrigation, industrial and domestic activities for a decade as well as requirements for each of the above activities will be worked out.
- c) Water requirement for the project, assessment of the wastewater quality and quantity of effluent (as per CPCB guidelines) likely to be discharged into water / land environment from the proposed activities.
- d) Monitoring of surface and ground water quality in order to characterize water bodies with respect to physico-chemical characteristics and pollution levels.
- e) Topography, drainage, flooding and river bed/ bank erosion for major rivers will be determined.

e) Biological Environment

i. Ecology : The ecological study will aim to understand the State of Health of habitat and ecosystems such as degree of disturbance, presence of pollutants, nutrients and hazardous material, type locations and characteristics of important and sensitive flora and fauna.

ii. Terrestrial ecology : Vegetation type will be defined and field investigation based on appropriate seasonal sampling of vegetation for density, diversity, frequency, relative abundance, cover etc. and identification of dominant plant species of the area based on these parameters will be done. In addition, relative abundance of wild animals and birds will be estimated.

A list of endangered species will be prepared.

Presence of wetland and other ecologically sensitive areas such as national parks/sanctuaries if any will be identified and indicated on a map.

iii. Aquatic Ecology : The ecology of the area will be thoroughly investigated. This effort will include review of existing literature.

A list of aquatic flora and fauna shall be prepared. The water bodies shall be characterized for trophic status, primary productivity and densities of phytoplankton, zooplankton, fish and macrophytes.

f) Socio Economic & Health Environment

- i. A study of the existing population in the study area will be conducted and its socio-economic characteristics will be determined through literature review.
- ii. The study will include assessment and characterization of population with respect to male and female ratio, educational pattern, religious beliefs, family structure,

- irrigation pattern, sources of livelihood, economic opportunities, public health and financial position of the population.
- iii. Collection of details regarding human settlements, demographic pattern, including Quality of life parameters like education, Employment, Recreation, Health, Transport, Cultural heritage, Industrial Development, communication, Sanitary facilities, school, Fire services, Police station etc. Labour force characteristics will also be determined in terms of skilled and unskilled workers available and the role of women in the labour force.
 - iv. Based upon site map or any other available Government record, the number of project-affected families (PAF) due to acquisition of private land will be indicated in the report.

III ENVIRONMENT IMPACT ASSESSMENT

This stage will include identification, prediction, quantification and evaluation of significant impacts on the Environment due to operation and the recommendations on the mitigative measures to be adopted to minimize adverse impacts and thus bring it to suitable levels. It will also outline the post study-monitoring programme so that the environment and development stay in perfect harmony.

a) Environment Impact

- i. The features of the project and other industries, which are likely to have impact on the environment have to be discussed in detail covering liquid effluent, solid waste, noise etc.
- ii. With knowledge of the baseline condition and the project related activities, positive and negative impacts during the construction and operation phases will be identified and assessed.
- iii. Both short term and long term impacts on sensitive areas, if any such as habitat of endangered species of wildlife or plants, site/monuments of historical and cultural importance centers with concentrated population in the study area will be established.

Since this R-EIA will be carried out for the existing project activities, environmental performance of the area will be established through monitored data on ambient water quality, effluent quality, ambient air quality, noise levels etc. In addition details of rehabilitation and

Resettlement, a forestation, institutional set up and other environment management related activities of corporation will be highlighted. The impacts will be expressed through appropriate matrix.

b) Air Quality Impact

- i. Identification, prediction, quantification and evaluation of other potential emission within the impact zone and prediction of air emission using appropriate air quality simulation model will be carried out.
- ii. Evaluation of the performance and suitability of the proposed pollution control measures to meet air quality emission standards will be done.
- iii. Appraisal for development of green belt and identification of sensitive plant species in the study area.
- iv. A computer based mathematical air quality model suitable for the region will be identified and run to predict the concentration of SPM, SO₂, NO_x and RPM due to project operation.
- v. The model will take into account other pollution sources and topographical features of the area. The results will be presented for a radius of 10 km. around the study area.
 - a. The predicted air quality will be compared with existing regulations and mitigating measures if any, will be identified.

c) Water Quality Impact

- i. The impact of liquid effluents on natural water bodies will be established.
- ii. Assessment of feasibility of water recycling and reuse for irrigation/green belt development / alternative use.

d) Impact on Ecology

- i. The impact on ecology of river of the area will be assessed in detail. Impacts on aquatic species, will be assessed, particularly those which are endangered. The parameters, which are of concern, are TSS, TDS, heavy metals, oil and grease, pH and temperature.
- ii. Recommendation of measures to mitigate such adverse impacts on soil erosion and habitat loss will be given. In addition, impact fugitive emissions will be assessed on the surrounding species of economic/genetic/ biological importance.

e) Prediction of Noise Levels

- i. Identification of sources of noise and its levels and its impact on the environment will be clearly brought out. The noise level at varying distances for multi sources will be predicted.
- ii. A comparison of measured noise (Leq) at monitoring locations to that of predicted noise levels (Leq) will be made and mitigatory measures required, if any, will be recommended which will conform to regulatory ambient air noise standards.

f) Social Impacts

- i. Projection of changes with respect to parameters like human settlements, demographic pattern, including quality of life, parameters like education, employment, recreation, health, transport, cultural heritage, industrial development and others and delineation of guidelines to minimize impacts.
- ii. Assessment of impact on places of historical / archaeological and aesthetic importance, if any.
- iii. Assessment of economic benefits to community and the environment.
- iv. Assessment of socio-economic impact on population living around the proposed site due to availability of electricity, road, transportation, market, educational facility, employment, medical facilities etc.
- v. Identification and subsequently suggestion of appropriate mitigative measures associated with Project's social impacts.

g) Occupational Safety & Risk Assessment

Occupational risk involved during mining activities will be assessed and necessary safety and protective measures spelt out. The DMP will include both on site and off site plans.

h) Disaster Management Plan

A Disaster Management Plan (DMP) for dealing with emergency situation arising due to fire, explosion, leakages of hazardous substances etc. in the project will be clearly demarcated. The plan will include storage, handling, transportation etc. of the hazardous and toxic materials to be used in the project activities.

i) Green Belt Development Plan

- i. Plantation already done in and around the study area and other areas will be clearly marked on the layout plan. The details of number of trees, species, age, etc. are will be furnished in tabular form.

- ii. Potential areas for further plantation will be identified and suitable plant species, plantation technique and necessary infrastructures required for plantation clearly mentioned.
- iii. A scientific green belt development plan based on attenuation factor and selection of indigenous / fast growing species for the plant, site township will be included in the EIA report.

j) Post project Monitoring Plan

- i. To monitor certain environmental parameters identified as critical or as required by regulatory agencies suggestions as to the schedule to be followed as also a regular monitoring programme will be given.
- ii. Considering the requirements of Regulatory Agencies and identified critical parameters, a proper post project environmental monitoring programme will be suggested wherein all equipments and manpower requirement necessary for the implementation of this programme and cost involved will be dealt with in detail.

k) Environmental Management Plan

- i. A suitable Environment Management Plan (EMP) will be drawn after identifying, predicting and evaluating the significant impacts on each component of the environment.
 - ii. Suggestions on additional environmental management and pollution control measures necessary to meet the requirements of the regulatory agencies will be spelt out.
 - iii. Recommendation of mitigative measures as and where such measures are warranted.
 - iv. Environmental Management Plan will be developed to selectively mitigate the adverse impacts of the project activities. Role and capability of existing environmental units on site will be examined and based on the findings recommendations will be made concerning establishment and/or expansion of such units and training of staff wherever necessary.
- l) Prepare the Environmental Impact Assessment (EIA) report as per guideline of EIA notification September 2006 prescribed by MoFF which inter alia shall cover all the aspects mentioned in the guidelines for the construction project. according to the local Acts, Laws, Regulations etc. and make changes as required by such authorities
 - m) To coordinate the public consultation process, if so directed by the ministry in the ToR.
 - n) To liaise & do the follow up with SEIAA / SEAC & with all concerned authorities for

processing the proposal till Environmental clearance is granted to the project.

- o) To attend personal hearing / technical presentation before Expert Appraisal Committee (EAC).

IV. Construction Stage

- a) Visit the site of work and provide periodical supervision as and when necessary to clarify/ interpret any drawing/detailing/specifications that may be necessary and attend conferences and meetings at work site, as and when required.
- b) To monitor certain environmental parameters identified as critical or as required by regulatory agencies suggestions as to the schedule to be followed as also a regular monitoring programme will be given.
- c) Considering the requirements of Regulatory Agencies and identified critical parameters, a proper post project environmental monitoring programme will be suggested wherein all equipments and manpower requirement necessary for the implementation of this programme and cost involved will be dealt with in detail.

V. Completion Stage

The Consultant shall,

- a) Obtain completion certificates, no objection certificate as applicable and wherever necessary, from the Environmental Authorities etc. after completion of work and supply the same, including any other document/details, related to the work, to the Employer.

3. INSTITUTE OBLIGATIONS

- a) Provide information regarding the project required for successful completion of project.
- b) Geo-technical investigations shall be got done by the Institute on their own and report given to Consultant.
- c) Provide a Survey plan to suitable scale showing boundaries, contours at suitable intervals, existing physical features including any existing roads, paths, services, structures, trees and utility line including levels of approach roads.
- d) Institute to pay the consultancy bill and reimbursable expenses if found in order within 21 days of submission of the same.
- e) Institute to pay all fees, levies, security deposits and expenses in respect of Statutory approvals.

4. PAYMENT OF REMUNERATION

(A) CONSULTANCY FEE

The employer shall pay the fees as per Financial Proposal to the consultant for the professional service to be rendered by him described in clause 2 (I, II, III & IV).

- a) For complete works as mentioned in the financial proposal, a lump sum fee as accepted by the institute shall be paid to the consultant in parts as mentioned in para 4(B) below.
- b) Total fee shall be inclusive of all taxes, expenditure on stationary, soft copies and presentations expenditure on equipments used for Environmental Studies required for Environmental clearance. Submission of Report, Preparation of Presentation, necessary follow up with various Government Departments, site / office visits, transportations, laboratory testing fee payable by the consultant to any other sub-consultant(s) / associate(s) and all statutory taxes etc. required to obtain the Environmental clearance for the works mentioned in the scope of work, nothing extra shall be paid over (a) mentioned above

(B) MODE OF PAYMENT

The payment for various stages of design work shall be worked out as mentioned below:

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| (i) On completion of stage – I. | 20% (twenty percent) of the total fee payable as para (A) above. |
| (ii) On completion of stage – II. | 50% (fifty percent) of the total fee payable as para 4(A) above less already paid. |
| (iii) On completion of stage – III. | 80% (eighty percent) of the total fee payable as para 4 (A) above less already paid. |
| (iv) On completion of stage – IV. | 90% (ninety percent) of the total fee payable as para 4(A) above less already paid. |
| (v) On completion of whole work obtaining completion certificate from local bodies etc. | 100% (hundred percent) of the total fee payable as para 4 (A) above less already paid. |

5 SECURITY DEPOSIT:

An amount equivalent to 5% (five percent) of the gross amount payable to the

consultant shall be deducted progressively from each bill as a security deposit for execution by the consultant. The security deposit will be refunded after the completion of the defects liability period of the work. Security deposit can, however, be replaced by FDR pledged in favour of the Director, IISER Bhopal payable at Bhopal and issued by any nationalized scheduled banks guaranteed by Reserve Bank of India.

6 ADDITIONS & ALTERATIONS:

- (I) The employer shall have the right to request in writing for additions, alternations, modifications or deletions in the reports, design and drawings of any part of the work and the consultant shall comply with such requests.
- (II) If the employer deviates substantially from the original scheme which involves, for its proper execution, extra services, expenses and extra labour on the part of the consultant for making changes and additions to the drawings, specifications or other documents rendering major part or whole of this work in fructuous, the consultant may then be compensated for such extra services and expenses on quantum merit basis to be agreed mutually unless such changes / alterations are due to consultant's own omissions and / or discrepancies, including changes under clause 2 and due to changes required by consultant's associates of all internal, external utilities and services. The decision of the employer shall be final on whether the deviations and additions are substantial as requiring any compensation to be paid to the consultant. However, for the minor modifications or alternation which does not affect the entire design, planning etc. nothing extra will be payable.
- (III) The consultant shall not make any material deviation, alteration, addition or omission from the work described in the contract documents except without obtaining the written consent of the employer.

7 TIME SCHEDULE

The commencement of work will be considered on 10th day after the date of issue of award letter and time for carrying out different activities shall be as under :-

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|--|----------------------------|
| (a) Preparation of programme of work and preliminary report as per clause 3 (I). | 1 weeks |
| (b) Preparation of detailed EIA report and structural designs as per clause 3 (I) and 3 (II)and (III). | 4 weeks |
| (c) Completion of services as mentioned in clause 3 (IV). | Actual for other services. |

Notwithstanding the above the consultant shall be available for consultation / site visit / for any requirement related to the work during the execution and defect liability – period of the project – as & when required by the employer.

8 DELAY IN CARRYING OUT THE CONSULTANCY WORK

The time allowed for carrying out the work, as specified in clause 7, shall be strictly observed by the consultant and shall be deemed to be the essence of contract on the part of the consultants. The work shall throughout the stipulated period of the contract, be processed with all diligence and in the event of failure of the consultant to complete the work within time schedule as specified above or subsequently notified to him, the consultant shall pay as compensation amount to 1 (one) per cent or such smaller amount as the employer may decide on the total fee payable for every day that the work remains unfinished after the specified date subject to a maximum of 5% of the fee.

9 ABANDONMENT OF WORK

That if the consultant abandons the work for any reason what-so-ever or become incapacitated from action as consultant as aforesaid, the employer may make full use of all or any of the drawings prepared by the consultant and that the consultant shall be liable to refund any excess fees paid to him up to that date plus to pay such damages as may be assessed by the employer subject to a maximum of the security deposit which will stand forfeited.

That if the employer abandons the work for any reason whatsoever, the consultant shall be paid for the services carried out as per Clause 2 duly approved by the employer in writing. The payment will be determined on the basis of break up of the consultancy fee mentioned in clause 3.

10 TERMINATION

The employer without any prejudice to its right against the consultant in respect of any delay or otherwise or to any claims or damages in respect of any breaches of the contract and without prejudice of any rights or remedies under any of the provisions of this contract, may terminate the contract by giving one month's notice in writing to the consultant and in the event of such termination, the consultant shall be liable to refund the excess payment, if any, made to him over and above what is due in terms of this agreement on the date of termination and the employer may make full use of all or any of the drawings prepared by the consultant.

11 ARBITRATION

That if any dispute, shall at any time arise between the parties in respect of the

meaning or interpretations of this agreement, or covering anything herein contained or the validity of the enforcement thereof which cannot be settled mutually, shall within 30 days (or such longer period may be mutually agreed upon) from the date one party informs the other in writing that such dispute shall be referred to sole arbitrator appointed by the institute. The arbitrator will have hearings at Bhopal or at such places in India as may be decided by the arbitrator.

In case, the arbitrator to whom the matter is originally referred being transferred or vacating his office or inability to act, The Institute, 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 was left by his predecessor. The arbitration proceedings will be conducted in accordance with and be subject to the Indian Arbitration and Conciliation Act, 1996, as amended from time to time and the decision of the arbitrator shall be final and binding on the parties.

It is also the term of the agreement that if the consultant does not make demand for arbitration in respect of any item in writing within 90 days of receiving intimation from the employer that the final bill is ready for payment, the claim of the consultant will be deemed to have waived and absolutely barred and the employer shall be discharged and released of all liabilities under the agreement in respect of all such claims.

The consultant shall continue to perform their duties with diligence notwithstanding the fact that a dispute has been referred to arbitration or any dispute or difference has arisen.

12 NUMBER OF DRAWINGS SETS ETC. AND COPYRIGHT

All the estimates, details of quantities, drawings, detailed designs, reports and any other documents envisaged under this agreement would be supplied by the consultant as indicated above, but not less than four sets of prints and additional copies required for submission to PCB / SEIAA / SEAC. If there is any revision of any details in any drawing for any reason, same number of documents shall be supplied by the consultant without extra charge. All these drawings will become the property of the employer and he will have the right to use the same anywhere else. In that event, the employer will pay a royalty to the consultant on mutually acceptable basis. The drawings cannot be issued to any other person, firm or authority or used by the consultant for any other project. No copies of any documents shall be issued to any one, except the employer and his authorized representative.

13 GUARANTEE

The consultant shall re-design at his cost any portion of the work, which due to his failure to use a reasonable degrees of design skill, shall become defective within one year from the date of regular use of the portion of the work affected. The employer shall grant right of access to the consultant to these portions of the work claimed to be

defective for inspection.

The employer may make good the loss by recovery from the dues of the consultant in case of failure to comply with the above clause subject to a maximum of the amount of security deposit as per clause 5 mentioned above. In case no amount is available with employer, such amount shall be a debt on the consultant.

14 DETERMINATION OR RECESSION OF AGREEMENT

The employer without any prejudice to his rights against the consultant in respect of any delay be notice in writing may determine or rescind the contract and to engage another consultant(s) to carry out the balance work debiting the excess amount, if any, so spent to the original consultant in any of the following cases:-

- (a) If the consultant being a company shall pass a resolution or the court shall make an order that company shall be wound up or if a receiver or a manager on behalf of the creditor shall be appointed or if circumstances shall arise which entitles the court or creditor to appoint a receiver or a manager which entitles the court to make up a winding order.
- (b) If the consultant commits breach of any of the terms of agreement.

15 GENERAL

- (a) The scrutiny of the drawing, designs and reports by the employer's own supervisory staff, if any does not absolve the consultants of their responsibility under the agreement. The consultants shall remain solely responsible for soundness of the work and services designed by him or by the associates / specialists engaged, if any, by him and for all provisions of the contract so as to satisfy the particular requirement.
- (b) The fees paid as provided herein clause 3 shall be in full discharge of functions to be performed by him and no claim whatsoever shall be against the employer in respect of any proprietary rights or copy rights on the part of any other party relating the drawings, design and reports, unless otherwise specifically mentioned in the agreement.
- (c) The consultant shall indemnify and keep indemnified the employer against any such claims and against all costs and expense paid by the employer in defending himself against such claims.
- (d) It is further agreed between the employer and the consultant that the stamp duty payable under the law in respect of this agreement shall be borne by the consultant.

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FINANCIAL PROPOSAL FOR ENVIRONMENTAL CLEARANCE

I/We _____ Environment Consultant / Consultancy Firm am / are hereby quoting the fee for the work of providing professional services as per terms of reference issued by IISER Bhopal. We agree to mode of payment, as decided by the IISER Bhopal. The offer is inclusive of all taxes excluding statutory service taxes. I/We agree for no payment shall be made for the escalation (In figure & Words).

Our fee is Rs. _____ (in figure)

(Rupees _____)

Note : *Total fee shall be inclusive of all taxes, expenditure on stationary, soft copies and presentations expenditure on equipments used for Environmental Studies required for Environmental clearance. Submission of Report, Preparation of Presentation, necessary follow up with various Government Departments, site / office visit, transportations, laboratory testing fee payable by the consultant to any other sub-consultant(s) / associate(s) and all statutory taxes etc. required to obtain the Environmental clearance*

(Signature of Consultant with Seal)