

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE BENCH, CHENNAI
ORIGINAL APPLICATION NO. 61 of 2022**

IN THE MATTER OF: -

**Mugasi Anumanpalli Village Panchayat
& Others**

... Applicants

Versus

Union of India and Others

... Respondent(s)

INDEX

S.NO	PARTICULARS	PAGE NO.
1.	Counter Affidavit	1- 11
2.	Annexure R-1 Copy of the EIA Notification, 2006 dated 14.09.2006	12-56
3.	Annexure R-2 Copy of the Notification dated 20.04.2022	57-62
4.	Annexure R-3 Copy of the letter to Regional Office of the MoEF&CC at Chennai	63-64
5.	Annexure R-4 Copy of the Site Inspection report dated 28.11.2023 along with the Corrigendum	65-84
6.	Annexure R-5 Documents provided by the Project Proponent to the RO Chennai w.r.t the cultivable command area (CCA)/ayacut	85-126

Place: Chennai
Dated: 31.01.2024

Filed by:

Advocate for MoEF&CC

Mob.No. 9444012986

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE BENCH, CHENNAI
ORIGINAL APPLICATION NO. 61 of 2022**

IN THE MATTER OF: -

**Mugasi Anumanpalli Village Panchayat
& Others**

... Applicants

Versus

Union of India and Others

... Respondent(s)

**COUNTER AFFIDAVIT ON BEHALF OF RESPONDENT NO. 1,
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**

MOST RESPECTFULLY SHOWETH:

I, Dr. Saranya P , D/o P.K. Narasimman, aged about 35 Years working as Scientist 'D' in the Ministry of Environment, Forest and Climate Change, having an office located at 2nd Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-03, do hereby solemnly affirm on oath and state as under:

1. It is submitted that I am working as Scientist 'D' in the office of the Regional Office Chennai and as such am well acquainted with the facts and circumstances of the case on the basis of records available in my

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

Saranya
Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

office and am thus duly authorized to file this Affidavit on behalf of the Respondent No. 1 herein, i.e. the Ministry of Environment, Forest & Climate Change (hereinafter referred as MoEF&CC). Specifically admitted hereunder:

2. It is submitted that the present Original Application has been filed challenging the Extension, Renovation and Modernization of Lower Bhavani Sub Basin Project (Lower Bhavani Irrigation System, Kalingarayan Channel and Kodiveri Anicut System) running through Erode, Tiruppur and Karur districts of the State of Tamil Nadu. It is stated in the application that the existing irrigation area of the Lower Bhavani Project (hereinafter referred to as 'LBP Canal') consists of 83,975 ha. The applicants have alleged that the said project has been undertaken without securing prior Environmental Clearance mandated under the Environmental Impact Assessment Notification, 2006.

It is also alleged that the project proponent had issued an administrative order vide G.O.Ms. No. 276 dated 09.11.2020 for the purpose of renovation and modernization of LBP Canal without assessing the environmental impact of such construction and the mandatory requirements of public consultation has not been followed. Further, it is also contended that for the purpose of concrete lining of the entire inner area of the existing irrigation canals, 4 lakh trees will be uprooted which would create environmental and ecological imbalance. It is also stated that the project is likely to have disastrous effect on the groundwater table and scarcity of drinking water in the region.

3. It is submitted that the present application has been filed by the applicant seeking the following reliefs:



Dr. P. Saranya
Scientist 'D'

Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

a. To appoint Expert Committee in the field of Environment and Ecology so as to assess the environmental and ecological damages of the project and to file a report in this regard before the Hon'ble Tribunal.

b. Declare all the actions of the State of Tamil Nadu in implementing the proposed project as per G.O.Ms 276 Public Works Department dated 09.11.2020 for Concrete Lining of Lower Bhavani project Canal by uprooting the 4 lakh trees, in the name of Extension, Renovation and Modernization of Lower Bhavani Sub Basin Project System, without obtaining prior EC and permissions as illegal and violative of the Environment Protection Act, 1986 and EIA Notification, 2006 as amended.

c. Direct respondents 1 and 2 to undertake detailed environmental study on the proposed project as per G.O.Ms 276 Public Works Department dated 09.11.2020 by holding Public consultation, Environmental Impact Assessment Study.

d. Restrain the project proponent from carrying on any construction activities in the entire stretch of the LBP Canal, until the 3rd respondent obtains EC from appropriate authority.

4. That, the MoEF&CC grants Environmental Clearance to Irrigation projects in accordance with the provisions laid down in Environment Impact Assessment Notification, 2006 and its amendments thereof. The EIA Notification, 2006 clearly states the requirement of prior Environmental Clearance ("EC") before the start of any construction work in case of new projects or expansion and modernization of existing projects or activities.

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006


Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

5. It is submitted that Environment Impact Assessment (EIA) essentially refers to the assessment of environmental impacts likely to arise from the construction of project. EIA is a planning tool to integrate the likely environmental concerns into the developmental process right at the initial stage of planning and suggest necessary mitigation measures.

6. It is submitted that the salient features of EIA Notification, 2006 inter alia includes:

(i) *The EIA Notification, 2006 has categorized the projects into two categories namely; Category 'A' and Category 'B' based on their impact potential.*

(ii) *Category 'A' projects will be appraised at the Central level while Category 'B' projects at the State level.*

(iii) *State level Environment Impact Assessment Authorities and Committees (SEIAAs and SEACs) have been constituted for the purpose of appraisal of Category 'B' projects.*

(iv) *The stage of scoping for prescribing terms of reference by the Regulatory Agency for the EIA studies has been incorporated in accordance with the International practice. It is expected to improve the quality of EIA thereby improving the quality of decision making and minimizing the delays.*

The copy of the EIA Notification, 2006 dated 14.09.2006 is annexed as **Annexure R-1**.

7. It is submitted that the EIA Notification, 2006 mandates certain projects to obtain prior EC before start of any construction work in case of-

P. Saranya

Dr. P. Saranya
Scientist 'D'

Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

- All new projects or activities listed in the Schedule to this notification;
- Expansion, modernization or any change in the product mix or raw material mix in existing projects or activities, listed in the Schedule to this notification. The Schedule to the EIA Notification, 2006 details the categories or projects or activities which require prior Environmental Clearance.

Here it is pertinent to mention that if an irrigation project, mentioned at Item no. 1 (c), involves inter-state issues then it falls under Category A which requires prior Environmental Clearance from the MoEF&CC. As per the Schedule appended to the said notification (as amended on 20.04.2022), all irrigation projects mentioned at Item no. 1 (c) are covered under Category B, except for irrigation projects involving inter-state issues shall be appraised at Central level without change in category.

The copy of the Notification dated 20.04.2022 related to irrigation project is enclosed as **Annexure R-2**.

8. Further it is pertinent to mention that, based on the records available on the Parivesh web portal (<https://parivesh.nic.in/>), the MoEF&CC did not receive an application for grant of EC for the project in question. So in order to further examine the issues involved in the instant matter and to check the current factual status of the project in question, the MoEF&CC directed its Regional Office at Chennai (hereinafter referred to as 'RO Chennai') vide letter dated 14.11.2023 to conduct a project site visit and submit the Site Inspection Report so to ascertain if EIA Notification, 2006 has been violated.

Dr. P. Saranya
Dr. P. Saranya
 Scientist 'D'

Government of India
 Regional Office, MoEF&CC
 Shastri Bhawan, Haddows Road,
 Nungambakkam, Chennai - 600 006

Dr. P. Saranya
 Scientist 'D'
 Government of India
 Regional Office, MoEF&CC
 Shastri Bhawan, Haddows Road,
 Nungambakkam, Chennai - 600 006

The copy of the Letter dated 14.11.2023 is annexed as **Annexure R-3**.

9. That the RO Chennai carried out the site inspection on 22.11.2023 and 23.11.2023 and the report was submitted vide its letter dated 28.11.2023, to the MoEF&CC. As per the said report, the works proposed in the project involves lining of 1/3rd of the canal sides and providing precast plain cement concrete slab on both side of slopes of the canal for a length of 65.37km for the purpose of renovation of the damaged cross masonry structures such as canal sluices, regulators, bridges and strengthen the weak earthen embankments of the canal. The relevant extract of observations made by the RO Chennai are provided hereunder:

- i. Regarding interstate issues:

"The Lower Bhavani Major irrigation Project lies in Erode District of Tamil Nadu. The proposed project was to provide irrigation facility in 2, 47,247 acres in 3 districts namely Erode, Tiruppu and Karur in Tamil Nadu State. The extension, renovation and modernization of LBP falls in these 3 Districts."

- ii. Regarding requirement of EC under EIA Notification, 2006:

"..It is submitted that from the available records submitted by project Authority, the Lower Bhavani Sagar Irrigation project was approved just after independence (1947) and initial works were taken-up even before independence (1944) to provide irrigation facility of about 247247 acres of culturable command area of covering 3 Districts in Tamil Nadu. The Environmental Clearance became a statutory requirement since 27.1.1994 for major

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

Dr. P. Saranya
Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

irrigation projects. This project is an ongoing project and was started before 27.1.1994- The proposed activities being undertaken is only for improvement and modernization and as such may not attract the provisions of EIA Notification, 1994. The project may also not attract the provisions of EIA Notification, 2006 and its amendment from time to time."

iii. Regarding status of the Construction:

"Project Authorities have undertaken construction activities during the current financial year 2023 after getting the administrative approval from Government of Tamil Nadu. No construction activities were initiated earlier. It may be noted that construction of protection walls, rehabilitation/reconstruction of sluice gate & few Bridges works in the LBP main canal were undertaken during July to August 2023, from 1 - 1 - 000 miles to 1513-500 miles. The details of construction activities undertaken are presented in Table. III. So far about 35% of the works have been completed in all 4 packages. Presently no new construction activities are carried out in the project area. The remaining works will be taken - up in the ensuing months in non-irrigation season, as informed by the project Authority."

iv. Regarding removal of Trees:

"The project authorities have planned to remove the trees which are grown inside the canal slopes and obstructing the flow of canal water. The proposal for felling of trees was presented to the

Psaranya
Dr. P. Saranya
 Scientist 'D'
 Government of India
 Regional Office, MoEF&CC
 Shastri Bhawan, Haddows Road,
 Nungambakkam, Chennai - 600 006

District Collector, Erode and Tiruppur. The District Collector, Erode has obtained necessary report from the Divisional Forest officers and RDO, Erode and RDO, Gobichettipalayam. The proposal was placed before District Green Committee, Erode which had approved the proposal. After getting the approval, the District Collector, Tiruppur had issued an order for a total of 8750 trees only (Vide letter no. Na. Ka. 11691/2021/M22 dated 13.10.22). Similarly, the District Collector, Erode has issued an order for a total of 6877 trees only (Vide letter no. Na. Ka. NO. 10858/2022/K3 dated 6.3.2023).

Even though the WRD has obtained permission from the District Collector, Erode and District Collector, Tiruppur for felling the trees for a total of 15627 trees, only 114 trees had been felled so far. Copy of the photos taken during the site visit is at Annexure-IV. The PA claims that it was much essential to remove these trees which cause much obstruction to the free flow of water. The tree removal proposal was for considering in the inner side slope of the canal which causes much obstruction to flow. Normally the trees grown in the bund of the canal cannot have that much strength & stability as the tree grows in normal ground. The WRD, under the circumstances considered minimal removal of tree and at the same time canal protection to prevent breaches which may cause heavy damages to crops and also to provide un-interrupted water supply to the Tail end farmers.”

Psarany

Dr. P. Saranya

Scientist 'D'

Government of India

Regional Office, MoEF&CC

Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

DR. P. SARANYA
SCIENTIST 'D'
GOVERNMENT OF INDIA
REGIONAL OFFICE, MOEF&CC
SHASTRI BHAWAN, HADDOWS ROAD,
NUNGAMBAKKAM, CHENNAI - 600 006

10. As per the findings of the RO Chennai, "The ayacut area i.e. cultivable command area (CCA) has not been increased" which has been substantiated by the following documents provided by the Project Proponent to the RO Chennai:

- i. Executive Summary-Detailed Project Report -Lower Bhavani Irrigation System
- ii. Report to accompany the work of Extension, Renovation & Modernization of Kalingarayan Channel
- iii. Report to accompany the work of Extension, Renovation & Modernization of Kodiveri Anicut System

Moreover, the project is an ongoing project which was approved after 1947 and it started before 'prior environmental clearance' became a statutory requirement.

The copy of the Site Inspection report dated 28.11.2023 along with the Corrigendum and the documents provided by the Project Proponent to the RO Chennai w.r.t the cultivable command area (CCA) is annexed as **Annexure R-4** and **Annexure R-5** respectively.

11. It is submitted that the aforesaid views provided by the RO Chennai were thoroughly examined. In this regard, it is pertinent to mention that based on the provision of EIA, 2006 provided at Para no. 7 (ii), it is evident that *"for modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to the EIA notification, 2006 through change in process and or technology or involving a change in the product – mix shall require EC."*


Dr. P. Saranya
 Scientist 'D'
 Government of India
 Regional Office, MoEF&CC
 Shastri Bhawan, Haddows Road,
 Nungambakkam, Chennai - 600 006

12. It is further submitted that the Ministry shall adopt the same affidavit in the matter namely, OA No 89 of 2022 titled as LBP Systemized Irrigation Council vs Union of India and others tagged along with the instant matter, pending before the Hon'ble Tribunal.
13. It is submitted that the present reply affidavit may kindly be taken on record and into consideration and the Hon'ble Tribunal may pass appropriate Order(s), direction(s) as deemed fit and proper under the facts and circumstances of the present case.
14. That other/ancillary issues raised in the application under reply do not pertain to the answering respondent. The Ministry seeks leave to make additional submissions, if required, during the course of the proceedings.



DEPONENT

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

VERIFICATION

I, the above named deponent do hereby solemnly affirm and state that the contents of the aforesaid affidavit are true and correct to my personal knowledge and have been derived from the official records maintained by the Respondent. No part of it is false nor has anything material been concealed there from.

Verified at Chennai on this 31st day of January, 2024

**DEPONENT**

Dr. P. Saranya
Scientist 'D'
Government of India
Regional Office, MoEF&CC
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

**(Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii)
MINISTRY OF ENVIRONMENT AND FORESTS
New Delhi 14th September, 2006**

Notification

S.O. 1533(E). - Whereas, a draft notification **under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 for imposing** certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India¹, unless prior environmental clearance has been accorded in accordance with the objectives of National Environment Policy **as approved by the Union Cabinet on 18th May, 2006** and the procedure specified in the notification, by the Central Government or the State or Union territory Level Environment Impact Assessment Authority (SEIAA), to be constituted by the Central Government in consultation with the State Government or the Union territory Administration concerned under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for the purpose of this notification, was published in the Gazette of India ,Extraordinary, Part II, section 3, sub-section (ii) vide number S.O. 1324 (E) dated the 15th September ,2005 inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 15th September, 2005;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification number S.O. 60 (E) dated the 27th January, 1994, except in respect of things done or omitted to be done before such supersession, the Central Government hereby directs that on and from the date of its publication the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to this notification entailing capacity addition with change in process and or technology shall be

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

undertaken in any part of India only after the prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified hereinafter in this notification.

¹Includes the territorial waters

2. Requirements of prior Environmental Clearance (EC):- The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- (i) All new projects or activities listed in the Schedule to this notification;
- (ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;
- (iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

3. State Level Environment Impact Assessment Authority:- (1) A State Level Environment Impact Assessment Authority hereinafter referred to as the SEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of three Members including a Chairman and a Member – Secretary to be nominated by the State Government or the Union territory Administration concerned.

- (2) The Member-Secretary shall be a serving officer of the concerned State Government or Union territory administration familiar with environmental laws.
- (3) The other two Members shall be either a professional or expert fulfilling the eligibility criteria given in Appendix VI to this notification.

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- (4) One of the specified Members in sub-paragraph (3) above who is an expert in the Environmental Impact Assessment process shall be the Chairman of the SEIAA.
- (5) The State Government or Union territory Administration shall forward the names of the Members and the Chairman referred in sub- paragraph 3 to 4 above to the Central Government and the Central Government shall constitute the SEIAA as an authority for the purposes of this notification within thirty days of the date of receipt of the names.
- (6) The non-official Member and the Chairman shall have a fixed term of three years (from the date of the publication of the notification by the Central Government constituting the authority).

¹“(7) All decisions of the SEIAA shall be taken in a meeting and shall ordinarily be unanimous:

Provided that, in case a decision is taken by majority, the details of views, for and against it, shall be clearly recorded in the minutes and copy thereof sent to MoEF.”

4. Categorization of projects and activities:-

- (i) All projects and activities are broadly categorized in to two categories - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.
- (ii) All projects or activities included as Category ‘A’ in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;
- (iii) All projects or activities included as Category ‘B’ in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, *will* require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. ^{II} “In the absence of a duly constituted SEIAA

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

or SEAC, a Category 'B' project shall be considered at Central Level as a Category 'B' project;"

5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government and SEACs (hereinafter referred to as the (EAC) and (SEAC) at the State or the Union territory level shall screen, scope and appraise projects or activities in Category 'A' and Category 'B' respectively. EAC and SEAC's shall meet at least once every month.

- (a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union territory Administration with identical composition;
- (b) The Central Government may, with the prior concurrence of the concerned State Governments or the Union territory Administrations, constitutes one SEAC for more than one State or Union territory for reasons of administrative convenience and cost;
- (c) The EAC and SEAC shall be reconstituted after every three years;
- (d) The authorised members of the EAC and SEAC, concerned, may inspect any site(s) connected with the project or activity in respect of which the prior environmental clearance is sought, for the purposes of screening or scoping or appraisal, with prior notice of at least seven days to the applicant, who shall provide necessary facilities for the inspection;
- (e) The EAC and SEACs shall function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

6. Application for Prior Environmental Clearance (EC):-

An application seeking prior environmental clearance in all cases shall be made in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II, after the identification of prospective site(s) for the project and/or activities to which the application relates, before commencing any construction activity, or preparation of land, at the site by the applicant. The applicant shall furnish, along with the application, a copy

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

of the pre-feasibility project report except that, in case of construction projects or activities (item 8 of the Schedule) in addition to Form 1 and the Supplementary Form 1A, a copy of the conceptual plan shall be provided, instead of the pre-feasibility report.

7. Stages in the Prior Environmental Clearance (EC) Process for New Projects:-

7(i) The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:-

- Stage (1) Screening (Only for Category 'B' projects and activities)
- Stage (2) Scoping
- Stage (3) Public Consultation
- Stage (4) Appraisal

I. Stage (1) - Screening:

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

II. Stage (2) - Scoping:

(i) "Scoping": refers to the process by which the Expert Appraisal Committee in the case of Category 'A' projects or activities, and State level Expert Appraisal Committee in the case of Category 'B1' projects or activities, including applications for expansion and/or modernization and/or change in product mix of existing projects or activities, determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

concerned shall determine the Terms of Reference on the basis of the information furnished in the prescribed application Form 1/Form 1A including Terms of Reference proposed by the applicant, a site visit by a sub- group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction/Township/Commercial Complexes /Housing) shall not require Scoping and will be appraised on the basis of Form 1/ Form 1A and the conceptual plan.

- (ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form 1. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities .If the Terms of Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form 1, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.
- (iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC concerned at this stage itself. In case of such rejection, the decision together with reasons for the same shall be communicated to the applicant in writing within sixty days of the receipt of the application.

III. **Stage (3) - Public Consultation:**

- (i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following:-

- (a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- (b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
 - (c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
- III “(cc) maintenance dredging provided the dredged material shall be disposed within port limits.”;
- III “(d) All Building or Construction projects or Area Development projects (which do not contain any category ‘A’ projects and activities) and Townships (item 8(a) and 8(b) in the Schedule to the notification).”
- e) all Category ‘B2’ projects and activities.
 - f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.
- (ii) The Public Consultation shall ordinarily have two components comprising of:-
- (a) a public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;
 - (b) obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.
- (iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45(forty five) of a request to the effect from the applicant.
- (iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period directly to the regulatory authority concerned as above, the regulatory

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

authority shall engage another public agency or authority which is not subordinate to the regulatory authority, to complete the process within a further period of forty five days,.

- (v) If the public agency or authority nominated under the sub paragraph (iii) above reports to the regulatory authority concerned that owing to the local situation, it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed, it shall report the facts in detail to the concerned regulatory authority, which may, after due consideration of the report and other reliable information that it may have, decide that the public consultation in the case need not include the public hearing.
- (vi) For obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity, the concerned regulatory authority and the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) shall invite responses from such concerned persons by placing on their website the Summary EIA report prepared in the format given in Appendix IIIA by the applicant along with a copy of the application in the prescribed form, within seven days of the receipt of a written request for arranging the public hearing. Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right, source specified in the application shall not be placed on the web site. The regulatory authority concerned may also use other appropriate media for ensuring wide publicity about the project or activity. The regulatory authority shall, however, make available on a written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing. All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means.
- (vii) After completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.

IV. Stage (4) - Appraisal:

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- (i) Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.
- (ii) The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant validated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.
- (iii) The appraisal of an application shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days .The prescribed procedure for appraisal is given in Appendix V ;

7(ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product –mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

8. Grant or Rejection of Prior Environmental Clearance (EC):

- (i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.
- (ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.
- (iii) In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified in sub-paragraphs (i) or (ii) above, as applicable, the

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

- (iv) On expiry of the period specified for decision by the regulatory authority under paragraph (i) and (ii) above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.
- (v) Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.
- (vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

9. Validity of Environmental Clearance (EC):

The "Validity of Environmental Clearance" is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and five years in the case of all other projects and activities.

However, in the case of Area Development projects and Townships [item 8(b)], the validity

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

period shall be limited only to such activities as may be the responsibility of the applicant as a developer. This period of validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form 1, and Supplementary Form 1A, for Construction projects or activities (item 8 of the Schedule). In this regard the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee as the case may be.

10. Post Environmental Clearance Monitoring:

- IV (i)(a) In respect of Category 'A' project, it shall be mandatory for the project proponent to make public the environment clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the district or State where the project is located and in addition, this shall also be displayed in the project proponent's website permanently.
- (b) In respect of Category 'B' projects, irrespective of its clearance by MoEF / SEIAA, the project proponent shall prominently advertise in the newspapers indicating that the project has been accorded environment clearance and the details of the MoEF website where it is displayed.
- (c) The Ministry of Environment and Forests and the State/Union Territory Level Environmental Impact Assessment Authorities (SEIAAs), as the case may be, shall also place the environmental clearance in the public domain on Governmental portal.
- (d) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.”;
- IV (ii) It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- IV (iii) All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority.

11. Transferability of Environmental Clearance (EC):

A prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written "no objection" by the transferor, to, and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.

12. Operation of EIA Notification, 1994, till disposal of pending cases:

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27th January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I , or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

SCHEDULE

(See paragraph 2 and 7)

LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
1		Mining, extraction of natural resources and power generation (for a specified production capacity)		
(1)	(2)	(3)	(4)	(5)
v "1(a)	(i) Mining of minerals. (ii) Slurry pipelines (coal lignite and other ores) passing through national parks / sanctuaries / coral reefs, ecologically sensitive areas.	≥ 50 ha. of mining lease area in respect of non-coal mine lease. > 150 ha of mining lease area in respect of coal mine lease. Asbestos mining irrespective of mining area All projects.	<50 ha ≥ 5 ha .of mining lease area in respect of non-coal mine lease. ≤ 150 ha ≥ 5 ha of mining lease area in respect of coal mine lease.	General Condition shall apply Note: Mineral prospecting is exempted.”;
1(b)	Offshore and onshore oil and gas exploration, development & production	All projects		Note Exploration Surveys (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey
1(c)	River Valley projects	(i) ≥ 50 MW hydroelectric power generation; (ii) ≥ 10,000 ha. of culturable command area	(i) < 50 MW ≥ 25 MW hydroelectric power generation; (ii) < 10,000 ha. of culturable command area	v “General Condition shall apply. Note: Irrigation projects not involving submergence or inter-state domain shall be appraised by the SEIAA as Category ‘B’ Projects.”;

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(1)	(2)	(3)	(4)	(5)
1(d)	Thermal Power Plants	v " ≥ 500 MW (coal / lignite / naphtha & gas based); ≥ 50 MW (Pet coke diesel and all other fuels including refinery residual oil waste except biomass); ≥ 20 MW (based on biomass or non hazardous municipal waste as fuel).";	< 500 MW (coal / lignite / naphtha & gas based); <50 MW ≥ 5MW (Pet coke, diesel and all other fuels including refinery residual oil waste except biomass); ≥ 20 MW > 15 MW (based on biomass or non hazardous municipal waste as fuel).";	v "General Condition shall apply. Note: (i) Power plant up to 15 MW, based on biomass and using auxiliary fuel such as coal / lignite / petroleum products up to 15% are exempt. (ii) Power plant up to 15 MW, based on non-hazardous municipal waste and using auxiliary fuel such as coal / lignite / petroleum products up to 15% are exempt. (iii) Power plants using waste heat boiler without any auxiliary fuel are exempt.";
1(e)	Nuclear power projects and processing of nuclear fuel	All projects		
2		Primary Processing		
2(a)	Coal washeries	≥ 1 million ton/annum throughput of coal	<1million ton/annum throughput of coal	General Condition shall apply (If located within mining area the proposal shall be appraised together with the mining proposal)
2 (b)	Mineral beneficiation	≥ 0.1million ton/annum mineral throughput	< 0.1million ton/annum mineral throughput	General Condition shall apply (Mining proposal with Mineral beneficiation shall be appraised together for grant of clearance)

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

3				
(1)	(2)	(3)	(4)	(5)
3(a)	Metallurgical industries (ferrous & non ferrous)	a) Primary metallurgical industry All projects b) Sponge iron manufacturing ≥ 200 TPD c) Secondary metallurgical processing industry All toxic and heavy metal producing units $\geq 20,000$ tonnes /annum	Sponge iron manufacturing <200TPD Secondary metallurgical processing industry i.) All toxic and heavy metal producing units <20,000 tonnes /annum ii.) All other non –toxic secondary metallurgical processing industries >5000 tonnes/annum	^v “General condition shall apply. Note: (i) The recycling industrial units registered under the HSM Rules, are exempted. (ii) In case of secondary metallurgical processing industrial units, those projects involving operation of furnaces only such as induction and electrical arc furnace, submerged arc furnace, and cupola with capacity more than 30,000 tonnes per annum (TPA) would require environmental clearance. (iii) Plant / units other than power plants (given against entry no. 1(d) of the schedule), based on municipal solid waste (non-hazardous) are exempted.”
3(b)	Cement plants	≥ 1.0 million tonnes/annum production capacity	<1.0 million tonnes/annum production capacity. All Stand alone grinding units	General Condition shall apply
4				
(1)	(2)	(3)	(4)	(5)
4(a)	Petroleum refining industry	All projects	-	-
4(b)	Coke oven plants	$\geq 2,50,000$ tonnes/annum	<2,50,000 & $\geq 25,000$ tonnes/annum	^v “General Condition shall apply.”
4(c)	Asbestos milling and asbestos based products	All projects	-	-

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(1)	(2)	(3)	(4)	(5)
4(d)	Chlor-alkali industry	≥300 TPD production Capacity or a unit located out side the notified industrial area/ estate	^v “(i) All projects irrespective of the size, if located in a Notified Industrial Area/ Estate. (ii) <300 tonnes per day (TPD) and located outside a Notified Industrial Area/ Estate.”	^v “General as well as specific condition shall apply. No new Mercury Cell based plants will be permitted and existing units converting to membrane cell technology are exempted from this notification.”
4(e)	Soda ash Industry	All projects	-	-
4(f)	Leather/skin/hide processing industry	New projects outside the industrial area or expansion of existing units out side the industrial area	All new or expansion of projects located within a notified industrial area/ estate	^v “General as well as specific condition shall apply.”
5		Manufacturing / Fabrication		
5(a)	Chemical fertilizers	^v “All projects except Single Super Phosphate.”	^v “Single Super Phosphate.”	-
5(b)	Pesticides industry and pesticide specific intermediates (excluding formulations)	All units producing technical grade pesticides	-	-
5(c)	Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)	All projects -	-	-
5(d)	Manmade fibers manufacturing	Rayon	Others	General Condition shall apply
5(e)	Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)	Located out side the notified industrial area/ estate -	Located in a notified industrial area/ estate	^v “General as well as specific condition shall apply.”

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(1)	(2)	(3)	(4)	(5)
5(f)	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	Located out side the notified industrial area/ estate	Located in a notified industrial area/ estate	^v "General as well as specific condition shall apply."
5(g)	Distilleries	(i) All Molasses based distilleries (ii) All Cane juice/ non-molasses based distilleries ≥ 30 KLD	All Cane juice / non-molasses based distilleries - <30 KLD	General Condition shall apply
5(h)	Integrated paint industry	-	All projects	General Condition shall apply
5(i)	Pulp & paper industry excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp with out bleaching	Pulp manufacturing and Pulp & Paper manufacturing industry	Paper manufacturing industry without pulp manufacturing	General Condition shall apply
5(j)	Sugar Industry	-	≥ 5000 tcd cane crushing capacity	General Condition shall apply
5(k)	^v Omitted			
6	Service Sectors			
6(a)	Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks / sanctuaries / coral reefs / ecologically sensitive areas including LNG Terminal	All projects		-

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(1)	(2)	(3)	(4)	(5)
6(b)	Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)	-	All projects	General Condition shall apply
7		Physical Infrastructure including Environmental Services		
7(a)	Air ports	^v "All projects including airstrips, which are for commercial use."	-	^v "Note: Air strips, which do not involve bunkering/ refueling facility and or Air Traffic Control, are exempted."
7(b)	All ship breaking yards including ship breaking units	All projects	-	-
7©	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes.	If at least one industry in the proposed industrial estate falls under the Category A, entire industrial area shall be treated as Category A, irrespective of the area. Industrial estates with area greater than 500 ha. and housing at least one Category B industry.	Industrial estates housing at least one Category B industry and area <500 ha. Industrial estates of area > 500 ha. and not housing any industry belonging to Category A or B.	^v "Genral as well as special conditions shall apply. Note: 1. Industrial Estate of area below 500 ha. and not housing any industry of Category 'A' or 'B' does not require clearance. 2. If the area is less than 500 ha. but contains building and construction projects > 20,000 Sq. mts. And or development area more than 50 ha it will be treated as activity listed at serial no. 8(a) or 8(b) in the Schedule, as the case may be."
7(d)	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	All integrated facilities having incineration & landfill or incineration alone	All facilities having land fill only	General Condition shall apply

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(1)	(2)	(3)	(4)	(5)
7(e)	^v "Ports, harbours, break waters, dredging."	≥ 5 million TPA of cargo handling capacity (excluding fishing harbours)	< 5 million TPA of cargo handling capacity and/or ports/ harbours ≥10,000 TPA of fish handling capacity	^v "General Condition shall apply. Note: 1. Capital dredging inside and outside the ports or harbors and channels are included; 2. Maintenance dredging is exempt provided it formed part of the original proposal for which Environment Management Plan (EMP) was prepared and environmental clearance obtained."
7(f)	Highways	i) New National High ways; and ii) Expansion of National High ways greater than 30 KM, involving additional right of way greater than 20m involving land acquisition and passing through more than one State.	^v " i) All State Highway Project; and ii) State Highway expansion projects in hilly terrain (above 1,000 m AMSL) and or ecologically sensitive areas."	General Condition shall apply. Note: Highways include expressways."
7(g)	Aerial ropeways	^{v(xvi)(a)} "(i) All projects located at altitude of 1,000 mtr. And above. (ii) All projects located in notified ecologically sensitive areas."	^{v(xvi)(b)} "All projects except those covered in column (3)."	General Condition shall apply
7(h)	Common Effluent Treatment Plants (CETPs)		All projects	General Condition shall apply
7(i)	Common Municipal Solid Waste Management Facility (CMSWMF)		All projects	General Condition shall apply
8		Building /Construction projects/Area Development projects and Townships		
8(a)	Building and Construction projects		≥20000 sq.mtrs and <1,50,000 sq.mtrs. of built-up area#	#(built up area for covered construction; in the case of facilities open to the sky, it will be the activity area)
8(b)	Townships and Area Development projects.		Covering an area ≥ 50 ha and or built up area ≥1,50,000 sq .mtrs ++	++All projects under Item 8(b) shall be appraised as Category B1

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

Note:-**V^(xvii) “General Condition (GC):**

Any project or activity specified in Category ‘B’ will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as identified by the Central Pollution Control Board from time to time, (iii) Eco-sensitive areas as notified under section 3 of the Environment (Protection) Act, 1986, such as, Mahabaleshwar Panchgani, Matheran, Pachmarhi, Dahanu, Doon Valley, and (iv) inter-State boundaries and international boundaries:

Provided that the requirement regarding distance of 10 km of the inter-State boundaries can be reduced or completely done away with by an agreement between the respective States or U.Ts sharing the common boundary in case the activity does not fall within 10 kilometres of the areas mentioned at item (i), (ii) and (iii) above.”

Specific Condition (SC):

If any Industrial Estate/Complex / Export processing Zones /Special Economic Zones/Biotech Parks / Leather Complex with homogeneous type of industries such as Items 4(d), 4(f), 5(e), 5(f), or those Industrial estates with pre –defined set of activities (not necessarily homogeneous, obtains prior environmental clearance, individual industries including proposed industrial housing within such estates /complexes will not be required to take prior environmental clearance, so long as the Terms and Conditions for the industrial estate/complex are complied with (Such estates/complexes must have a clearly identified management with the legal responsibility of ensuring adherence to the Terms and Conditions of prior environmental clearance, who may be held responsible for violation of the same throughout the life of the complex/estate).

[No. J-11013/56/2004-IA-II (I)]

(R.CHANDRAMOHAN)

JOINT SECRETARY TO THE GOVERNMENT OF INDIA

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

APPENDIX I
(See paragraph – 6)
FORM 1

VI(a) “(I) Basic Information

Serial Number	Item	Details
1.	Name of the project/s	
2.	S. No. in schedule	
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number of wells to be drilled	
4.	New/Expansion/Modernization	
5.	Existing Capacity/Area etc.	
6.	Category of Project i.e. 'A' or 'B'	
7.	Does it attract the general condition? If Yes, please specify.	
8.	Does it attract the specific condition? If Yes, please specify.	
9.	Location	
	Plot/Survey/Khasra No.	
	Village	
	Tehsil	
	District	
	State	
10.	Nearest railway station/airport along with distance in kms.	
11.	Nearest Town, city, District Headquarters along with distance in kms.	
12.	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	
13.	Name of the applicant	
14.	Registered Address	
15.	Address for correspondence:	
	Name	
	Designation (Owner/Partner/CEO)	
	Address	
	Pin Code	
	E-mail	
	Telephone No.	
Fax No.		
16	Details of Alternative Sites examined, if any. Location of these sites should be shown on a topo sheet.	Village-District-State 1. 2. 3.
17.	Interlinked Projects	
18	Whether separate application of interlinked project has been submitted?	

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

19.	If yes, date of submission	
20.	If no, reason	
21.	Whether the proposal involves approval/ clearance under: If yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980 ? (b) The Wildlife (Protection) Act, 1972 ? (c) The C.R.Z. Notification, 1991 ?	
22.	Whether there is any Government Order/Policy relevant/ relating to the site ?	
23.	Forest land involved (hectares)	
24.	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up ? (a) Name of the Court. (b) Case No. (c) Orders/directions of the Court, if any and its relevance with the proposed project.	

(II) Activity

- 1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
1.2	Clearance of existing land, vegetation and buildings?		
1.3	Creation of new land uses?		
1.4	Pre-construction investigations e.g. bore houses, soil testing?		
1.5	Construction works?		
1.6	Demolition works?		
1.7	Temporary sites used for construction works or housing of construction workers?		
1.8	Above ground buildings, structures or earthworks including linear structures, cut And fill or excavations		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

1.9	Underground works including mining or tunneling?		
1.10	Reclamation works?		
1.11	Dredging?		
1.12	Offshore structures?		
1.13	Production and manufacturing processes?		
1.14	Facilities for storage of goods or materials?		
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?		
1.16	Facilities for long term housing of operational workers?		
1.17	New road, rail or sea traffic during construction or operation?		
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?		
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?		
1.20	New or diverted transmission lines or pipelines?		
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?		
1.23	Abstraction or transfers of water from ground or surface waters?		
1.24	Changes in water bodies or the land surface affecting drainage or run-off?		
1.25	Transport of personnel or materials for construction, operation or decommissioning?		
1.26	Long-term dismantling or decommissioning or restoration works?		
1.27	Ongoing activity during decommissioning which could have an impact on the environment?		
1.28	Influx of people to an area in either temporarily or permanently?		
1.29	Introduction of alien species?		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

1.30	Loss of native species or genetic diversity?		
1.31	Any other actions?		

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)		
2.2	Water (expected source & competing users) unit: KLD		
2.3	Minerals (MT)		
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)		
2.5	Forests and timber (source – MT)		
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		
2.7	Any other natural resources (use appropriate standard units)		

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)		
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)		
3.3	Affect the welfare of people e.g. by changing living conditions?		
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,		
3.5	Any other causes		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes		
4.2	Municipal waste (domestic and or commercial wastes)		
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)		
4.4	Other industrial process wastes		
4.5	Surplus product		
4.6	Sewage sludge or other sludge from effluent treatment.		
4.7	Construction or demolition wastes		
4.8	Redundant machinery or equipment		
4.9	Contaminated soils or other materials		
4.10	Agricultural wastes		
4.11	Other solid wastes		

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources.		
5.2	Emissions from production processes		
5.3	Emissions from materials handling including storage or transport		
5.4	Emissions from construction activities including plant and equipment		
5.5	Dust or odours from handling of materials including construction materials, sewage and waste		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

5.6	Emissions from incineration of waste		
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)		
5.8	Emissions from any other sources		

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers		
6.2	From industrial or similar processes		
6.3	From construction or demolition		
6.4	From blasting or piling		
6.5	From construction or operational traffic		
6.6	From lighting or cooling systems		
6.7	From any other sources		

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)		
7.3	By deposition of pollutants emitted to air into the land or into water		
7.4	From any other sources		
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances		
8.2	From any other causes		
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?		

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting. lities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other 		
9.2	Lead to after-use of the site, which could have an impact on the environment		
9.3	Set a precedent for later developments		
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(III) Environmental Sensitivity

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, esting, foraging, resting, over wintering, migration		
4	Inland, coastal, marine or underground waters		
5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defence installations		
8	Densely populated or built-up area		
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)		
10	Areas containing important, high quality or scarce Resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)		
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)		
12	Areas susceptible to natural hazard which could cause the project to present environmental Problems (<i>earthquakes, subsidence, landslides, erosion, Flooding or extreme or adverse climatic conditions</i>)		

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(IV). Proposed Terms of Reference for EIA studies

^{VI(b)} "I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost."

Date: _____

Place: _____

Signature of the applicant
With Name and Full Address
(Project Proponent/Authorised Signatory)

NOTE:

1. The projects involving clearance under Coastal Regulation Zone Notification, 1991 shall submit with the application a C.R.Z. map duly demarcated by one of the authorized agencies, showing the project activities, w.r.t. C.R.Z. (at the stage of TOR) and the recommendations of the State Coastal Zone Management Authority (at the stage of EC). Simultaneous action shall also be taken to obtain the requisite clearance under the provisions of the C.R.Z. Notification, 1991 for the activities to be located in the CRZ.
2. The projects to be located within 10 km of the National Prks, Sancturries, Biosphere Reserves, Migratory Corridors of Wile Animals, the project proponenet shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon (at the stage of EC)."
3. All correspondence with the Ministry of Environment & Forests including aubmission of application for TOR/Environmental Clearance, subsequent clarifications, as may be required from time to time, participation in the EAC Meeting on behalf of the project proponenet shall be made by the authorized signatory only. The authorized signatory should also submit a document in support of his claim of being and authorized signatory for the specific project."

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

APPENDIX II
(See paragraph 6)

FORM-1 A (only for construction projects listed under item 8 of the Schedule)

CHECK LIST OF ENVIRONMENTAL IMPACTS

(Project proponents are required to provide full information and wherever necessary attach explanatory notes with the Form and submit along with proposed environmental management plan & monitoring programme)

1. LAND ENVIRONMENT

(Attach panoramic view of the project site and the vicinity)

- 1.1. Will the existing landuse get significantly altered from the project that is not consistent with the surroundings? (Proposed landuse must conform to the approved Master Plan / Development Plan of the area. Change of landuse if any and the statutory approval from the competent authority be submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.
- 1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.
- 1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology).
- 1.4. Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).
- 1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)
- 1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- 1.7. Give details regarding water supply, waste handling etc during the construction period.
- 1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)
- 1.9. Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)

2. WATER ENVIRONMENT

- 2.1. Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.
- 2.2. What is the capacity (dependable flow or yield) of the proposed source of water?
- 2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)
- 2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)
- 2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)
- 2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)
- 2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created.
- 2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?

- 2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)
- 2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)
- 2.11. How is the storm water from within the site managed?(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)
- 2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)
- 2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)
- 2.14. Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.

3. VEGETATION

- 3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with it's unique features, if any)
- 3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)
- 3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

4. FAUNA

- 4.1. Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.

- 4.2. Any direct or indirect impacts on the avifauna of the area? Provide details.
- 4.3. Prescribe measures such as corridors, fish ladders etc to mitigate adverse impacts on fauna

5. AIR ENVIRONMENT

- 5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)
- 5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.
- 5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.
- 5.4. Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.
- 5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.
- 5.6. What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

6. AESTHETICS

- 6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?
- 6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?
- 6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.
- 6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

7. SOCIO-ECONOMIC ASPECTS

- 7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details.

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- 7.2. Give details of the existing social infrastructure around the proposed project.
- 7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

8. BUILDING MATERIALS

- 8.1. May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)
- 8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?
- 8.3. Are recycled materials used in roads and structures? State the extent of savings achieved?
- 8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

9. ENERGY CONSERVATION

- 9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?
- 9.2. What type of, and capacity of, power back-up to you plan to provide?
- 9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?
- 9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.
- 9.5. Does the layout of streets & buildings maximise the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.
- 9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?
- 9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.
- 9.8. What are the likely effects of the building activity in altering the micro-climates? Provide a self assessment on the likely impacts of the proposed construction on

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

creation of heat island & inversion effects?

- 9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.
- 9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.
- 9.11. If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.
- 9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.
- 9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used.

10. Environment Management Plan

The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

APPENDIX III

(See paragraph 7

GENERIC STRUCTURE OF ENVIRONMENTAL IMPACT ASSESMENT DOCUMENT

S.NO	EIA STRUCTURE	CONTENTS
1.	Introduction	<ul style="list-style-type: none"> • Purpose of the report • Identification of project & project proponent • Brief description of nature, size, location of the project and its importance to the country, region • Scope of the study – details of regulatory scoping carried out (As per Terms of Reference)
2.	Project Description	<ul style="list-style-type: none"> • Condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Details should be provided to give clear picture of the following: <ul style="list-style-type: none"> • Type of project • Need for the project • Location (maps showing general location, specific location, project boundary & project site layout) • Size or magnitude of operation (incl. Associated activities required by or for the project) • Proposed schedule for approval and implementation • Technology and process description • Project description. Including drawings showing project layout, components of project etc. Schematic representations of the feasibility drawings which give information important for EIA purpose • Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements (as required by the scope) • Assessment of New & untested technology for the risk of technological failure

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

3.	Description of the Environment	<ul style="list-style-type: none"> • Study area, period, components & methodology • Establishment of baseline for valued environmental components, as identified in the scope • Base maps of all environmental components
4.	Anticipated Environmental Impacts & Mitigation Measures	<ul style="list-style-type: none"> • Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operations, final decommissioning or rehabilitation of a completed project • Measures for minimizing and / or offsetting adverse impacts identified • Irreversible and Irretrievable commitments of environmental components • Assessment of significance of impacts (Criteria for determining significance, Assigning significance) • Mitigation measures
5.	Analysis of Alternatives (Technology & Site)	<ul style="list-style-type: none"> • In case, the scoping exercise results in need for alternatives: • Description of each alternative • Summary of adverse impacts of each alternative • Mitigation measures proposed for each alternative and • Selection of alternative
6.	Environmental Monitoring Program	<ul style="list-style-type: none"> • Technical aspects of monitoring the effectiveness of mitigation measures (incl. Measurement methodologies, frequency, location, data analysis, reporting schedules, emergency procedures, detailed budget & procurement schedules)
7.	Additional Studies	<ul style="list-style-type: none"> • Public Consultation • Risk assessment • Social Impact Assessment. R&R Action Plans
8.	Project Benefits	<ul style="list-style-type: none"> • Improvements in the physical infrastructure • Improvements in the social infrastructure

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

		<ul style="list-style-type: none"> • Employment potential –skilled; semi-skilled and unskilled • Other tangible benefits
9.	Environmental Cost Benefit Analysis	If recommended at the Scoping stage
10.	EMP	<ul style="list-style-type: none"> • Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA
11	Summary & Conclusion (This will constitute the summary of the EIA Report)	<ul style="list-style-type: none"> • Overall justification for implementation of the project • Explanation of how, adverse effects have been mitigated
12.	Disclosure of Consultants engaged	<ul style="list-style-type: none"> • The names of the Consultants engaged with their brief resume and nature of Consultancy rendered

APPENDIX III A

(See paragraph 7)

CONTENTS OF SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT

The Summary EIA shall be a summary of the full EIA Report condensed to ten A-4 size pages at the maximum. It should necessarily cover in brief the following Chapters of the full EIA Report: -

1. Project Description
2. Description of the Environment
3. Anticipated Environmental impacts and mitigation measures
4. Environmental Monitoring Programme
5. Additional Studies
6. Project Benefits
7. Environment Management Plan

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

APPENDIX IV

(See paragraph 7)

PROCEDURE FOR CONDUCT OF PUBLIC HEARING

1.0 The Public Hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity District -wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

2.0 The Process:

2.1 The Applicant shall make a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is covering more than one District or State or Union Territory, the public hearing is mandated in each District, State or Union Territory in which the project is located and the applicant shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

2.2 The Applicant shall enclose with the letter of request, at least 10 hard copies and an equivalent number of soft (electronic) copies of the draft EIA Report with the generic structure given in Appendix III including the Summary Environment Impact Assessment report in English and in the official language of the state/local language, prepared strictly in accordance with the Terms of Reference communicated after Scoping (Stage-2). Simultaneously the applicant shall arrange to forward copies, one hard and one soft, of the above draft EIA Report along with the Summary EIA report to the following authorities or offices, within whose jurisdiction the project will be located:

- (a) District Magistrate/District collector/Deputy commissioner/s
- (b) Zila Parishad or Municipal Corporation or Panchayats Union
- (c) District Industries Office
- (d) Urban Local Bodies (ULBs) / PRIs Concerned / Development authorities.
- (d) Concerned Regional Office of the Ministry of Environment and Forests

2.3 On receiving the draft Environmental Impact Assessment report, the abovementioned authorities except the Regional Office of MoEF, shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over.

2.4 The SPCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment report (Appendix III A) for

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b), (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

inspection in select offices or public libraries or any other suitable location etc. They shall also additionally make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices as given in para 2.2.

3.0 Notice of Public Hearing:

3.1 The Member-Secretary of the concerned SPCB or UTPCC shall finalize the date, time and exact venue for the conduct of public hearing within 7(seven) days of the date of receipt of the draft Environmental Impact Assessment report from the project proponent, and advertise the same in one major National Daily and one Regional vernacular Daily / Official State Language. A minimum notice period of 30(thirty) days shall be provided to the public for furnishing their responses;

3.2 The advertisement shall also inform the public about the places or offices where the public could access the draft Environmental Impact Assessment report and the Summary Environmental Impact Assessment report before the public hearing. In places where the newspapers do not reach, the Competent Authority should arrange to inform the local public about the public hearing by other means such as by way of beating of drums as well as advertisement / announcement on radio / television.

3.3 No postponement of the date, time, venue of the public hearing shall be undertaken, unless some untoward emergency situation occurs and then only on the recommendation of the concerned District Magistrate/District collector/Deputy Commissioner, the postponement shall be notified to the public through the same National and Regional vernacular dailies and also prominently displayed at all the identified offices by the concerned SPCB or Union Territory Pollution Control Committee;

3.4 In the above exceptional circumstances, fresh date, time and venue for the public consultation shall be decided by the Member – Secretary of the concerned SPCB or UTPCC only in consultation with the District Magistrate/District collector/Deputy Commissioner and notified afresh as per procedure under 3.1 above.

4.0 Supervision and Presiding over the Hearing:

4.1 The District Magistrate/District collector/Deputy Commissioner or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, shall Supervise and preside over the entire public hearing process.

5.0 Videography

5.1 The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while Forwarding it to the Regulatory Authority concerned.

6.0 Proceedings

6.1 The attendance of all those who are present at the venue shall be noted and annexed with the final proceedings.

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

- 6.2 There shall be no quorum required for attendance for starting the proceedings.
- 6.3 A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary EIA report.
- 6.4 Persons present at the venue shall be granted the opportunity to seek information or clarifications on the project from the Applicant. The summary of the public hearing proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB or UTPCC and read over to the audience at the end of the proceedings explaining the contents in the local/vernacular language and the agreed minutes shall be signed by the District Magistrate/District collector/Deputy Commissioner or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.
- 6.5 A Statement of the issues raised by the public and the comments of the Applicant shall also be prepared in the local language or the Official State language, as the case may be, and in English and annexed to the proceedings:
- 6.6 The proceedings of the public hearing shall be conspicuously displayed at the office of the Panchyats within whose jurisdiction the project is located, office of the concerned Zila Parishad, District Magistrate/District collector/Deputy Commissioner, and the SPCB or UTPCC . The SPCB or UTPCC shall also display the proceedings on its website for general information. Comments, if any, on the proceedings which may be sent directly to the concerned regulatory authorities and the applicant concerned.
- 7.0 Time period for completion of public hearing**
- 7.1 The public hearing shall be completed within a period of 45 (forty five) days from date of receipt of the request letter from the Applicant. Thereafter the SPCB or UTPCC concerned shall sent the public hearing proceedings to the concerned regulatory authority within 8(eight) days of the completion of the public hearing. Simultaneously, a copy will also be provided to the project proponent. The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations incorporating the concerns expressed in the public hearing along with action plan and financial allocation, item-wise, to address those concerns.”.
- 7.2 If the SPCB or UTPCC fails to hold the public hearing within the stipulated 45(forty five) days, the Central Government in Ministry of Environment and Forests for Category 'A' project or activity and the State Government or Union Territory Administration for Category 'B' project or activity at the request of the SEIAA, shall engage any other agency or authority to complete the process, as per procedure laid down in this notification.

APPENDIX –V

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

(See paragraph 7)

PROCEDURE PRESCRIBED FOR APPRAISAL

1. The applicant shall apply to the concerned regulatory authority through a simple communication enclosing the following documents where public consultations are mandatory:
 - Final Environment Impact Assessment Report [20(twenty) hard copies and 1 (one) soft copy]]
 - A copy of the video tape or CD of the public hearing proceedings
 - A copy of final layout plan (20 copies)
 - A copy of the project feasibility report (1 copy)
2. The Final EIA Report and the other relevant documents submitted by the applicant shall be scrutinized in office within 30 days from the date of its receipt by the concerned Regulatory Authority strictly with reference to the TOR and the inadequacies noted shall be communicated electronically or otherwise in a single set to the Members of the EAC /SEAC enclosing a copy each of the Final EIA Report including the public hearing proceedings and other public responses received along with a copy of Form -1or Form 1A and scheduled date of the EAC /SEAC meeting for considering the proposal.
3. Where a public consultation is not mandatory, the appraisal shall be made on the basis of the prescribed application Form 1 and EIA report, in the case of all projects and activities other than Item 8 of the Schedule. In the case of Item 8 of the Schedule, considering its unique project cycle, the EAC or SEAC concerned shall appraise all Category B projects or activities on the basis of Form 1, Form 1A and the conceptual plan and make recommendations on the project regarding grant of environmental clearance or otherwise and also stipulate the conditions for environmental clearance.”
4. Every application shall be placed before the EAC/SEAC and its appraisal completed within 60 days of its receipt with requisite documents / details in the prescribed manner.
5. The applicant shall be informed at least 15 (fifteen) days prior to the scheduled date of the EAC /SEAC meeting for considering the project proposal.
6. The minutes of the EAC /SEAC meeting shall be finalised within 5 working days of the meeting and displayed on the website of the concerned regulatory authority. In case the project or activity is recommended for grant of EC, then the minutes shall clearly list out the specific environmental safeguards and conditions. In case the recommendations are for rejection, the reasons for the same shall also be explicitly stated.

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide notification number S.O. 1533 (E), dated 14th September, 2006 and amended vide S.O. 1737 (E), dated the 11th October, 2007.

APPENDIX VI

(See paragraph 5)

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

COMPOSITION OF THE SECTOR/ PROJECT SPECIFIC EXPERT APPRAISAL COMMITTEE (EAC) FOR CATEGORY A PROJECTS AND THE STATE/UT LEVEL EXPERT APPRAISAL COMMITTEES (SEACs) FOR CATEGORY B PROJECTS TO BE CONSTITUTED BY THE CENTRAL GOVERNMENT`

1. The Expert Appraisal Committees (EAC(s) and the State/UT Level Expert Appraisal Committees (SEACs) shall consist of only professionals and experts fulfilling the following eligibility criteria:

Professional: The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA/MSc Degree, or (ii) in case of Engineering /Technology/Architecture disciplines, 4 years formal training in a professional training course together with prescribed practical training in the field leading to a B.Tech/B.E./B.Arch. Degree, or (iii) Other professional degree (e.g. Law) involving a total of 5 years of formal University training and prescribed practical training, or (iv) Prescribed apprenticeship/article ship and pass examinations conducted by the concerned professional association (e.g. Chartered Accountancy),or (v) a University degree , followed by 2 years of formal training in a University or Service Academy (e.g. MBA/IAS/IFS). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.

Expert: A professional fulfilling the above eligibility criteria with at least 15 years of relevant experience in the field, or with an advanced degree (e.g. Ph.D.) in a concerned field and at least 10 years of relevant experience.

Age: Below 70 years. However, in the event of the non-availability of /paucity of experts in a given field, the maximum age of a member of the Expert Appraisal Committee may be allowed up to 75 years

2. The Members of the EAC shall be Experts with the requisite expertise and experience in the following fields /disciplines. In the event that persons fulfilling the criteria of "Experts" are not available, Professionals in the same field with sufficient experience may be considered:

- **Environment Quality Experts:** Experts in measurement/monitoring, analysis and interpretation of data in relation to environmental quality
- **Sectoral Experts in Project Management:** Experts in Project Management or Management of Process/Operations/Facilities in the relevant sectors.
- **Environmental Impact Assessment Process Experts:** Experts in conducting and carrying out Environmental Impact Assessments (EIAs) and preparation of Environmental Management Plans (EMPs) and other Management plans and who have wide expertise and knowledge of predictive techniques and tools used in the EIA process
- **Risk Assessment Experts**
- **Life Science Experts in floral and faunal management**
- **Forestry and Wildlife Experts**

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006

• **Environmental Economics Expert with experience in project appraisal**

3. The Membership of the EAC shall not exceed 15 (fifteen) regular Members. However the Chairperson may co-opt an expert as a Member in a relevant field for a particular meeting of the Committee.
4. The Chairperson shall be an outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector.
5. The Chairperson shall nominate one of the Members as the Vice Chairperson who shall
preside over the EAC in the absence of the Chairman /Chairperson.
6. A representative of the Ministry of Environment and Forests shall assist the Committee as its Secretary.
7. The maximum tenure of a Member, including Chairperson, shall be for 2 (two) terms of 3 (three) years each.
8. The Chairman / Members may not be removed prior to expiry of the tenure without cause and proper enquiry.

I; II; III (i), (ii); IV (a), (b); V (i), (ii), (iii)(a), (b), (c), (iv), (v), (vi) (a), (b), (vii), (viii) (a), (b), (ix), (x), (xi), (xii) (a), (b) , (xiii), (xiv) (a), (b), (xv) (a), (b), (xvi) (a), (b), (xvii); VI (a), (b); VII & VIII of the Notification, S.O. 3067(E) dated 01.12.2009 of the Ministry of Environment and Forests, (Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii), No. 2002] New Delhi, Tuesday, November 1, 2009; an amendment to EC notification S.O.1533(E) dated 14.09.2006



भारत का राजपत्र

The Gazette of India

सी.जी.-डी.एल.-अ.-20042022-235241
CG-DL-E-20042022-235241

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 1795]

नई दिल्ली, बुधवार, अप्रैल 20, 2022/चैत्र 30, 1944

No. 1795]

NEW DELHI, WEDNESDAY, APRIL 20, 2022/CHAITRA 30, 1944

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 20 अप्रैल, 2022

का.आ. 1886(अ).—केंद्रीय सरकार पर्यावरण और वन विभाग के पूर्ववर्ती मंत्रालय में पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा (3) की उप-धारा (1) और उप-धारा (2) के खंड (v) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण समाघात निर्धारण अधिसूचना, 2006 (जिसे इसमें इसके पश्चात ईआईए अधिसूचना, 2006 कहा गया है), परियोजनाओं की कतिपय प्रवर्ग के लिए पूर्व पर्यावरणीय मंजूरी आज्ञापक बनाने के लिए, संख्या का.आ.1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की है।

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण (एसईआईए) का गठन प्रवर्ग ख के अधीन सभी प्रस्तावों के लिए पर्यावरण मंजूरी (ईसी) पर विचार और अनुदान के लिए प्रत्यायोजित शक्तियों का प्रयोग करने हेतु राज्य स्तर पर ईआईए अधिसूचना, 2006 के कार्यान्वयन के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उप-धारा (3) के अधीन किया गया है;

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण ने पर्यावरण मंजूरी मूल्यांकन प्रक्रिया में पिछले पंद्रह वर्षों में पर्याप्त अनुभव प्राप्त किया है और राज्य स्तर पर पर्यावरण मंजूरी प्रस्तावों के कुशल और पारदर्शी निपटान के लिए परिवेश पोर्टल के माध्यम से पूरी तरह से ऑनलाइन कर दिया गया है;

और केंद्रीय सरकार राज्य स्तर पर मंजूरी की प्रसुविधा के लिए पर्यावरण मंजूरी प्रक्रिया को और विकेंद्रीकृत करना आवश्यक समझती है;

और आज की तारीख में, सुरक्षा भागीदारी के महत्वपूर्ण तत्वों के साथ राष्ट्रीय रक्षा और सामरिक महत्व से संबंधित प्रवर्ग ख की परियोजनाओं का राज्य स्तर पर भी मूल्यांकन किया जा रहा है, जिसे केंद्रीय सरकार राष्ट्रीय सुरक्षा चिंताओं को ध्यान में रखते हुए केंद्रीय रूप से मूल्यांकन करना आवश्यक समझती है;

अतः अब, केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए उक्त नियमों के नियम 5 के उप-नियम (3) के खंड (क) के अधीन नोटिस की अपेक्षा को समाप्त करने के पश्चात्, लोकहित में भारत सरकार की तत्कालीन पर्यावरण एवं वन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ), तारीख 14 सितम्बर, 2006, की अधिसूचना में निम्नलिखित और संशोधन करती है अर्थात्:-

उक्त अधिसूचना में-

(1) पैरा 4 में, उप-पैरा (iii) क) के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

(iii) क) राष्ट्रीय रक्षा या सामरिक या सुरक्षा महत्व से संबंधित हैं या जिन्हें केंद्रीय सरकार द्वारा संकटकाल जैसे महामारी, प्राकृतिक आपदाओं जैसी अत्यावश्यकताओं के कारण ऐसी प्रवर्ग 'ख' परियोजनाओं को अधिसूचित किया गया है या राष्ट्रीय कार्यक्रमों या स्कीमों या मिशन या ऐसी परियोजनाओं के अधीन पर्यावरण के अनुकूल क्रियाकलापों का संवर्धन करने के लिए जो इस अधिसूचना में यथा अधिकथित समय-सीमा से अधिक विलंबित हैं और समय-समय पर इस संबंध में यथा-अधिकथित मानदंडों को पूरा करती हैं, उन्हें केंद्रीय स्तर पर प्रवर्ग 'ख' परियोजनाओं के रूप में विचार किया जाएगा;

(2) अनुसूची में, -

(i) मद 1(क) के सामने, -

(क) स्तंभ (3) में, -

(क) गैर-कोयला खनन पट्टे के संबंध में "> 100 हेक्टेयर खनन पट्टा क्षेत्र" के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

"कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में >250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) ">150 हेक्टेयर" प्रतीक, अंक और अक्षर के स्थान पर, "> 500 हेक्टेयर" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) स्तंभ (4) में, -

(क) गैर-कोयला खनन के संबंध में <100 हेक्टेयर खनन पट्टा क्षेत्र के स्थान पर,

पट्टा", निम्नलिखित रखा जाएगा, अर्थात्: -

"लघु खनिज खनन पट्टों के संबंध में सभी खनन पट्टा क्षेत्र और कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में <250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) "<150 हेक्टेयर" के प्रतीकों, अंकों और अक्षरों के स्थान पर "<500 हेक्टेयर" के प्रतीक, अंक और अक्षर रखे जाएंगे;

(ii) मद 1(ग) के सामने, -

(क) स्तंभ (3) में, -

(क) क्रम संख्या (i) में, "> 50 मेगावाट, प्रतीकों, अंकों और अक्षरों के स्थान पर "> 100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) और उससे संबंधित प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, -

(क) क्रम संख्या (i) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) में, -

(I) "और <50,000 हेक्टेयर" शब्द, प्रतीक और अंक का लोप किया जाएगा;

(II) बिंदु (ग) में सारणी में, "से <50,000" शब्द, प्रतीक और अंक का लोप किया जाएगा; ।

(ग) स्तंभ (5) में, क्रम संख्या (ii) के पश्चात, निम्नलिखित क्रम संख्या अंतःस्थापित किया जाएगा, अर्थात् :-

"(iii) अंतर-राज्यीय मुद्दों से संबंधित सिंचाई परियोजनाओं का मूल्यांकन केंद्रीय स्तर पर श्रेणी में परिवर्तन के बिना किया जाएगा।";

(iii) मद 1(घ) के सामने,-

(क) स्तंभ (3) में, "> 50 मेगावाट" प्रतीकों, अंकों और अक्षरों के स्थान पर, "> 100 मेगावाट" प्रतीकों, अंकों और अक्षरों को रखा जाएगा;

(ख) स्तंभ (4) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(iv) मद 2(क) के सामने, -

(क) स्तंभ (3) में, ">1" प्रतीकों और अंक के स्थान पर, ">2.5" प्रतीकों और अंक को रखा जाएगा;

(ख) स्तंभ (4) में, "<1" प्रतीकों और अंक के स्थान पर, "< 2.5" प्रतीक और अंक रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा अंतःस्थापित किया जाएगा, अर्थात्: -

"खनन पट्टा क्षेत्र के भीतर स्थित धुलाई मशीनों के साथ एकीकृत कोयला खनन परियोजनाओं को कोयला खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार केंद्रीय स्तर या राज्य स्तर पर, यथास्थिति, विचार किया जाना जारी रहेगा।";

(v) मद 2 (ख) के सामने, -

(क) स्तंभ (3) में, विद्यमान प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, "<0.5 मिलियन टीपीए का उत्पादन" प्रतीक, अंक, शब्द और अक्षर के स्थान पर, "सभी खनिज परिष्करण परियोजना, परिष्करण की प्रक्रिया पर ध्यान दिए बिना" शब्द रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा रखा जाएगा,

अर्थात्: -

"भीतर स्थित लाभकारी संयंत्रों के साथ एकीकृत खनन परियोजनाएं खनन पट्टा क्षेत्र पर केन्द्रीय स्तर पर विचार किया जाता रहेगा या यथास्थिति, राज्य स्तर, खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार।";

(vi) मद 7 (क) के सामने,-

(क) स्तंभ (3) में, "सभी परियोजनाओं" शब्दों के स्थान पर "सभी नई परियोजनाएं" शब्द रखे जाएंगे;

(ख) स्तंभ (4) में, निम्नलिखित अंतःस्थापित किया जाएगा, अर्थात्: -

"सभी विस्तार परियोजनाएं, जिनमें हवाई पट्टियां भी सम्मिलित हैं, जो वाणिज्यिक उपयोग के लिए हैं।"

[फा. सं. आईए 3-22/10/2022-आईए. III]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड III, उप-खंड (ii), संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की गई थी और अधिसूचना संख्या का.आ. 1807(अ), तारीख 12 अप्रैल, 2022 द्वारा अंतिम संशोधन किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**NOTIFICATION**

New Delhi, the 20th April, 2022

S.O. 1886(E).—WHEREAS, the Central Government in the erstwhile Ministry of Environment and Forests, in exercise of its powers under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 has published the Environment Impact Assessment Notification, 2006 (hereinafter referred to as the EIA Notification, 2006), vide number S.O.1533 (E), dated the 14th September, 2006 for mandating prior environmental clearance for certain category of projects;

And whereas, the State Environment Impact Assessment Authorities (SEIAAs) have been constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for implementation of the EIA Notification, 2006 at State level for exercising delegated powers to consider and grant Environmental Clearance (EC) for all proposals under Category B;

And whereas, the SEIAAs have gained substantial experience over the past fifteen years in the EC appraisal process and the process at the State level has also been made completely online through the PARIVESH portal for efficient and transparent disposal of EC proposals;

And whereas, the Central Government deems it necessary to further decentralise the EC process for facilitating clearances at State level;

And whereas, as on date, category 'B' projects, relating to national defence and strategic importance with significant element of security involvement are also being appraised at the State level which, the Central Government deems it necessary to be appraised centrally taking into account national security concerns;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with sub-rule(4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government, after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the said rules, in public interest, hereby makes the following further amendments in the notification of the Government of India, in the erstwhile Ministry of Environment and Forests, number S.O. 1533 (E), dated the 14th September, 2006, namely:-

In the said notification,-

(1) in paragraph 4, for sub-paragraph (iii a), the following shall be substituted, namely:-

(iii a) Such Category 'B' projects, relating to the National defence or strategic or security importance or those as notified by the Central Government on account of exigencies such as pandemics, natural disasters or to promote environmentally friendly activities under National Programmes or Schemes or Missions or such projects which are inordinately delayed beyond the stipulated timeline as laid down in this notification and also meet the criteria as laid down in this regard from time to time, shall be considered at the Central level as Category 'B' projects;

(2) in the Schedule,-

(i) against item 1(a),-

(a) in column (3),-

(A) for ">100 ha. of mining lease area in respect of non-coal mining lease", the following shall be substituted, namely:-

">250 ha mining lease area in respect of major mineral mining lease other than coal";

(B) for the symbol, figures and letters "> 150 ha", the symbol, figures and letters "> 500 ha" shall be substituted;

(b) in column (4),-

(A) for "≤ 100 ha of mining lease area in respect of non-coal mine lease", the following shall be substituted, namely:-

"All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal";

(B) for the symbols, figures and letters “ ≤ 150 ha”, the symbols, figures and letters “ ≤ 500 ha” shall be substituted;

(ii) against item 1(c),—

(a) in column (3),—

(A) in serial number (i), for the symbols, figures and letters “ ≥ 50 MW”, the symbols, figures and letters “ ≥ 100 MW” shall be substituted;

(B) serial number (ii) and the entries relating thereto shall be omitted;

(b) in column (4),—

(A) in serial number (i), for the symbol, figures and letters “ < 50 MW”, the symbol, figures and letters “ < 100 MW” shall be substituted;

(B) in serial number (ii),—

(I) the word, symbol and figures “and $< 50,000$ ha.” shall be omitted;

(II) in point (c) in the table, the word, symbol and figures “to $< 50,000$ ” shall be omitted;

(c) in column (5), after serial number (ii), the following serial number shall be inserted, namely:—

“(iii) Irrigation projects involving Inter-State issues shall be appraised at Central level without change in category.”;

(iii) against item 1(d),—

(a) in column (3), for the symbols, figures and letters “ ≥ 50 MW”, the symbols, figures and letters “ ≥ 100 MW” shall be substituted;

(b) in column (4), for the symbol, figures and letters “ < 50 MW”, the symbol, figures and letters “ < 100 MW” shall be substituted;

(iv) against item 2(a),—

(a) in column (3), for the symbols and figure “ ≥ 1 ”, the symbols and figures “ ≥ 2.5 ” shall be substituted;

(b) in column (4), for the symbols and figure “ < 1 ”, the symbols and figures “ < 2.5 ” shall be substituted;

(c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—

“Integrated coal mining projects with washeries located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for coal mining projects.”;

(v) against item 2 (b),—

(a) in column (3), the existing entries shall be omitted;

(b) in column (4), for the symbol, figures, words and letters “ < 0.5 million TPA throughput”, the words “All mineral beneficiation projects irrespective of the procedure for beneficiation” shall be substituted;

(c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—

“Integrated mining projects with beneficiation plants located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for mining projects.”;

(vi) against item 7 (a),—

(a) in column (3), for the words “All projects”, the words “All new projects” shall be substituted;

(b) in column (4), the following shall be inserted, namely:—

“All expansions projects, including airstrips, which are for commercial use.”

[F. No. IA3-22/10/2022-IA.III]

Dr. SUJIT KUMAR BAJPAYEE, Jt. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section III, sub-section (ii), vide, number S.O. 1533(E), dated the 14th September, 2006 and was last amended, vide, the notification number S.O. 1807(E), dated the 12th April, 2022.

I/57635/2023

F. No.L-11011/06/2022-IA-I(RV)
Government of India
Ministry of Environment, Forest & Climate Change
(Impact Assessment Division)

2nd Floor, Vayu Wing,
Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi-110003
Tele: 011-20819283

Date: 14th November, 2023

To,

Deputy Director General of Forests (C)
Integrated Regional Office Chennai,
1st and 2nd Floor, Handloom Export Promotion Council 34,
Cathedral Garden Road, Nungambakkam,
Chennai- 34
E-mail: ro.moefccc@gov.in
Tele: 044-28222325

Sub: OA No 61/2022 in the matter of Mugasi Anumanpalli Village Panchayat & Ors. Vs Union of India & Ors. before NGT (SZ), Chennai - reg.

Sir,

This is with reference to the above mentioned subject matter, wherein the applicant vide OA No 61 of 2022 (copy enclosed) has alleged that the said project has been undertaken without securing prior environmental clearance mandated under the Environmental Impact Assessment Notification, 2006. Further, it has been alleged that the project proponent is going ahead with the project without assessing the environmental impact of such construction and the mandatory requirements of public consultation has not been followed. Also, the petitioner has contended that the project proponent had issued G.O.Ms. No. 276 dated 09.11.2020 for the purpose of renovation and modernization of LBP Canal without environmental study and impact of the project. The project is likely to have disastrous effect on the groundwater table and scarcity of drinking water in the region.

2. As per records available in the Ministry, no proposal related to this project has been received. Therefore, it is requested to examine the issues involved in the project and conduct a project site visit at the earliest. The Site Inspection Report shall provide the following, so to ascertain if EIA Notification, 2006 has been violated and accordingly, submit a report on priority:

- i. Whether the project involves Inter-state issues or not
- ii. Confirm whether the construction attracts the provisions of EIA Notification 2006 and prior permission (Environmental Clearance) has been taken from

I/57635/2023

- concerned regulatory authority.
- iii. Status of the construction of the project, if any

This issues with the approval of the competent authority.

Encl: as above

Yours faithfully,

(Dr Saurabh Upadhyay)
Scientist C

Email ID: saurabh.upadhyay85@gov.in

Copy to:

1. The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai- 600 032, Tamil Nadu/ AD(YPS)/ Guard File



भारतसरकार
GOVERNMENT OF INDIA
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE
Regional Office/ क्षेत्रीय कार्यालय,
1st Floor, Additional Office Block for GPOA, Shastri Bhawan,
Haddows Road, Nungambakkam, Chennai – 600006



EP/12.7/NGT(SZ)/07/2023-24/TN/1297

28.11.2023

To

Dr. Saurabh Upadhyay

Scientist 'C'

IA Division, Indira Paryavaran Bhawan,

MoEF&CC, Jorbagh Road, Aliganj, New Delhi – 110 003

E-mail: saurabh.upadhyay85@gov.in

Subject: OA No. 61/2022 in the matter of Mugasi Anumanpalli Village Panchayat & Ors. V/s Union of India & Ors. before Hon'ble NGT (SZ), Chennai - reg

Letter No. L-11011/06/2022-IA-I(RV) dated 14.11.2023.

Sir,

With reference to the above mentioned subject, I am directed to enclose the Site inspection report along with Annexures and photographs for kind perusal please.

Encl: As above.

Yours faithfully,

C. Palpandi
28/11/2023

(Dr. C. Palpandi)

Scientist 'D'
Dr. C. Palpandi

Scientist 'D'

Government of India

Regional Office, MoEF&CC

Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006

Site Inspection Report in the matter of OA No. 61/2022 filed by Mugasi Anumanpalli Village Panchayat & Ors.V/s Union of India & Ors. Before Hon'ble NGT (SZ), Chennai

Introduction:

The Ministry of Environment, Forest & Climate Change (MoEF&CC), New Delhi vide its letter No. L-11011/06/2022-IA-I(RV) dated 14.11.2023 requested the Regional Office, MoEF & CC, Chennai to examine the issues involved in the project and conduct a project site visit at the earliest in the matter of OA No. 61/2022 filed by Mugasi Anumanpalli Village Panchayat & Ors. Vs. Union of India & Ors. before Hon'ble NGT (SZ), Chennai (**Annexure-I**). Further, MoEF & CC, New Delhi has also requested to provide information on the following:

- (i) Whether the project involves Inter-state issues or not
- (ii) Confirm whether the construction attracts the provisions of EIA Notification 2006 and prior permission (Environmental Clearance) has been taken from concerned regulatory authority
- (iii) Status of the construction of the project, if any

The Competent Authority nominated Dr. C. Palpandi, Scientist 'D', Regional Office, MoEF & CC, Chennai to carry out the site inspection of the project. Accordingly, the site inspection of the project was carried-out by the undersigned during 22.11.2023 to 23.11.2023 along with the representatives of the Project Authorities. The entire project region covering a distance of about 200 km of the main canal has been inspected during this period. Photos taken during the site visit is at **Annexure-II**. The detail of the project is presented below:

i. Details of the project:

The Lower Bhavani Project (LBP) is the first major irrigation project sanctioned and executed in the country after independence. It was sanctioned under the post-war development works on the **19thSeptember, 1947**, immediately after independence, well

before the Five Year Plans were drawn by the Union Planning Commission. This was taken-up for immediately after sanction of the project by the then State of Madras.

Bhavanisagar Dam or Lower Bhavani Dam, is located in Erode district, Tamil Nadu, The dam was constructed across the Bhavani River and almost 75 years old. The project was proposed to provide irrigation facility to total culturable command area (CCA) of about 247247 acres covering 3 Districts in Tamil Nadu viz. Erode, Trippur and Karur. The break-up irrigation facility in these 3 districts is as follows:

- (i) Lower Bhavani canal system - 207500 acres
- (ii) The Kodivery Irrigation system – 24504 acres (Old)
- (iii) The Kalingarayan Irrigation system - 15743 acres. (Old)

ii. Present Status of the Physical System

The LBP canal is in existence for the past 75 years. Other than periodical annual maintenance, no major improvements or renovation works have been carried out right from the inception of canal system. The present condition of the canal, major distributaries, cross-masonry works etc., are not physically in proper shape/condition and their details are given below.

(a) **The Main Canal:**

The total length of main canal is 124.2.560 miles (200 km), there are 75 head sluices & 118 direct Irrigation sluices for providing irrigation facilities. The drawing capacity of the LBP main canal at the head reach is designed to carry 2307cusecs of water (65.32 cumecs) which was originally planned. The present system is unable to provide the full potential to irrigate the entire command area in these 3 districts. The Government of Tamil Nadu has taken-up the modernization, renovation and extension of the present Lower Bhavani Main Canal so that the irrigation facility will be provided as per the originally planned command area in these 3 districts. The total estimated cost for this modernization project is about Rs. 709.60 Crores (**Table-I**). Government of Tamil Nadu vide its G.O M.s No 276 Public Works (W1) Dept Dated 09.11.2020 have accorded administrative approval.

(b) Details of works:**Table-I**

Package No.	Name of Package	Estimate Amount (Rs. in Crores)
I	Extension, Renovation & Modernization of Lower Bhavani Project Main Canal from Mile 0-0-373 to 18-1-375 in Erode District.	194.15
II	Extension, Renovation & Modernization of Lower Bhavani Project Main Canal from Mile 18-1-375 to 39-0-000 in Erode District.	127.65
III	Extension, Renovation & Modernization of Lower Bhavani Project Main Canal from Mile 39-0-000 to 63-0-560 in Erode District.	198.25
IV	Extension, Renovation & Modernization of Lower Bhavani Project Main Canal from Mile 63-0-560 to 124-2-560 in Erode, Trippur & Karur Districts.	189.55
	Total	709.60

(c) Aim of this project:

In order to cater 103500 acres of land for one zone at 60 duty – 1725 cusec of water is required. Considering the allowable seepage losses as 33.33% in this earthen channel an additional quantity of 575 cusecs of water is drawn making the total discharge as 2300 cusecs of water. The renovation works are proposed to minimize this additional seepage so as to ensure required water supply to the tail end of the ayacut.

It is proposed to rehabilitate the following cross masonry works in the canal is given in **Table – II** below:

S.No.	Type of structure	As Existing Reach	As per Estimate		
			Rehabilitation	Reconstruction	Total
		Length/Nos	Length/ Nos.	Length/ Nos.	Length/ Nos.
1	Pre-cast slab lining	199.60		65.37	65.37

2	Head Sluices & Direct Sluices in Nos.	189	81	12	93
3	Bridges	93	2	13	15
4	Under Tunnel/ Drainage Culvert in Nos.	168	118	10	128
5	Aqueduct in Nos.	18	6	2	8
6	Aqueduct cum outlet in Nos.	1	1		1
7	Canal siphon in Nos.	3	1		1
8	Regulator in Nos.	6	2		2
	Sub Total-1				
II	Civil Works (Ditsy Canal)				
1	Cast in-situ lining Length in Km	370.10		105.36	10.5.36
2	Head Sluices and Pipe Sluices in Nos.	1312	19	166	185
3	Regulator in Nos.	32	10	11	21
4	Drops in Nos.	987	92	147	239
5	Road pipe culvert in Nos.	201	2	57	59

(d) Works proposed in the project

- i. Only 1/3rd of the canal sides which are in very damaged condition and prone for breaches which are proposed to be lined.
- ii. Remaining 2/3rd of the total length of the canal will remain as unlined earthen canal.
- iii. In order to strengthen the bund, it is proposed to provide precast plain cement concrete slab in both side slopes of the canal for a length of 65.37 km out of the total length of 199.60 Km originally.
- iv. Now that also in consideration to be re-evaluated & changed, as a protection wall for the length of 28 km, as mentioned in the minutes of meeting regarding implementation of the Project convened by the Hon'ble Chief Minister on 03.05.2023 and Chief Secretary minutes of meeting held on 15.12.2022.

This rehabilitation project is mainly formulated to renovate the damaged cross masonry structures such as canal sluices, regulators, bridges and to strengthen the weak

earthen embankments of the canal in both side slopes of the canal. The allowable seepage in the canal (33%) will be arrested.

iii. Observations of Regional Office (SEZ), MoEF & CC, Chennai with respect to letter No F- No L – 11011/ 06/2022 – 1A – (RV) GOI, MoEF & CC

(i) Whether the project involves interstate issues or not

- The Lower Bhavani Major irrigation Project lies in Erode District of Tamil Nadu. The proposed project was to provide irrigation facility in 2,47, 247 acres in 3 districts namely Erode, Tiruppur and Karur in Tamil Nadu State. The extension, renovation and modernization of LBP falls in these 3 Districts.

(ii) Conform whether the construction attracts the provision of EIA notification – 2006 and prior permission (Environmental Clearance) has been taken from concerned regulatory authority.

- The Environmental Clearance (EC) became a statutory requirement since 27.1.1994 for major irrigation projects. The Lower Bhavanisagar Project (LBP) is the first major irrigation project sanctioned and executed in the country after independence. It was sanctioned under the post-war development works on the **19th September, 1947** (Vide G.O.No.2844 dated 19.9.1947 – By Order of His Excellency the Governor), immediately after independence, well before the Five Year Plans were drawn by the Union Planning Commission. The total project cost mentioned was Rs.6.00 Crores. This was taken-up immediately after sanction of the project by the then State of Madras, Public Works Department. The Project Authority submitted a copy of the letter for a proof and it appears from the letter the Public Works Department, Government of Madras, the works were even taken-up before independence. A reference to this affects i.e. G.O. Ms. No. 765 dated 15.3.1944 was mentioned in the letter of 19.9.1947 (**Annexure-III**).
- The proposed activities, includes repair and rehabilitation of the existing damaged structures like Regulators, Irrigation head sluices, Drainage Sluices, Drainage in-falls etc. Other proposed activities to be undertaken includes –

- (a) There is no increase in the carrying capacity of the canal (i.e. 2307 cusecs)

- (b) The ayacut area i.e. cultivable command area (CCA) has not been increased.
- (c) The capacity of the Bhavanisagar reservoir is unaltered; no increase in dam height & storage capacity remains the same.
- (d) The project envisages only canal strengthening and canal stability to protect canal embankment and there by minimise the seepage losses.
- (e) The project is focussing only on repair and rehabilitation of existing cross masonry structures. If the condition of the structure is beyond repairable, those structures alone will be proposed for reconstruction.

- It is submitted that from the available records submitted by Project Authority, the Lower Bhavanisagar Irrigation project was approved just after independence (1947) and initial works were taken-up even before independence (1944) to provide irrigation facility of about 247247 acres of culturable command area of covering 3 Districts in Tamil Nadu. The environmental clearance became a statutory requirement since 27.1.1994 for major irrigation projects. This project is an ongoing project and was started before 27.1.1994. The proposed activities being undertaken is only for improvement and modernization and as such may not attract the provisions of EIA Notification, 1994. The project may also not attract the provisions of EIA Notification, 2006 and its amendment from time to time.

iii. Status of the Construction if any,

- Project Authorities have undertaken construction activities during the current financial year 2023 after getting the administrative approval from Government of Tamil Nadu. No construction activities were initiated earlier. It may be noted that construction of protection walls, rehabilitation/reconstruction of sluice gate & few Bridges works in the LBP main canal were undertaken during July to August 2023, from 1 - 1 – 000 miles to 115/3-500 miles. The details of construction activities undertaken are presented in **Table. III**. So far about 35% of the works have been completed in all 4 packages. Presently no new construction activities are carried out in the project area. The remaining works will be taken – up in the ensuing months in non-irrigation season, as informed by the Project Authority.

iv. Removal of Tree

- The project authorities have planned to remove the trees which are grown inside the canal slopes and obstructing the flow of canal water. The proposal for felling of trees was presented to the District Collector, Erode and Tiruppur. The District Collector, Erode has obtained necessary report from the Divisional Forest officers and RDO, Erode and RDO, Gobichettipalayam. The proposal was placed before District Green Committee, Erode which had approved the proposal. After getting the approval, the District Collector, Tiruppur had issued an order for a total of 8750 trees only (Vide letter no. Na.Ka.11691/2021/M22 dated 13.10.22). Similarly, the District Collector, Erode has issued an order for a total of 6877 trees only (Vide letter no. Na. Ka. NO.10858/2022/K3 dated 6.3.2023).

- Even though the WRD has obtained permission from the District Collector, Erode and District Collector, Tiruppur for felling the trees for a total of 15627 trees, **only 114 trees** had been felled so far. Copy of the photos taken during the site visit is at **Annexure-IV**. The PA claims that it was much essential to remove these trees which cause much obstruction to the free flow of water. The tree removal proposal was for considering in the inner side slope of the canal which causes much obstruction to flow. Normally the trees grown in the bund of the canal cannot have that much strength & stability as the tree grows in normal ground. The WRD, under the circumstances considered minimal removal of tree and at the same time canal protection to prevent breaches which may cause heavy damages to crops and also to provide un-interrupted water supply to the Tail end farmers.

v. Conclusions

Further, it is submitted that a court case has been filed in WP.10419/2021,11020/21 by the agitating group of farmers. The Hon'ble High Court directed the Government to consider and dispose of such representation by a reasonable order to the petitioner. It is also submitted that the Hon'ble High Court, Madras in WP NO. 19472 and 19548 of 2022 again directed the respondents (authorities) to proceed with the works from 1.5.2023 based on the Government Order.

In an average about 35% of Works are Completed in all 4 packages so for – Remaining works will be taken – up in the ensuing months in non-irrigation Season. In that 35% of work progress, only 25-30 Numbers in site location which are highly obstruction to flow only removed so for.

C. Palpandi
(Dr. C. Palpandi)

Scientist 'D'

Regional Office, MoEF&CC, Chennai

Dr. C. Palpandi

Scientist 'D'

Government of India

Regional Office, MoEF&CC

**Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai - 600 006**

Table. III. The details of works carried out in the Lower Bhavani Project main canal in the year 2023

S. No.	Mileage	Component Name	Length in meter
1	1 - 1 - 000	Sluice + Protection wall	Left – 20 m
2	1 - 4 - 282	Protection wall	Left – 310 m
3	2 - 0 - 431	Protection wall	Left – 300 m
4	2 - 4 - 579	Protection wall	Left – 200 m
5	4 - 0 - 205	Protection wall	Left – 195 m
6	4 - 1 - 220	Protection wall	Left – 265 m
7	5 - 0 - 100	Sluice	-
8	5 - 1 - 000	Protection wall	Left – 307 m
9	5 - 2 - 280	Sluice	-
10	6 - 2 - 425	Bridge + Protection wall	Left - 30M Right – 30 m
11	7 - 1 - 520	Sluice + Protection wall	Left – 30 m
12	7 - 4 - 098	Protection wall	Left – 200 m
13	7 - 7 - 420	Sluice + Protection wall	Left – 22 m
14	8 - 2 - 550	Sluice + Protection wall	Left – 20 m
15	10/0	Sluice + Protection wall	Left – 105 m
16	11/3	Sluice + Protection wall	Left – 122 m
17	16/1	Drainage culvert	Left – 7 m Right – 511 m
18	17/4	Drainage culvert	Left – 67 m Right – 80 m
19	18/4	Protection wall	750 m
20	19/1	Protection wall	150 m
21	19/4	Protection wall	200
22	21/5	Bridge	-

23	26/7	Protection wall	50 m
24	35/7	Sluice gate	-
25	36/A	Sluice gate	-
26	37/2 – 37/3	Sluice gate	-
27	37/5	Protection wall	300 m
28	37/6-37/7	Protection wall	750
29	38/2	Sluice gate	-
30	38/7	Sluice gate	-
19	39-2-010	Washing yard with Protection wall	Left-102.15 Right-112.25
20	40-5-180	Drainage culvert with Protection wall	Left – 213.10 Right-154.80
21	41-0	New bridge with Protection wall	Left-157.00 Right – 178.70
22	49/1	Rehabilitation of distributary	-
23	49/6	Washing yard with protection wall	Left-70.05 Right-70.80
24	49/7	Reconstruction of direct sluice	-
25	50-7-500	New bridge with protection wall	Left-171.55 Right-146.50
26	51/2	Drainage culvert	Left-220 m Right-260 m
27	53/3	Protection wall	Left-265 m,Right-265 m
28	54/1	Bridge + Protection wall	Left-90 m
29	54/6	Sluice	Left-10 m
30	55/4	Sluice	Left-10m
31	55/7	Drainage culvert	Left-150 m, Right-95 m

32	57/5	Drainage culvert	Left-95 m, Right-95 m
33	58/0	Drainage culvert	Left-65 m, Right-110 m
34	63/3	Bridge	-
35	64/2-570	Retaining wall	1000 m
36	70/4-662	Drainage culvert	-
26	74/5-0	Sluice & Protection wall	55 m
27	75/1-09	Sluice	6 m
28	76/4-5	Bridge & Protection wall & Sluice	70 m
29	77/4-02	Sluice	6 m
30	82/5-6	Protection wall	320 m
31	85/4-337	Bridge	6 m
32	89/0-2	Protection wall	270 m
33	92/7-8	Protection wall	120 m
34	99/6-490	Sluice	5 m
35	100/0-380	Sluice	5 m
36	100/3-287	Sluice	5 m
37	101/6-360	Bridge	6 m
38	113/3-400	Sluice	5 m
39	115/3-500	Sluice	5m

/57635/2023

F. No.L-11011/06/2022-IA-I(RV)
Government of India
Ministry of Environment, Forest & Climate Change
(Impact Assessment Division)

2nd Floor, Vayu Wing,
Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi-110003
Tele: 011-20819283

Date: 14th November, 2023

To,

Deputy Director General of Forests (C)
Integrated Regional Office Chennai,
1st and 2nd Floor, Handloom Export Promotion Council 34,
Cathedral Garden Road, Nungambakkam,
Chennai- 34
E-mail: ro.moefccc@gov.in
Tele: 044-28222325

Sub: OA No 61/2022 in the matter of Mugasi Anumanpalli Village Panchayat & Ors. Vs Union of India & Ors. before NGT (SZ), Chennai - reg.

Sir,

This is with reference to the above mentioned subject matter, wherein the applicant vide OA No 61 of 2022 (copy enclosed) has alleged that the said project has been undertaken without securing prior environmental clearance mandated under the Environmental Impact Assessment Notification, 2006. Further, it has been alleged that the project proponent is going ahead with the project without assessing the environmental impact of such construction and the mandatory requirements of public consultation has not been followed. Also, the petitioner has contended that the project proponent had issued G.O.Ms. No. 276 dated 09.11.2020 for the purpose of renovation and modernization of LBP Canal without environmental study and impact of the project. The project is likely to have disastrous effect on the groundwater table and scarcity of drinking water in the region.

2. As per records available in the Ministry, no proposal related to this project has been received. Therefore, it is requested to examine the issues involved in the project and conduct a project site visit at the earliest. The Site Inspection Report shall provide the following, so to ascertain if EIA Notification, 2006 has been violated and accordingly, submit a report on priority:

- i. Whether the project involves Inter-state issues or not
- ii. Confirm whether the construction attracts the provisions of EIA Notification 2006 and prior permission (Environmental Clearance) has been taken from

/57635/2023

- concerned regulatory authority.
iii. Status of the construction of the project, if any

This issues with the approval of the competent authority.

Encl: as above

Yours faithfully,

Signed by

Saurabh Upadhyay

Date: 14-11-2023 17:25:23

(Dr Saurabh Upadhyay)

Scientist C

Email ID: saurabh.upadhyay85@gov.in

Copy to:

1. The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai- 600 032, Tamil Nadu/ AD(YPS)/ Guard File



Fig. Construction of protection wall



Fig. Construction of Sluice gate and protection wall

REPORT ON THE LOWER BHAVANI PROJECT

43

APPENDIX III (iv).

GOVERNMENT OF MADRAS

PUBLIC WORKS DEPARTMENT.

Irrigation—Coimbatore district—Lower Bhavani Project—Estimate sanctioned.

G.O. Ms. No. 2844, dated 19th September 1947.

READ—the following papers :—

- G.O. Ms. No. 765, Public Works, dated 15th March 1944.
 From the Director of Agriculture, dated 2nd June 1945, No. D-3-269/44.
 From the Chief Engineer (Irrigation), dated 7th July 1946, No. 1081/44-B-11.
 " " " " dated 19th October 1946, No. 1081/44-B-18.
 " " " " dated 7th February 1947, No. 1081/44-39.
 " " " " dated 16th February 1947, No. 858/47-M-1.
 " " " " dated 26th February 1947, No. 1081/44-B-44.
 From the Board of Revenue, dated 6th June 1947, Reference No. H. 1529/45-5.
 " " " " dated 3rd July 1947, " " No. H. 1529/45-8.
 From the Chief Engineer (Irrigation), dated 24th July 1947, No. 1930/47-N-23.

Order—Ms. No. 2844, P.W., dated 19th September 1947.

His Excellency the Governor of Madras approves an expenditure of Rs. 7 crores (rupees seven crores only) including direct and indirect charges and omitting arrears of simple interest or Rs. 8.79 crores including arrears of simple interest on the construction of a dam across the Bhavani river near Satyamangalam in the Coimbatore district together with the connected distributary canals.

2. The expenditure is debitable to "68. Construction of Irrigation, Navigation, Embankment and Drainage Works—Irrigation Works—Unproductive—E. Works—B. Lower Bhavani Project". A provision of Rs. 28 lakhs has already been made in the Budget Estimate for 1947-48 towards the expenditure to be incurred on the project during the current year.

3. A betterment tax at Rs. 100 per acre will also be levied from the owners of lands benefited by the project. The Board of Revenue is requested to submit along with the detailed report on the revenue aspects of the project, proposals to implement the levy of the betterment tax.

(By order of His Excellency the Governor)

T. A. VARGHESSE,
 Secretary to Government

- To the Chief Engineer (Irrigation).
 " Board of Revenue, Madras.
 " Director of Agriculture.
 " Accountant-General, through Finance.
 Copy to the Revenue Department.
 " Development Department.
 " Food Department.
 " Finance Department.
 " Finance Department (Ways and Means).
 " Public (Information and Publicity) Department.



Fig. Removal of tree



Fig. Removal of tree

**Government of India
Ministry of Environment, Forest & Climate Change
Regional Office, Chennai**

EP/12.7/NGT(SZ)/07/2023-24/TN

Dated: 24.01.2024

CORRIGENDUM NO. 1

Subject: Site Inspection Report in the matter of OA No. 61/2022 filed by Mugasi Anumanpalli Village Panchayat & Ors.V/s Union of India & Ors. Before Hon'ble NGT (SZ), Chennai

Please refer to this Office letter No. EP/12.7/NGT(SZ)/07/2023-24/TN dated 28.11.2023 in the above mentioned subject. I am directed to inform that in the second page line 8 of the Site Inspection report, it may be read as Lower Bhavani canal system - 207000 acres instead of Lower Bhavani canal system - 207500 acres.

2. All other contents of the site inspection report will remain unchanged.
3. This issues with the approval of the Competent Authority.

C. Palpandi
Dr. C. Palpandi
Scientist 'D'

EXECUTIVE SUMMARY

The Government of Tamil Nadu, pursuant to the announcement made in the Legislative Assembly on 22.06.2009 in the Budget Session, ordered in G.O.Ms.No.198 PW(S1) Dept. dated 11.09.2009 that a Committee with Prof A.Mohanakrishnan as Chairman of the composition detailed in the order given in the Annexure - I would formulate a "Scheme for Modernisation of the main and branch canals including lining of the Lower Bhavani Project". The order contained the Terms of Reference and other stipulations and ended saying that the Committee should submit its report to the Government within a period of four months from the date of its constitution.

2. In the very first meeting of the Committee convened at Erode on 02.11.2009, when all the Members of the Committee and the Engineers presently maintaining the irrigation system gathered, the Chairman who was himself personally involved in the construction of the Headworks in the Project from 1948 to 1954 and had also seen the Canal System being executed during the period, traced the History of the Project from its inception and sought the co-operation of the Members and also others concerned in completing the task given to them to the best of their ability and presenting their Report to the Government within the stipulated time. An Action Plan to this effect was also drawn taking note of the suggestions that came forth from the Members and others who had gathered. A copy of the Minutes of this first meeting is given in Annexure - 2 for perusal.

3. In the second meeting of the Committee convened on 03.12.2009 at Chennai, a number of important decisions were taken based on which suitable proposals are to be made in the Modernisation Scheme to be formulated.

(a) Thiru N. Shanmugam, Special Chief Engineer, WRD (Retired), who has been included in the Committee because of his experience in managing the system earlier and who was given the task of ensuring the participation of the farmers in the Lower Bhavani System for this modernisation, was heard of the suggestions that came forth from them on their needs during his personal interaction. His Report may be seen in the Annexure - IV.1.

(b) (i) To ensure that the total area to be localised for irrigation does not exceed the designed extent of 2,07,000 acres in spite of the decision of the Government to extend the main canal from M.89/0 to M.124 / 2 to include drought prone areas, just before the Project was taken up for execution, certain areas commandable from this canal running on contour had to be omitted, which were then referred to as "Dharapuram cut". They are seen as isolated patches now not served by irrigation. The Committee felt that it is neither fair nor equitable to leave them as they are, any more and decided to include them also in this scheme of Modernisation as the Ayacut of the Lower Bhavani Project.

(ii) As the Lower Bhavani Project command was irrigated, over a few years, it was seen that there was considerable flow generated in the Odais and drains within the command area due to the seepage from the distribution system, which was through unlined channels and there was also return flow when the area was irrigated in the first season to raise wet crops, which was all running down back to the River. In order to make use of this flow, a few small schemes were executed over a period of time, which are now 34 in number, called the "Harnessing Schemes". But the farmers had to wait till the drains carried the flow, which meant delay in farming and disparity in irrigation service in the small extents lying dispersed but within the command area of the Project System. This led to unrest and demand from those farmers year after year, to release irrigation waters in these drains even as the irrigation season starts in

this project on August 15th on par with the ayacut already localised. The Committee after due deliberations decided that those extents under the 34 Harnessing Schemes, details of which are given in Annexure - IV.4, may also be treated as the ayacut under the System.

(iii) Over these years of the service by the LBP System from 1954 to this day, there has been spectacular development in the region with several towns like Sathyamangalam, Gobichettypalayam and Erode with water, the catalyst, being made available to enrich the inhabitants in the area, expanding and spreading over the already localised ayacut area in a big way with several industrial establishment also coming in. The Committee therefore felt that the new areas now proposed to be regularised as ayacut to be served by the system in (i) & (ii) above may compensate for the already localised area being lost and thrown out of irrigation. The actual area irrigated year after year from 1971-72 onwards is given in Annexure - II.2 and it may be seen that in no irrigation year it has touched the design area of 2,07,000 acres. However the Committee made a stipulation that when the Modernisation Scheme is taken up for implementation, the final extent would still be limited to the designed ayacut of 2,07,000 acres.

(iv) Inclusion of these new areas would also involve the extension of the distributaries and minors to serve those areas, besides the on-farm development works to bring all these new areas on par with the existing ayacut area. The Committee agreed to provide for this in the Modernisation Report on the basis of details to be furnished by the Superintending Engineer, Agriculture Engineering who is in-charge, including some amounts for rehabilitating the on-farm development works already executed in the existing area. These are seen in Volume - II.

(v) The Committee had to take a crucial decision on lining the Irrigation System - whether the entire system including the branches and

minors besides the main canal is to be lined, in the context of the fears expressed by the farmers and also the general public that the groundwater levels will fall if the seepage now seen (in fact more than 33 1/3 % allowed for this unlined system) is arrested, affecting the drinking water and other benefits they are enjoying by going in for perennial crops in the area using the groundwater. After due deliberation, the Committee decided by consensus that lining in this Modernisation Scheme will be limited to only the main canal for its entire length of 124 miles leaving the other limbs of the distribution system unlined as it is, of course improving their sections and bringing them to standards.

(vi) On this basis, Thiru T.G.Chandran, Special Chief Engineer, Designs Circle, was asked to prepare specifications and drawings for the lining of the main canal. The Committee also decided that the section of the canal will be limited to the design requirements of a lined canal, with the right bank being reformed with additional earth work added with suitable soil borrowed and conveyed, to be compacted to specifications. The bed lining will be with cement concrete M 15, 9 cm thick, laid in situ and the sides with precast slabs of suitable size leaving adequate free board and berms. Please vide Chapter - IV.

(vii) The Chairman of the Committee then recollected the circumstances under which the present system of managing the irrigation in two seasonal turns came in, the first for wet crops and the second for dry irrigation, an unique experiment introduced in 1964 under the Government order No.2367 (Revenue) dated 21.09.1964, which has been successfully implemented so far to the satisfaction of all concerned, the Beneficiaries and the Managers. In the second season the canal is run on the basis of 10 days on and 10 days off. The Joint Director of Agriculture, Member of the Committee, was asked whether a change on this could be thought of. On his advice, the Committee decided to leave the present

practice as it is. But the Joint Director of Agriculture was asked to give his considered Report on the changes that could be thought of in the cropping pattern and the Agricultural practices, in the context of the improvements in the system through Modernisation, which would ensure better irrigation service of making available the right quantity of water to crops at the right time. The Agriculture Consultant available in the Cauvery Technical Cell, Thiru S.Ganapathy Sankaran, was requested to work along with the Joint Director of Agriculture, inspecting the ayacut area and reacting with the farmers. The Report they jointly submitted is vetted and covered in the Chapter - IV.

A copy of the Minutes of the Second Meeting is given in Annexure - 3 for perusal.

4. *In the third and final meeting of the Committee convened at Erode on the 5th January 2010, efforts were made to consolidate the views already expressed by different stakeholders and System managers and formulate the final proposals to draft the Report of the Committee.*

5. *In this meeting, the decision to confine the lining only to the main canal was reconfirmed by the Committee. However, since this could form a main item contributing to the cost of the Scheme, the Committee deliberated on the details. It was decided that the first reach of the main canal, taking off on the right bank from the battery of 5 canal sluices constructed in the masonry dam, upto M.1.2.500 (Reaches I A, B and C), may be lined as it is. In this reach the canal runs in full cutting and a discharge of 5 c/s is maintained to feed the Research Farm of the Agricultural University, althrough the year. Irrigation of the command starts only below this point. The main canal starting from this point may be lined with the revised section introducing a transition.*

6. *Examining the lined canal sections for the rest of the Reaches 29 in number upto the tail end, presented by the Special Chief Engineer, Designs, and going through the specification drawn by him said to*

conform to the IS Code 3873 - 1993 with draining arrangements as per IS 4358 - 1995, the Committee felt that the drainage arrangements shown to counter any possible uplift in the bed lining is too elaborate and would not be necessary in the present case, for the reason that there are very rare chances of the ground water levels in the area rising upto the bed level of the canal and causing uplift, since the rainfall in this area is very low and the experience is that the ground water levels here are very low. These provisions were therefore omitted after taking a conscious decision by the Committee. The bed concrete in M 15 would be laid in situ, 9 cm thick, of course in alternate panels and finished with haunches on either end to receive the side lining with precast plain cement concrete slabs of size 45 cm x 30 cm x 7.5 cm to be laid staggered in alternate layers. No-fine concrete slabs will be inserted at 2.4 m centre to centre in the side slopes of the canal and 6 m centre to centre longitudinally, to drain away any moisture from the banks when saturated with rain. All these technical details including the specifications are shown in the drawings in Volume.III.

7. *The details on the number of structures of different categories to be reconstructed, those to be repaired and rehabilitated and those which may be left as they are, presented by the Executive Engineer, Erode, as assessed by the field officers, after walk through surveys were generally gone through by the Committee and accepted. A case was made out for introducing a new structure at M.63/6/15 of the main canal to serve as an outlet for emptying the canal during emergency, which was considered and accepted by the Committee.*

8. *The Executive Engineer, Erode, was asked to prepare detailed estimates for the entire scheme on the basis of the decisions taken by the Committee, and the typical estimates he may work out for the canal sections, structures etc., and a time frame for completing the presentation of the estimation was also fixed by the Committee. More importantly, the*

Committee indicated the chapters under which the Scheme Report may be presented to the Government and also finalised the drawings to be made to accompany the Report.

A copy of the Minutes of this Meeting is given in Annexure - 4 for perusal.

9. *The Primary Objectives in planning for Modernisation of any existing Irrigation System already functioning is to save water through increasing the Irrigation efficiency. In this instant case, it is all the more relevant because of the circumstances under which this Lower Bhavani Project was sanctioned as the first Irrigation Project after Independence, which Project had to wait for nearly a century since it was mooted and had taken several twists and turns both in respect of water availability, the storage planned and also in deciding on the benefits that could be envisaged. Also, it is the first project planned for irrigated dry, when previous to this in all the systems in service in the then Madras State, a project meant for irrigation was meant only for wet and particularly paddy. Even after sanction, certain changes in the ayacut to be served had to be accommodated to meet the aspirations and genuine demands of the people in the region which is the basic tenet in democracy.*

10. *Next came the problem to be solved when the ayacut development went on a track contrary to the design, which of course was solved through a unique decision of serving the ayacut of 2.07 lakh acres originally envisaged, to be served in two irrigation turns, the first turn for growing wet crop utilising not more than 24 TMC and the second turn for only dry crops limiting the utilisation to 12 TMC altogether not exceeding 36 TMC in a year. All these are detailed in Chapter I of this Report as Historical Background.*

11. *While formulating the scheme for Modernisation, it is preferable to seek some guidelines to be followed and such guidelines are available. "The Guidelines for Rehabilitation and Modernisation of Irrigation*

Projects" published by the International Commission on Irrigation and Drainage (ICID) in 1999 came in handy which suggests "Diagnostic Analysis of the Existing System" as the first step, then to review the adequacy of the Water Resources available, the present status of the physical system, the management practices and also the agricultural practices now in vogue in the command area. All these are covered in Chapter II.

12. Next to be discussed is the Objective in formulating this Modernisation Scheme. The 5th Asian Regional Conference of the ICID was held in New Delhi on the 6th December 2009, the Diamond Jubilee year of the ICID, on the theme "Improvement in Efficiency of Irrigation Projects through Technology Upgradation and Better Operation and Maintenance". Inaugurating the Conference attended by more than 850 delegates from more than 43 countries, the Hon'ble Prime Minister of India said that the main objective of our "National Water Mission", a part of the National Action Plan on Climate Change recently launched by the Government of India, is Integrated Water Resources Management by conserving waters, minimising wastage and ensuring its more equitable distribution. He indicated that increasing water use efficiency by at least 20% is one of the key areas of the National Water Mission. This is essential for not only improving agricultural productivity, but also for sustainable water use. Mentioning that an assessment of the irrigation system in India indicates that efficiencies of surface water system are only around 35 to 40% at present, he suggested that this has to be improved to at least about 60%.

13. This is discussed in Chapter III of this Report. The present efficiency of the Lower Bhavani System has been calculated with the available data base and is seen to be around 44% and the ways and means for raising this to 60% or 65% have been discussed in the subsequent Chapters IV & V dealing with the Formulation of

Modernisation Proposals, after wide consultations with the farmers who are the main stakeholders and their participation. The methodical approach adopted in formulating the proposals by the Committee has been already presented earlier in this summary, detailing the proceedings of the three meetings held.

14. *Farmers should be encouraged to go in for the modern way of cultivation namely System of Rice Intensification (SRI) in more areas in this project, which would result in savings of water and other inputs, besides giving higher yield than the conventional method of paddy cultivation.*

15. *The farmers requested the Committee to recommend to the Government of Tamil Nadu for 80% subsidy for Micro Irrigation (i.e. sprinkler and drip) to the needy farmers without specifying the crop.*

16. *Farmers represented that "Farmers Surveillance Committee" can be formed at the time of execution to ensure better quality, address farmer's grievances and ensure speedy execution. They feel their involvement would ensure quality and timely completion since they are the interested party.*

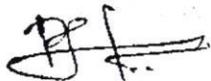
17. *As this is only a proposal to modernise and improve the existing scheme which has been successfully serving for the past about 60 years, there is no change in the environment or ecology and hence, EIA studies were not found necessary.*

18. *Concluding, the Cost Estimates, the Benefit Cost Ratio and the Programme for implementation are presented in Chapters VI and VII. The total cost of the scheme is Rs.610 crores and the B.C. ratio works out to 1.49 : 1. Since the improvements envisaged in the Scheme are to be executed in the live system, that is to be kept operating during the irrigation season, the total period for implementation has been assessed*

as five years and the year-wise physical programme is also displayed in the charts included in the final Chapter.

19. The Committee believes that they have done their best to present this Report for the "Scheme of Modernisation of the LBP Irrigation System" suggesting improvements, adopting the present technological developments, keeping the cost aspect also in mind and adapting the available guidelines for such an endeavour to the conditions suitable to the Lower Bhavani Project Area.

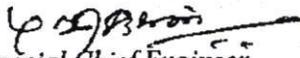
20. The Committee thanks the Government of Tamil Nadu for entrusting this task to them in full confidence of their expertise in the Irrigation Management in the State and hopes that this Report presented in three Volumes will meet the expectation of the Government and requests that the Report may be accepted and formulation taken up for implementation early.



Vice Chairman,
Cauvery Technical Cell,
Egmore, Chennai - 600 008.



Chief Engineer,
Water Resources Department,
Pollachi Region, Coimbatore - 641 001.



Special Chief Engineer,
Water Resources Department
Designs Circle, Chennai - 600 005.



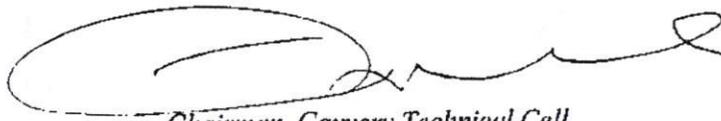
Special Chief Engineer (Retd.),
Water Resources Department,
Gobichettipalayam, Erode Dt.



Joint Director of Agriculture,
Erode.



Superintending Engineer,
Water Resources Department,
Bhavani Basin Circle, Coimbatore.



Chairman, Cauvery Technical Cell,
Egmore, Chennai - 600 008.



**PUBLIC WORKS DEPARTMENT
WATER RESOURCES DEPARTMENT
OFFICE OF THE CHIEF ENGINEER,
COIMBATORE REGION, COIMBATORE**

TECHNICAL SANCTION SLIP

Name of Work "Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System" at an Estimated cost of Rs. 933.10 crores.
Package No V - "Extension, Renovation and Modernisation of Kalingarayan Channel from mile 15-4.5-195 to 56-5.5-328 in Erode District".

Ref :

1. G.O (4D).No.66 Public Works (W1) Department Dt 17.08.2020.
2. G.O (Ms).No. 276 Public Works Department Dt 09.11.2020.
3. Chairman and Managing Director, TNWRC &RRC, Chennai
Lr.No.144/2020/TNWRC RRC/CE/Dt 10.11.2020

The Government have issued orders for seeking loan assistance from NIDA through TNWRC & RRC for the work of "**Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System**" at an total estimated cost of Rs. **933.10 crores** as in G.O (4D).No.66 Public Works (W1) Department Dated 17.08.2020.

The Government have also accorded Sanction for the execution of "**Extension, Renovation and Modernisation of Kalingarayan Channel from mile 15-4.5-195 to 56-5.5-328 in Erode District**" ^{under package V} at an total estimated cost of Rs. **76.80 crores** as in G.O (Ms).No. 276 Public Works Department Dated 09.11.2020.

The Chairman and Managing Director, TNWRC & RRC, Chennai has entrusted the work to Chief Engineer, Coimbatore Region as a deposit work for further action as per Government order vide Chairman and Managing Director, TNWRC &RRC, Chennai Lr.No.144/2020/TNWRC RRC/CE/Dt 10.11.2020.

The Detailed Estimate has been prepared based on typical drawings ~~by the~~ by the Superintending Engineer based on the site conditions and to the requirements.

The expenditure to be incurred for the above estimate is debitale from NABARD (NIDA) fund through Tamil Nadu Water Resources Conservation and Rivers Restoration Corporation Limited as a Deposit work "Head of Account of 8443 Civil Deposit Works – Class – III (8443 – 00 – 108 – AJ - 80202)" IFHRMS – DP Code.

The Detailed Estimate for **Package V** is technically sanctioned for **Rs.76.80 crores** (**Rupees Seventy Six Crores and Eighty Lakhs Only**) and registered as **ER.No: 16 CE/CBE/2020-21.**

[Signature]
Chief Engineer, WRD/PWD,
Coimbatore Region, Coimbatore - 01.
[Signature] 12.11.2020
[Signature] 12/11/2020
[Signature] Oct

96
GOVERNMENT OF TAMILNADU
PUBLIC WORKS DEPARTMENT / W.R.D.

OFFICE OF THE CHIEF ENGINEER, WRD, P.W.D,
COIMBATORE REGION, COIMBATORE -1.

PRESENT: Er. R. Viswanath, M.E.,
CHIEF ENGINEER

PROCEEDING NO : TS/ AEE I / AE I / F. ERM - LBB / Package V / 2020 / dt: 12.11.2020

Sub: NABARD (NIDA) Fund- Extension, Renovation And Modernization of Lower Bhavani System In Cauvery Basin in Cauvery Basin." - Estimate for Rs 933.10 Crore (Package V- "Extension, Renovation and Modernisation Of Kalingarayan Channel From mile 15-4.5-195 TO mile 56-5.5-328 in Erode District" Estimate Amount Rupees 76.80 crores) -Technical Sanction accorded - Regarding.

- Ref:**
1. G.O.(4D) No.66, Public Works (W1) Department dated 17.08.2020.
 2. G.O.(Ms) No.276, Public Works (W1) Department dated 09.11.2020.
 3. Chairman and Managing Director, TNWRC & RRC, Chennai Lr.No.144 / 2020 / TNWRC RRC / CE / Dt 10.11.2020
 4. Superintending Engineer, PWDWRD, Bhavani Basin Circle, Erode Lr.No: TS / AEE / AE/F-Cauvery Modernization -LBP / 2020 / Dt 10.11.2020.

The Government have issued orders for seeking loan assistance from NIDA through TNWRC & RRC for the work of "Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System" at an total estimated cost of Rs. 933.10 crores as in G.O (4D).No.66 Public Works (W1) Department Dated 17.08.2020.

The Government have also accorded Sanction for the execution of "Extension, Renovation and Modernisation of Kalingarayan Channel From mile 15-4.5-195 TO mile 56-5.5-328 In Erode District." - Estimate for Rs 76.80 crores as in G.O (Ms).No. 276 Public Works Department Dated 09.11.2020.

The Chairman and Managing Director, TNWRC & RRC, Chennai has entrusted the work to Chief Engineer, Coimbatore Region as a deposit work for further action vide reference 3.

The estimate for the Package V work of - "Extension, Renovation & Modernisation of Kalingarayan Channel from mile 15-4.5-195 TO mile 56-5.5-320 Erode District" - Estimate for Rs 78.80 crores submitted by the Superintending Engineer PWD/WRD, Bhavani Basin Circle, Erode is technically sanctioned for Rs. 78.80 Crores (Rupees Seventy Six crore and Eighty Lakhs only) and registered as CER No. 18 CE / CB 2020-21 subject to the condition that the Superintending Engineer is fully responsible for correctness of quantities, rates, specifications and datas adopted in the estimate.

The Superintending Engineer is responsible for obtaining necessary approved Design Drawings for all the reconstruction works (Under Tunnels, Sluices, Bridges) where ever necessary before execution from the Superintending Engineer, WRD, Design Circle, Chennai.

The technically sanctioned estimate is sent herewith for taking further necessary action. Prior approval should be obtained from the competent authorities for any deviations in quantities (additional / substituted items) which are found essential during execution.

The receipt of the estimate shall be acknowledged.

Encl: Estimate (In original) - 1 no

To
The Superintending Engineer, WRD,
Bhavani Basin Circle, Erode

J. Y. J. (Signature)
12.11.2020
for Chief Engineer, WRD,
Coimbatore Region, Coimbatore-1.

21
12/11/20

**EXTENSION, RENOVATION AND MODERNISATION OF LOWER BHAVANI
SUB BASIN PROJECT SYSTEM.**

ESTIMATE AMOUNT. RS.933.10 CRORES

**REPORT TO ACCOMPANY THE WORK OF EXTENSION, RENOVATION AND
MODERNISATION OF KALINGARAYAN CHANNEL FROM MILE 15-4.5-195
TO MILE 56-5.5-328 IN ERODE DISTRICT.**

Estimate Amount .Rs. 76.80.00 Crores.

PREAMBLE:

The Kalingarayan Anicut is an old Anicut constructed across the river Bhavani just above its confluence with river Cauvery near Bhavani town about 740 years ago in pre British era by Thiru. Kalingarayan a native chief. This is the second and the last Anicut across the river Bhavani below the Bhavanisagar Reservoir. The Kalingarayan channel takes off from the right side of the Kalingarayan Anicut.

The Kalingarayan channel runs through Erode, Modakkurichi and Kodumudi Taluks via., Erode City Corporation, Pasur, Unjalur, Kodumudi and ends at Avudayarparai. The total length of kalingarayan channel is 56 miles 5 1/2 furlongs with two branch canals named Malayampalayam Branch canal and Avudaiyarparai Branch Canal and irrigates about 15743 acres of land in Erode, Modakkurichi and Kodumudi Taluks of Erode District. The crops raised in the Kalingarayan channel ayacut areas are mainly wet crops such as paddy, Turmeric, Banana and Sugarcane. This irrigation channel carries water for a period of 10½ months from 16th June to 30th April of succeeding year with a closure period of 1½ months from 1st May to 15th June of succeeding year.

DEFECIENCIES:

Kalingarayan channel is a very old earthen channel. Except for annual maintenance, no major improvements or renovation works have been so far done from mile 15-4.5-195 to 56-5.5-328 of this canal system.

In this reach there are Under Tunnel 49Nos, 35 Nos of Bridges, 612nos of Irrigation sluice are used for irrigation and 279 Nos of Bailing stand are available at

the right side. Almost all the sluices and bailing stand of kalingarayan channel are dilapidated in condition and most of the sluices does not have any shutters to regulate and some are having the paddle shutters, which are in damaged condition and need renewal. The bridges are constructed very long back using stone and brick masonry. All these bridges are damaged in condition and not in highway standards.

Since the Kalingarayan channel was excavated about 740 years ago, the left side embankment - cum - inspection track of the Kalingarayan channel became very weak and eroded almost, in all the places between from mile 15/4 to 56/5.5 due to prolonged use by the nearby farmers and local inhabitants.

Now, the Government of Tamil Nadu has accorded administrative Sanction to a sum of Rs.933.10 crores (Rupees Nine Hundred and Thirty Three Crores and Ten Lakhs only) Vide GO Ms No. 276 PW(W1)D Dated:09.11.2020 to rehabilitate the age old Lower Bhavani Sub Basin Project system under Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System. The entire Scheme has been Splitted in to Six Packages. The Scheme is funded through Tamil Nadu Water Resources Conservation and River Restoration Corporation Ltd as a Deposit Work.

S.No	Package No	Name of Package	Estimate Amount (in Crores)
1	Package - I	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 0-0-373 to 18-1-375 in Erode District	194.15
2	Package - II	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 18-1-375 to 39-0-000 in Erode District	127.65
3	Package - III	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 39-0-000 to 63-0-560 in Erode District	198.25
4	Package - IV	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 63-0-560 to 124-2-560 in Erode District	189.55

S.No	Package No	Name of Package	Estimate Amount (in Crores)
5	Package - V	Extension, Renovation and Modernisation of Kalingarayan Channel From Mile 15-4.5-195 to 56-5.5-328 in Erode District	76.80
6	Package - VI	Extension, Renovation and Modernisation of Thadappalli Channel and Arakkankottai canal in Kodiveri Anicut System in Erode District.	146.70
		Total	933.10

(Rupees Nine Hundred and Thirty Three Crore and Ten Lakhs Only)

From the above, to improve the present condition of the Kalingarayan irrigation channel, The Government of Tamil Nadu has accorded the Administrative sanction for an amount of **Rs.76.80 Crores** to rehabilitate **Kalingarayan channel from mile 15-4.5-195 to mile 56-5.5-328 in Erode District.**

REHABILITATION WORKS PROPOSED:

Construction of Protection wall:

The Kalingarayan channel was constructed about 740 years ago. This channel is not a designed channel, hence the bed and sides of channel are eroded and they are not in their original standards. Since, it is a contour channel, the left side of the channel bund which is now in deteriorated condition, need to be strengthened against any breach, similarly the right side of the channel is need to be protected against sliding of earth and also from unauthorized discharge of industrial effluents and domestic sewage. Hence it is proposed to construct PCC protection wall in vulnerable portions of the left and right bank. The protection wall is proposed using M15 Design mix Concrete with construction joints at every 25 metres.

Malayampalayam Branch canal offtaking at mile 31-6 right hand side of the Kalingarayan channel, which runs 4 mile and irrigates about 350 acres. It is also a contour canal having canal bank at left side. Due to prolonged use by the nearby farmers and local inhabitants the canal bund is narrow and weak and canal breach occurs frequently. Hence, it is proposed to construct protection wall on both sides and provide concrete lining to the Bed of channel of 60mm thick 1:2:4 concrete using 20mm and downgraded HBGS jelly for a length of 1210m.

Reconstruction of sluices:

In the reach from mile 15-4.5-195 to 56-5.5-328, 726 nos of sluice are used for irrigation. The all existing sluices are constructed in brick or stone masonry. Now, 659 sluices are in deteriorated condition. Hence, it is proposed to reconstruct 659 sluices. In this reach 513 direct irrigation sluices are in the left side and 146 sluices for bailing stand are at the right side.

In the year 2008-09, under NABARD Scheme to prevent the effluent discharge letting into channel from dyeing units, tanneries, industrial waste from various places, a baby canal to carry the sewage has been constructed along with that, 400 Nos of paddle type of steel shutters were also replaced. However, the steel shutters encounters and always functioning with mixture of sewage and irrigation water which is partially polluted. At present the shutters were also in partially damaged and deteriorated condition and the same has also been proposed to provide V-Groove M.S screw gearing sluice shutter arrangement for better manual operation.

Under Tunnels:

Under tunnel allows the drain from right side catchment to left side of the channel and well below the bed of the canal. In the reach from mile 15-4.5-195 to 56-5.5-328, there are 47 nos of under tunnel which required 25 nos under tunnel are in reconstruction and 22nos are required rehabilitation. These under tunnels are proposed using RCC of M25 Grade box culvert with single vent of size 1.00m x 1.00m RCC box culvert.

Channel Outlets:

Channel outlets drain the excess water from canal during the monsoon periods and during the flood seasons. In this reach there are 6 No of outlets available to drain out excess water from the channel. The outlets aprons are in deteriorated condition so it is proposed provide concrete skin wall on the aprons.

Bridges:

In the reach from mile 15-4.5-195 to 56-5.5-328, there are 35 nos of bridges, out of these 21 nos requires reconstruction and 11 Nos need repair. The farmers of kalingarayan channel have no approach to convey their agricultural inputs and cultivated goods to the outside at time. Also these bridges are necessary for the farmers to manage their lands during flood season. The existing approaches of these bridges are single lane so it is proposed to reconstruct single lane bridges with approach slabs. The bridges are designed for IRC Class AA loading.

Strengthening of Bund:

Since the Kalingarayan channel was excavated about 740 years ago, the left side embankment - cum - inspection track of this channel became very weak

and eroded almost in all the places between from mile 15-4.5-195 to 56-5.5-328 due to prolonged use by the nearby farmers and local inhabitants thereby making the bund narrow and weak. Also the embankment portions in the left side bund was neither constructed as per the standard specifications nor rehabilitated in the recent past. The nature of the soil in the left side bund of this channel is sandy loam with clay. Hence it is proposed to strengthen the left side channel bank with conveyed earth. The earth is not available near the kalingarayan channel for formation of embankment. Now it has been proposed to form the canal bank with conveyed gravel.

Earth work

Since the quantum of earth required for the formation of canal bund to the required profile is not available in the vicinity of the site, it is proposed to borrow the earth from the lands, ponds, tanks belonging to Government and Private lands as well. Earth is proposed to be borrowed from the private lands as per the list approved by the mining authorities. For which the cost of earth is adopted as per the G.O.(D) No.107 Industries (MMC.2) Dept dt 06.07.2017 and seionorage charges has also been adopted as per the G.O (Ms) no.183 Industries (MME.1) Dept dt. 28.12.2017. Necessary conveyance charges from point of source of earth to the point of execution have also been adopted based on the current schedule of rates for the year 2020-2021. Rate for the item-Earth work excavation for the conveyed earth using machinery has been adopted as per the serial number 61 and schedule item number 62 of schedule of rates for the year 2020-2021.

Since the canal embankment profile to be formed should meet the stability criteria along with minimum seepage condition, necessary provision has been made for consolidation, compaction, using power roller including hire charges.

The profile of embankment for spoil bank and jeep track are proposed to be formed partially with the conveyed earth within the quantity of earth available in and around the vicinity of site or from the nearest available earth sources.

Gravel

The remaining part of the bund profile for required section for jeep track and spoil bank is proposed using gravel from the nearest sources for which the cost, conveyance, consolidation by power roller including hire charges etc are to be carried out following the standard specification prescribed laid down in schedule of rates 2020-2021.

Concrete M15 (Design mix)-20mm d/g

Components of various irrigation structures such as cut off wall, toe wall, binder wall, bed lining etc., are proposed in M15 concrete using 20mm downgraded metal. Since every point of execution along the canal stretch could not accommodate stacking the raw materials viz coarse and fine aggregate, cement, etc.,. It is proposed to prepare the concrete mix using transmixing from the centralized plant. The lump sum rates for the cost of transmixer, conveyance charges are adopted in this estimate using the quotation received from the reputed firms.

Concrete M15 grade – 40mm downgraded / 20mm downgraded

Various components such as transition wall, Retaining wall, wing wall, returns head wall are proposed in M15 concrete using 40mm downgraded and 20mm downgraded. Since every point of execution along the canal stretch could not accommodate stacking the raw materials viz coarse and fine aggregate, cement, etc., it is proposed to prepare the concrete mix using transmixing from the centralized plant. The lump sum parts for the cost of transmixer, conveyance

charges are adopted in this estimate using the quotation received from the reputed firms.

Concrete M20 – M35 grade

Components such as wearing coat, deck slab, bed blocks, skin wall, dirt wall, RCC barrels for syphon, drainage culvert, aqueducts, bridge, and road culvert are proposed in M20/M30/M35 using 20mm or 12mm coarse aggregate and data for the above is arrived.

Rehabilitation works

All the rehabilitation works proposed are based on the existing site conditions and to meet the hydraulic, durability criteria requirement.

After completion of this rehabilitation project, the impacts of pollution on water & Agriculture will be mitigated in the Kalingarayan Channel system, besides improving the strength & stability of the channels and also enhancing the functional efficiency of the above channel in the rehabilitation segments. The yield of crops will also increase.

L.S. Provisions:

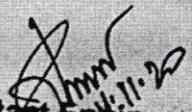
In addition to the above works, the following lump sum provisions are made in this estimate.

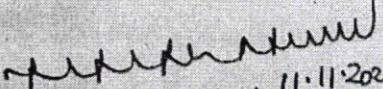
- i. Provision for Shelter rooms for Monitoring and observation during flood
- ii. Provision for Afforestation
- iii. Provision for Labour Welfare Fund @ 1%
- iv. Documentation charges for DPR preparation, Soil exploration, NDT Testing of Structures and gauging wells
- v. Provision for Advertisement charges.
- vi. Provision for Price Adjustment for Cement, Fuel, Steel and Labour charges.

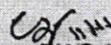
- vii. Provision for GST @ 12%
- viii. Provision for Documentation of flow details and leakages before and after Project, fixing of flow measurement devices and model section etc
- ix. Provision for Supervision Charges for TNWRRRC
- x. Provision for Environmental Impact Assesment Studies
- xi. Provision for fixing of Furlong stones, fixing of dowell bars, outlet shutters, fixing boundry stones , fixing of Scheme Information board and Hydraulic particulars board, Dewatering, Improvements to Staff quarters and Section office , Photographic Charges, Caution Boards, Shifting of Electrical poles, unforeseen items, etc.,
- xii. Provision for Petty Supervision charges, Contingencies and unforeseen items.,

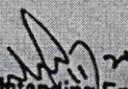
This rehabilitation project requires no statutory clearances from any authorities and involves no land acquisition.

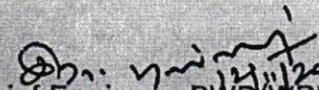
Incorporating all the above aspects, the estimate is prepared based on the current schedule of rates for the year 2020-21 for Erode District and the estimate amount works out to **Rs.7680.00 Lakhs (Rupees Seven Thousand six hundred and eighty Lakhs only)**. This expenditure will be chargeable under Head **"DEPOSIT"**.


Assistant Engineer, P.W.D.
Irrigation Section, (W.R.O.)
Unjalur, At Kasipalayam.


Assistant Executive Engineer, PWD/W.R.D.,
Lower Bhavani Basin Sub Division No. II, Erode-2


Executive Engineer, PWD / WRD
L.B.B.Dn, Erode - 2.


Superintending Engineer P.W.D, W.R.D.
Bhavani Basin Circle, Erode - 11.


Chief Engineer, PWD/WRD,
Coimbatore Region,
Coimbatore - 1.

12/11/20
24
12-11-2020
DUE



**PUBLIC WORKS DEPARTMENT
WATER RESOURCES DEPARTMENT
OFFICE OF THE CHIEF ENGINEER,
COIMBATORE REGION, COIMBATORE**

TECHNICAL SANCTION SLIP

Name of Work : "Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System" at an Estimated cost of Rs. 933.10 crores.

Package No VI - "Extension, Renovation and Modernisation of Thadappalli Channel and Arakkankottai Canal in Kodiveri Anicut System in Erode District".

Ref :
1. G.O (4D).No.66 Public Works (W1) Department Dt 17.08.2020.
2. G.O (Ms).No. 276 Public Works Department Dt 09.11.2020.
3. CMD, TNWRC &RRC, Chennai Lr.No.144/2020/TNWRC
RRC/CE/Dt 10.11.2020

The Government have issued orders for seeking loan assistance from NIDA through TNWRC & RRC for the work of "Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System" at an total estimated cost of Rs. 933.10 crores as in G.O (4D).No.66 Public Works (W1) Department Dated 17.08.2020.

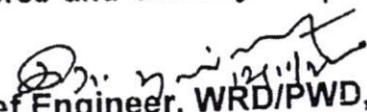
The Government have also accorded Sanction for the execution of "Extension, Renovation and Modernisation of Thadappalli Channel and Arakkankottai Canal in Kodiveri Anicut System in Erode District" ^{under Package VI} at an total estimated cost of Rs. 146.70 crores as in G.O (Ms).No. 276 Public Works Department Dated 09.11.2020.

The Chairman Managing Director, TNWRC & RRC, Chennai has entrusted the work to Chief Engineer, Coimbatore Region as a deposit work for further action vide reference 3.

The Detailed Estimate has been prepared based on typical drawings ~~furnished~~ by the Superintending Engineer based on the site conditions and to the requirements.

The expenditure to be incurred for the above estimate is debitale from NABARD (NIDA) fund through Tamil Nadu Water Resources Conservation and Rivers Restoration Corporation Limited as a Deposit work "Head of Account of 8443 Civil Deposit Works - Class - III (8443 - 00 - 108 - AJ - 80202)" IFHRMS - DP Code.

The Detailed Estimate for Package VI is technically sanctioned for Rs. 146.70 crores (Rupees One Hundred and Forty Six Crores and Seventy Lakhs Only) and registered as CER.No: 17 CE/CBE/2020-21.


Chief Engineer, WRD/PWD,
Coimbatore Region, Coimbatore - 01.

805T
12/11/2020

25.4
12.11.2020

12/11/2020
DCE

**EXTENSION, RENOVATION AND MODERNISATION OF
LOWER BHAVANI SUB BASIN PROJECT SYSTEM.**

ESTIMATE AMOUNT: RS. 933.10 CRORES

Report to accompany the Estimate for the work of "Extension, Renovation and Modernisation of Thadapalli Channel and Arakkankottai Canal in Kodiveri Anicut System in Erode District".

Estimate Amount: 146.70 Crores

The Government have issued orders for seeking loan assistance from NIDA through TNWRC & RRC for the work of "Extension, Renovation and Modernisation of Lower Bhavani Sub Basin Project System" at an total estimated cost of Rs. 933.10 crores as in G.O (4D).No.66 Public Works (W1) Department Dated 17.08.2020.

The Government have also accorded sanction for the execution of "Extension, Renovation and Modernisation of Thadapalli Channel and Arakkankottai Canal in Kodiveri Anicut System in Erode District" at an total estimated cost of **Rs. 146.70 crores** as in G.O M.s No 276 Public Works (W1) Dept Dated 09.11.2020

The Chairman and Managaing Director, TNWRC & RRC, Chennai has entrusted the work to the Chief Engineer, Coimbatore Region, Coimbatore as a Deposit work for further action as per Government Orders vide letter no.144/2020/TNWRC & RRC/CE dated 10.11.2020.

Page | 1

The entire Project has been splitted in to Six Packages as below.

S.No	Package No	Name of Package	Estimate Amount (in Crores)
1	Package - I	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 0-0-373 to 18-1-375 in Erode District	194.15
2	Package - II	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 18-1-375 to 39-0-000 in Erode District	127.65
3	Package - III	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 39-0-000 to 63-0-560 in Erode District	198.25
4	Package - IV	Extension, Renovation and Modernisation of Lower Bhavani Project Main Canal From Mile 63-0-560 to 124-2-560 in Erode, Tiruppur and Karur Districts.	189.55
5	Package - V	Extension, Renovation and Modernisation of Kalingarayan Channel From Mile 15-4.5-195 to 56-5.5-328 in Erode District	76.80
6	Package - VI	Extension, Renovation and Modernisation of Thadappalli Channel and Arakkankottai canal in Kodiveri Anicut System in Erode District.	146.70
		Total	933.10

(Rupees Nine Hundred and Thirty Three Crores and Ten Lakhs

Only)

In this order Package - VI - Rs.146.70 crores has been allotted to Extension, Renovation and Modernisation of Thadapalli channel and Arakkankottai canal in Kodiveri Anicut system. The Kodiveri System was taken up for execution & Irrigation supplies were allowed from the 17th century.

Kodiveri Anicut System.

The Kodiveri Anicut Irrigation system comes under Bhavani Sub Basin of Cauvery basin in Gobichettipalayam Taluk of Erode District. This system has an anicut built across the river Bhavani in Kodiveri village with two head regulators for Arakkankottai and Thadapalli channels. This system has been in existence from 17th Century. An extent of 9917 (24504 Acres) Hectares of land is irrigated under these two channels.

Thadapalli Channel

The Thadapalli channel takes off at the right side of Kodiveri anicut. This channel runs 77.43KM and confluence in Anathasagaram tank This channel is a very old earthen contour channel and naturally due to prolonged years of its service, the component of the Channel has become deteriorated. The bed width of channel is not uniform. The maximum carrying capacity of this channel is 750 cusecs. This channel has two branch channels. The Ayacut under this channel is 7144.48 Ha. The

Thadapalli Channel system has 448 no. of sluices in the main Channel and 105 no. of sluices in branch Channel.

Arakkankottai Canal

The Arakkankottai canal takes off at the Left side of Kodiveri anicut. This main canal runs for a length 32.63KM. This canal is a very old earthen contour canal and naturally due to prolonged years of its service, the component of the canal have become deteriorated. The bed width of canal is not uniform. The maximum carrying capacity of this canal is 379 cusecs. This canal has two branch canals . The Ayacut under this canal is 2772.16 Ha. The Arakkankottai canal system has 207 no of sluices in the main canal and 73 no. of sluices in branch canal .

Irrigation Period

Irrigation period for the above two channels is 10 months (April 15th to February 15th) for 2 Wet Crops.

Cropping Pattern of Kodiveri Anicut System

Paddy is the major crop cultivated in the ayacut which accounts for nearly 60% of the command area, sugarcane banana and Turmeric along with coconut are cultivated in the remaining part of the ayacut.

Earlier the entire ayacut, had paddy as the major crop but due to the water scarcity the ryots have changed the cropping pattern. The farmers

started to cultivate cash crops such as sugar cane, banana and turmeric due to the water scaring which was due to the deficiencies in the system.

There has been no major restoration / repatriation work in this Channel system hence the Channel has started deteriorating With the abrupt change in the present climatology due to global warming and others geographic factors, the farmers find huge difficulties in doing agriculture.

After detailed walk through survey and analyzing the rehabilitation requirements at field meeting with the end users it has been decided to take up the rehabilitation works.

Hydraulic Particulars of Kodiveri Anicut system

This system has an anicut built across the river Bhavani in Kodiveri village with two head regulators for Arakkankottai canal and Thadapalli channel. This system has been in existence from 17th Century. An extent of 9917 (24504 Acres) Hectares of land is irrigated under these two channels. This channels is very old earthen contour channels. The bed width of channels is not uniform. The average bed fall of channels is 1 in 6000.

Salient features of the Kodiveri Anicut system

Kodiveri Anicut.	
River	Bhavani
Basin	Cauvery
Nearest Town	Gobichettipalayam
District	Erode

Construction period	17 th Century
Cost	Not known
Anicut	
Type of Anicut	Heavey Boulders
Maximum height	2.40m
Length of Anicut	151m
Spillway	
No of Falling Shutter	39 Nos. 3.66 x 0.79m
Crest	+220.13 m
Discharge capacity	3456.51 cumecs
River Sluices	
Vents	1 Nos. 1.83 x 1.22 m
Sill	+ 216.50 m
Discharge	9.92 cumecs
canal sluices Arakkankottai	
Length	36.80 km
Vents	5 Nos. 1.57 x 1.73 m
Sill	+ 218.46 m
Discharge	10.73 cumecs
Ayacut	2772.16 Ha
Channel sluices Thadapalli	
Length	77.28 km
Vents	6 Nos. 1.52 x 1.83 m
Sill	+ 218.31m
Discharge	20.81 cumecs
Ayacut	7144.48 Ha

The total number of bridges and other cross drainage works in the Arakkankottai main canal are given below

SI.No.	Name of the Component	Total Number
1	Bridges	12
2	Aqueducts	8
3	outlet	21
4	Undertunnels	8
5	Regulators	2
6	Channel syphons	4
7	Bed Dam	7
Total		62

The total number of bridges and other cross drainage works in the Thadapalli Channel main Channel are given below

SI.No.	Name of the Component	Total Number
1	Bridges	39
2	Aqueducts	6
3	Regulators	2
4	Bed regulator	4
5	Under Tunnel	6
6	outlet	16
7	Culvert	3
8	Drop	3
Total		79 /

Arakkankottai Canal

The Arakkankottai canal system has 207 no of sluices in the main canal and 73 no. of sluices in branch canal . The canal having 3 branches Total extend of ayacut is 2772.16 ha in Gobi and Anthiyur Taluk of Erode District.

S. No	Name of branches.	Parant Channel	Off taking Chainage in Km	Length in Km	Region
1	Vanipurthur branch channel	Arakkankottai main canal	10.69	6.45	Coimbatore
2	Vanipurthur branch extention channel	Vanipurthur branch channel	5.37	6.43	Coimbatore
3.	Perumugai Athani branch channel	Arakkankottai main canal	27.62	9.39	Coimbatore

Thadapalli Channel

The Thadapalli Channel system has 448 nos of sluices in the main Channel and 179nos. of sluices in branch Channel. The channel having 5 branches. Total extend of ayacut is 7144.78 ha in Gobi Taluk, Anthiyur Taluk and Bhavani Taluk of Erode District.

S. No	Name of branches.	Parant Channel	Off taking Chainage in Km	Length in Km	Region
1	Singiam branch channel	Thadapalli Main Channel	31.85	9.16	Coimbatore
2	Side branch channel	Thadapalli Main Channel	29.46	3.30	Coimbatore
3.	Kugalur branch channel	Thadapalli Main Channel	36.00	15.79	Coimbatore
4.	Kugalur experimental branch channel	Kugalur branch Channel	15.68	4.50	Coimbatore
5.	Ammapalayam branch channel	Thadapalli Main Channel	51.48	2.10	Coimbatore

present status of Kodiveri Anicut System

In the Arakkankottai & Thadappalli main Channels of total length i.e., 77.28km. There are 207 direct Irrigation sluices in Arakkan kottai & 448 sluices are in Thadappalli channel provided for providing Irrigation facilities. The carrying capacity of the Arakkankottai main canal at the head reach as designed is 379 cusecs. & Thadapalli is 735cusecs. At the time of excavation of this Channel, on the left side, jeep track was formed. In the Arakkankottai Main canal, a good length is on embankments. During execution, considering the economy in cost and due to non-availability of earth suitable earth in the nearby areas, the canal bund was formed mostly using the available earth from the command area itself. Due to the usage of porous nature of soil in the embankment reaches, actual seepage loss of the earthen canal is higher than even the designed loss of 35 percent of discharge carried.

Since the Arakkankottai & Thadappalli main Channel runs mostly through the full embankment or partial embankment and is in operation for more than 200 years, it is noticed that the Channel has lost its original standards and the bunds have become leaky, with the result, the transmission loss has become heavy. Most of the cross masonry structures are also found to be weak and leaking in various places. These Channel sections have also got reduced and lost their carrying capacity due to long

service. Hence the Channel is not able to cater to the needs of the ayacut satisfactorily. As a matter of fact, the full supply depth could not be maintained in most reaches. Hence all the tail ends of the main Channel, distributaries, branches and sub branches are receiving inadequate supply. Sometimes they get less than 50 % of the supply. Due to the present condition of the Channel, the demand of the farmers could not be met especially during the transplantation period.

The inner slopes of the Channel bund in the embankment reaches are fully covered with scrub jungle which obstructs free flow of water in the Channel. Similarly outer side slope is also covered with scrub jungle growth, with the result, formation of cavities and rat holes in the bund could not be identified. Because of this, breaches occur in the main Channel now and then. Further the jungle growth affects the free movement of the inspection vehicles over the bund. Breach closing is also hampered.

Rain water gullies have been formed in many places and this reduces the top width of the bund. The height of the bund has also been reduced considerably due to the frequent movement of vehicles carrying agricultural products over the bund.

Hence the embankment portions are weak and have lost their standards. Rain water chutes in the outer slope of the embankment are

completely damaged. The inner slope of the Channel has also lost its original standard.

REHABILITATION WORKS

Construction of Protection wall

The Arakkankottai channel and Thadapalli channel was constructed about 750 years ago. This channel is not a designed channel, hence the bed and side of channel are eroded and they are not in their original standards. Hence it is proposed to construct PCC Protection wall at left sides of Thadapalli channel and as of Arakkankottai channel and on both sides for a particular portion using M15 Design mix Concrete using 40mm downgraded HBGS jelly stones and it is proposed to add Plasticizers. Necessary Bitumen felt, water stopper is proposed for placing in construction joints at every 30 meters spacing. It is proposed to provide weep holes by placing 63 mm dia PVC pipes with a spacing of 20 meters intervals. *Design adopted as per EIC circular*

Direct Sluices

As 70 nos of sluices is to be reconstructed in the Rehabilitation of sluices of Arakkankottai channel in Gobi Taluk of Erode District in the year 2020-21, it is proposed. For 10 nos of sluices out of 207 nos in main channel which are in damaged condition and is to be newly constructed to reduce loss of water. *Design as per design circle*

The Thadapalli Channel system has 448 no. of sluices in the main Channel and 105 no. of sluices in branch Channel. The Channels are very old earthen channel. The bed and sides are pores in nature. Hence, seepage is more all along the Channel. Due to this, the assured water supply could not be realized up to tail end. Because of this, it is very difficult to the water regulation works.

The Thadapalli channel there are 553 direct sluices Out of these, 493 are in good condition, 60 are fully damaged and need reconstruction. In 60 direct sluices, the head walls, wing walls, transition walls, apron, and shutters are in damaged condition and need reconstruction.

Bridges

The Bridge at the Inlet portion of the Perumugai Athani branch channel of Arakkankottai canal which exists near the Perumugai village is in damaged condition. The existing cause way is to be dismantled and the bridge is to reconstruction as per highway standard.

In Thadapalli Main Channel out of 39 bridges, 3 bridges were reconstructed and ten bridges have been renovated then and there. From mile 1/1 to 48/0 the existing 3 bridges are dilapidated condition and requires immediate repair for its effective usage. Hence it is proposed to be reconstruction of 3 bridges as per Highways standard.

Aqueducts

The Aqueduct at mile 6-1-330 of Arakkankottai canal is damaged and there is a heavy leakage of water in the side transition walls of aqueduct. The Upstream and downstream side walls of aqueduct which are of ancient bricks has to be dismantled and rehabilitation. After Rehabilitation works, the carrying capacity of the channel will be increases. Hence rehabilitation works are proposed for the aqueduct at mile 6-1-330.

Channel Syphons

The channel syphon at mile 1-3-413 of Arakkankottai canal is in damaged condition. The barrel position are heavily damaged and the water oozes out from the top of barrel. The carrying capacity of the channel is reduced and the water reaching the tailend is abrupted. The barrel portion of the channel is to be reconstructed for the free flow of water till the tailend. Similarly the channel syphon at mile 2-1-540 of Perumugai Athani branch channel, the barrel portion is to be reconstructed.

Under Tunnels

In the Perumugai Athani branch channel of the Arakkankottai canal 7 nos under tunnel exists in which one requires reconstruction which is proposed in this estimate.

In Thadapalli channel, there are 6 nos Under Tunnels all along the main Channel. Though all the Under Tunnels are functioning well, 1 no of

Under Tunnel require repairs in the roof, parapet walls and Channel slope masonry for which improvements are proposed.

Kodiveri Anicut

The Kodiveri Anicut falling shutters and structures is in damaged condition. Hence, the 39 nos of falling shutter is to be replaced. Body wall of Anicut was formed in available rocks, and the rocks are dislocated. Hence, necessary skin concrete, coping concrete and Apron concrete is provided in this estimate.

Modernisation of Arakkankottai Canal and Thadapalli channel Head sluices

Arakkankottai canal off takes from the left side of the Kodiveri Anicut system and Thadapalli channel off takes from the Right side of the Kodiveri Anicut system.

Arakkankottai canal have five vents in size 5'2"x5'8" and Thadapalli channel have six vents in size 5'x5'6". Each vent will be operated from operating platform using screw gearing shutter manually which was constructed during 17th Century. Gear box has to be changed using the mobile welding machine and 5HP motor for Automatic operation of shutters are provided in this estimate. Futher for keeping the Panel board, Panel room is necessary to be provided. The operating platform has to be covered completely by G.I.Sheets.

Bathing Ghat

Farmers and Public are represent, to construct Bathing ghat arrangement in Thadapalli channel and Arakkankottai canal. Hence 15nos bathing ghat in Thadapalli channels 5 nos in Arakkankottai canal provided in this estimate. Safety purpose, GI-B class pipe of 50mm dia handrails are provided for preventing the slippage of public in to the channel.

Earth work

Since the quantum of earth required for the formation of canal bund to the required profile is not available in the vicinity of the site, it is proposed to borrow the earth from the lands, ponds, tanks belonging to Government source.

Earth is proposed to be borrowed from the private lands as per the list approved by the mining authorities. For which the cost of earth is adopted as per the G.O.(D) No.107 Industries (MMC.2) Dept dt 06.07.2017 and seionorage charges has also been adopted as per the G.O (Ms) no.183 Industries (MME.1) Dept dt 28.12.2017.

Necessary conveyance charges from point of source of earth to the point of execution has also been adopted based on the current schedule of rates for the year 2020-2021.

Rate for the item-Earth work excavation for the conveyed earth using machinery has been adopted as per the serial number 61 and schedule item number 62 of schedule of rates for the year 2020-2021.

Since the canal embankment profile to be formed should meet the stability criteria along with minimum seepage condition, necessary provision has been made for consolidation, compaction, using power roller including hire charges.

The profile of embankment for spoil bank and jeep track are proposed to be formed partially with the conveyed earth within the quantity of earth available in and around the vicinity of site or from the nearest available earth sources.

Ready mix Concrete M15 (Design mix)-20mm downgraded

Components of various irrigation structures such as cut off wall, toe wall, binder wall, bed lining etc., are proposed in M15 concrete using 20mm downgraded metal. Since every point of execution along the canal stretch could not accommodate stacking the raw materials viz coarse and fine aggregate, cement, etc... it is proposed to prepare the concrete mix using transmixing from the centralized plant. The lump sum rates for the cost of transmixer, conveyance charges are adopted in this estimate using the quotation received from the reputed firms.

Ready mix Concrete M15 grade – 40mm downgraded / 20mm downgraded

Various components such as transition wall, Retaining wall, wing wall, returns head wall are proposed in M15 concrete using 40mm downgraded and 20mm downgraded. Since every point of execution along the canal stretch could not accommodate stacking the raw materials viz coarse and fine aggregate, cement, etc., it is proposed to prepare the concrete mix using transmixing from the centralized plant. The lump sum parts for the cost of transmixer, conveyance charges are adopted in this estimate using the quotation received from the reputed firms.

Concrete M20 – M35 grade

Components such as wearing coat, deck slab, bed blocks, skin wall, dirt wall, RCC barrels for syphon, drainage culvert, aqueducts, bridge, and road culvert are proposed in M20/M30/M35 using 20mm or 12mm coarse aggregate and data for the above is arrived.

Reconstruction work

Quantity arrived for all the reconstruction works for various cross masonry structures such as aqueducts, syphons, regulators, drainage culverts, bridges, drops, sluice etc retaining wall, transition wall are based only on the tentative drawings endorsed by Superintending engineers, Design Circle.

Rehabilitation works

All the rehabilitation works proposed are based on the existing site conditions and to meet the hydraulic, durability criteria requirement.

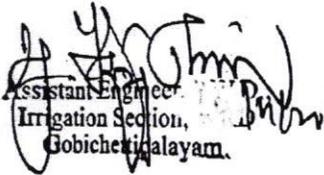
L.S Provisions

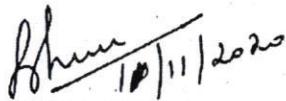
In addition to the above works, the following lump sum provisions are made in this estimate.

- Provision for Shelter rooms for Monitoring and observation during flood, flood stock materials room and renovation of existing ryots meeting building at Gobi.
- Provision for Afforestation.
- Provision for Labour welfare Fund@1% of civil work + GST
- Provision for Advertisement charges.
- Provision for Price Adjustment at 2% of civil work + GST.
- Provision for documentation of flow details and Seepage before and after project.
- Provision for fixing of dowell bars , fixing of Furlong stones, fixing boundry stones , widening of existing bridges, coffer dam arrangements, Purchase of VHF, fixing of Scheme Information board, Photographic Charges, dewatering, Outlet shutter, Unforeseen items, Grouting to damaged structures etc.
- Provision for PS charges, Contingencies & Unforeseen items.
- Provision for Supervision charges for Tamilnadu water resources conservation and River Restoration Corporation Ltd TNWRRC.

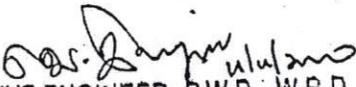
- Provision for Environmental impact Assessment studies.
- Provision for Electrical work & Generator.
- Provision for Credit to old materials for falling shutters and old stones.

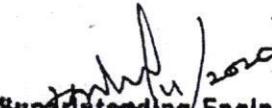
The estimate has been prepared based on the current year schedule of rates 2020-2021, prevailing market rates and the estimate amount works out to Rs.146.70 crores. (Rupees one hundred and forty six crores and seventy lakhs only).

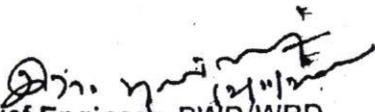

Assistant Engineer,
Irrigation Section,
Gobichettipalayam.


10/11/2020
ASSISTANT ENGINEER P.W.D
WATER RESOURCES ORGANISATION
IRRIGATION SECTION
VANIPUTHUR


11/11/2020
ASSISTANT EXECUTIVE ENGINEER, P. W. D.
WATER RESOURCES ORGANISATION
IRRIGATION SUB DIVISION
GOBICHETTIPALAYAM


EXECUTIVE ENGINEER, P.W.D., W.R.D.
BHAVANISAGAR DAM DIVISION
BHAVANISAGAR.


Superintending Engineer, P.W.D./W.R.D.
Bhavani Basin Circle,
Erode - 11.


Chief Engineer, PWD/WRD,
Coimbatore Region,
Coimbatore - 1.
12/11/2020
12.11.2020
DCE

HON' BLE NATIONAL GREEN
TRIBUNAIL SOUTHERN ZONE BENCH,
CHENNAI
ORIGINAL APPLICATION NO. 61 of 2022

Mugasi Anumanpalli Village Panchayat & Others
..... Applicant

Versus

Union of India and Others
.....Respondent(s)

Affidavit filed on behalf of
MoEF&CC, Chennai.

M/s. R.Thirunavukarasu
Counsel for Respondent
M-9444012986