

The project activity of Vindhyachal hydro power limited (VHPL) has received three requests for reviews from executive board (EB).

Request for review 1

Clarification No. 1

The validation report is not sufficiently transparent and clear in assessing the acceptance of the additionality of the project activity (B.2.1 of the validation report). The DOE should qualitatively address the different aspects of the PDD.

VHPL Response:

The validation report has assessed the Additionality mainly on two aspects viz. Investment analysis (revenue generation) and barrier due to prevailing practice, therefore our response is on the same lines.

To utilise power generated by the Vajra and Chaskaman projects we had two options (a) to sell the power to the State Grid Company or (b) to wheel the power through State grid company. In case of first option (a) there was no clear tariff policy of the Government for private sector small hydro projects. Because of which setting up a small hydro-power project in the state was considered as risky proposition by entrepreneurs. This is evident by the fact that before these two projects of VHPL not a single green field private sector project has been commissioned in Maharashtra. To support this claim a letter for the relevant Ministry has been gathered as evidence (refer attachment A1). On the second option (b) the commercial business sense prevailed and any industrial house willing to buy power from not so reliable small hydro projects wanted to pay a discounted rate. Therefore, VHPL entered into agreement with M/s INOX air products at a rate INR 0.30 per unit lower than the Maharashtra State Electricity Board (MSEB) rate. Content of this agreement is confidential in nature hence not being enclosed along with this reply (as the same would be made available for public viewing), however, copies of the said agreement between VHPL and M/s INOX air products has been made available to the DOE, M/s BVQI.

Background of the project developer is to run an educational institute and had no prior experience of hydro power projects, therefore, during the initial days the technical team interacted with experts in this field and gathered information related to various revenue streams available to small hydro project. During this period VHPL became aware of carbon credits available to renewable energy projects, example reports published by Tata Energy Research Institute (TERI), IISD publications etc. The management of VHPL then decided to take-up activities related to carbon credits once the associated uncertainty gets over. Internal communication to the management of VHPL and minutes of the meet of VHPL board meeting is attached (as reference A2 and A3 respectively).

Request for review 2 & 3

Clarification No. 1

The validator has failed to check the barrier test due to private involvement prior to the Electricity Act 2003 and Maharashtra hydropower policy in 2002.

VHPL Response:

Prior to the Electricity Act 2003 and Maharashtra hydropower policy 2002, the only relevant document available was Maharashtra state policy for captive power generation 1997. This policy was more applicable for captive fossil fuel based power projects. Therefore, the barrier to the VHPL hydro projects was on how to sell power to the off-taker the State grid company which is Maharashtra State Electricity Board (MSEB). Since in the state of Maharashtra, MSEB is the only off-taker of electricity generated, VHPL had to either sell electricity to MSEB or wheel it through MSEB by paying certain wheeling charges. In absence of policy any agreement on the tariff could not be arrived, which is evident by the fact that except for VHPL no private sector green filed hydro power project has been commissioned in Maharashtra since the Independence of India. Electricity Act 2003 and Maharashtra hydropower policy in 2002, which came after the projects were commissioned has no direct bearing on the tariff structure, however, the Maharashtra state hydro policy 2005, which is the most recent document has guidance related to tariff. At present in Maharashtra, the state regulatory commission (MERC) has authority of defining tariff of a power project, accordingly the current price of Hydro power is INR 2.87 per unit and still M/s VHPL has to honor its agreement with M/s INOX air products by selling power at a lower rate (Last year average price was INR 2.56 per unit). Therefore, considering the inherent risk associated with hydrology (rainfall, water availability *etc.*) of small hydro project and the lower tariff the revenue from sale of carbon credit is very critical to the sustainability of the project. Management of VHPL has waited long to get the UNFCCC CDM process of registration streamlined and desires to get both their projects registered as CDM project at UNFCCC.

Clarification No. 2

The validation report does not give sufficient information on the date(s) of stakeholder consultation and the participants.

VHPL Response:

In the year 2000 (31 March 2000) the local stake holder consultation was undertaken at Vajra site. For which the invitation letter was sent on 25th March 2000. The meeting was attended by local villagers. The approval letter has been jointly signed by (i) Government representative for Village, appointed by state Government and (ii) Elected Chief of Village Council. This letter is available in local language therefore an English translation is also attached (refer attachment A4 and A5 respectively).

Further, DOE M/s BVQI visited the project sites on 17th October 2005 and interviewed the local people and endorsed the fact that they have not objection to the project.

Clarification No. 3

The validation report does not clarify whether the DOE reviewed the intention of the project participant to start the project under CDM (expecting the revenue of CERs) when the project was prepared, in the late 1990s.

VHPL Response:

Background and prior experience of the project developer is to run an educational institute and had no experience of hydro power projects, therefore, during the initial days the technical team interacted with experts in this field and gathered information related to revenue streams available to small hydro project. During this period VHPL became aware of carbon credits available to renewable energy projects, example reports published by Tata Energy Research Institute (TERI), IISD publications etc. The management of VHPL then decided to take-up activities related to carbon credits once the associated uncertainty gets over. Internal communication to the management of VHPL and minutes of the meet of VHPL board meeting is attached (as reference A2 and A3 respectively).

Further, permission to start the work by the authority hydro department, Maharashtra has been awarded on 5/5/2000 and 5/12/2000 for Vajra and Chaskaman project respectively. As per the law before permission to start the construction work is accorded construction of the project can not start, therefore, both Vajra and Chaskaman project's construction starting date is after 1 January 2000. Copies of the permission to start the start the work is attached (reference A6 and A7). These plants were commissioned that means the project implementation dates are 06/12/2001 and 22/04/2002 respectively and the real action i.e. generation of power and its export to the grid for wheeling purpose started only after these dates. Commissioning report / Consent to Operate from the authority Maharashtra state pollution control board is enclosed for reference (A8 and A9).

Appendix 1

S. No.	Description
A 1	Letter from hydro department stating first small scale hydro in the state
A 2	Internal memo considering the CDM benefits
A 3	Minutes of Meeting of board meeting held on March 31, 2000
A 4	Letter from village panchyat (Local stakeholder)
A 5	Translation of stakeholder letter
A 6	Letter from hydro department for starting of Vajra project
A 7	Letter from hydro department for starting of Chaskaman project
A 8	Letter from pollution control board
A 9	Letter from pollution control board



S.V.Sodal
Secretary (CAD)

Government of Maharashtra

No. 1205/(277/2005)
Water resources Department
Mantralaya, Mumbai 400 032
Date 15.10.2005

CERTIFICATE

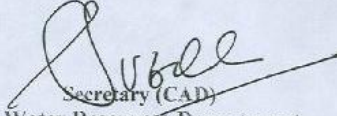
To Whomsoever it may concern

This is to certify that, M/s Vindhyachal Hydro Power Ltd. (VHPL) under Government of Maharashtra's Policy for Captive Power Generation dated 20th December 1997, have developed two small Hydro Projects. The projects are Vajra Fall Hydro Electric Project (3MW) located in Shahapur Taluka of Thane District and Chaskaman Hydro Electric Project (3MW) located in Rajgurunagar Taluka of Pune District. The projects are commissioned in February and June 2002 respectively.

This is further to state that, these are the first Green Field Hydro Power Projects to come up in Maharashtra in the private sector, other than the old Hydro Power Projects put up by Tata Power in pre-independence era. No other Green Field Hydro Projects have come up in Maharashtra in the last three years after VHPL commissioned their plants.

Place: Mumbai

Date: 15/10


Secretary (CAD)
Water Resources Department
Mantralaya, Mumbai 400032



VINDHYACHAL HYDRO POWER LTD.

Empire House, 214, Dr. D. N. Road, Fort, Mumbai - 400 001, (India)
Phone: 207 83 81 / 82 / 207 25 76 • Fax: 91-22-207 4294 / 207 37 34
E-Mail No.: hydro.tech@excess.net.in

Internal Memo

23rd February 2000

From : Director (Technical)
To : Managing Director
Subject : **Funding of Vajra Project**

- 1) The Project cost is likely to be Rs. 12 crores and with 70:30 debt equity ratio the loan required would be around Rs. 4.8 crores.
- 2) While negotiating with financial institutions for the loan the following needs our attention.
 - a) Company to get the project registered as infrastructure project under section 10(23)G of the Income Tax Act. This would reduce the tax burden of the financial institution on the interest it earns for the term loan extended to the project and in turn help us get a proper rate of interest from the Bank for the term loan.
 - b) Vajra project is eligible for interest subsidy from Ministry of Non-Conventional Energy Sources since 3 MW comes under small hydro project category. We need to make the application only after commencement of loan dispersal and subsidy will be based on the prevailing policy at that time.
 - c) The project being a renewable energy source can get benefit under Kyoto Protocol reducing the carbon emissions. In the seminars, people are talking that at 12 million units generation the project may get about 8,000-10,000 tons of carbon credit and at the rate of \$1-\$2 per ton the amount would be in the range of \$15,000 to \$20,000 per year. However, nobody is sure of the exact procedure and the likely cost to be incurred before getting this benefit. However, we need to keep a track of progress internationally, in this matter.

4/5



VINDHYACHAL HYDRO POWER LTD.

Empire House, 214, Dr. D. N. Road, Fort, Mumbai - 400 001 (India)
Phone: 207 83 81 / 82 / 207 25 76 • Fax: 81-22-207 4294 / 207 37 34
E-Mail No.: hydro.tec@access.net.in

: 2 :

- 3) From the European equipment suppliers, supplier credit on soft terms is normally available while selecting the equipment from vendor. We will have to discuss the possibility of their giving us this facility to us.

- 4) Wind energy is getting substantial benefit by way of sales tax. Since, small hydro is also renewable energy source, we should try to impress upon the concerned this facility to our project. Immediately, action will be initiated to get 10(23)G registration and necessary paper work will be done at appropriate time to get the MNES subsidy

This is for your information.

With regards,

M.N. Ramachandra

HELD AT _____ ON _____ TIME _____

Minutes of the 19th Board Meeting of VINDHYACHAL HYDRO POWER LTD., held on Friday, 31st March, 2000 at 3 p.m. at the Registered Office of the Company at Empire House, 3rd Floor, 214 Dr. D.N. Road, Fort, Mumbai - 400 001.

PRESENT :

- (1) Shri Shrikant Somani
- (2) Shri M.N. Ramachandra
- (3) Shri Vijay Kalantri

Shri Vijay Kalantri took the Chair.

After ascertaining that the requisite quorum for the meeting was present, the Chairman called the meeting to order.

LEAVE OF ABSENCE

Leave of Absence was granted to Shri J.V. Shetty who had expressed his inability to attend the meeting and requested for leave of absence.

Item No. 1:**CONFIRMATION OF THE MINUTES**

Minutes of the proceedings of the previous meeting of the Board of Directors of the Company held on 31st December, 1999 which were circulated earlier to the Directors were read, confirmed and signed by the Chairman.

Item No. 2:**SIGNING OF AGREEMENTS WITH KAMATS**

Shri Vijay Kalantri, Chairman, informed the Board that the Company has to enter into Agreement and Lease Deed with Mrs. Sudha Mohan Kamat, Maharook G. Kamat, Viahwanath L. Hegde & Kumud V. Hegde, hereinafter collectively referred to as "Kamats", for the Land required for setting up the Vajra Fall Hydro Electric Project on the Bhaisa River at Village Sarlambe, Taluka Shahpur, District Thane (Maharashtra). He recommended the names of Shri Shrikant Somani, Managing Director of the Company and Shri M.N. Ramachandra, Director of the company to sign the above Agreement/Lease Deed, on behalf of the Company. The Directors then passed the following resolution :-

CHAIRMAN'S INITIALS

HELD AT _____

ON _____

TIME _____

"RESOLVED THAT Shri Shrikant Somani, Managing Director of the Company and Shri M.N. Ramachandra, Director of the Company, be and are hereby authorized to sign, on behalf of the Company, the Agreement and Lease Deed to be entered into between the Company and the "Kamats".

Item No. 3

POWER PURCHASE AGREEMENT

Chairman, informed the Board that the Company has to enter into Power Purchase Agreement with M/s. INOX Air Products Limited, for sale of power to be generated at Vajra Fall Hydro Electric Project on the Bhatsa River at Village Sarlambe, Taluka Shahapur, District Thane (Maharashtra). He recommended the name of Shri Shrikant Somani, Managing Director of the Company, to sign the Power Purchase Agreement, on behalf of the Company. The Directors then passed the following resolution :-

"RESOLVED THAT Shri Shrikant Somani, Managing Director of the Company, be and is hereby authorized to sign, on behalf of the Company, the Power Purchase Agreement to be entered into between the Company and M/s. INOX Air Products Limited."

Item No. 4

TRIPARTITE SHAREHOLDERS AGREEMENT

Shri Vijay Kalantri, Chairman, informed the Board that the Company has to enter into Tripartite Shareholders Agreement with M/s. INOX Air Products Limited and M/s. India Ener-Gen Limited, in view of INOX Air Products Ltd., subscribing to 15,000 number of preference shares of Rs. 1000/- each in the Company. He recommended the name of Shri Shrikant Somani, Managing Director, to sign the Tripartite Shareholders Agreement, on behalf of the Company. The Directors then passed the following resolution:-

"RESOLVED THAT Shri Shrikant Somani, Managing Director of the Company, be and is hereby authorized to sign, on behalf of the Company, the Tripartite Shareholders Agreement to be entered into between the Company and M/s. INOX Air Products Limited & M/s. India Ener-Gen Limited."


CHAIRMAN'S INITIALS

HELD AT _____ ON _____ TIME _____

Item No. 5**LEASE AGREEMENT/DEED WITH THE GOVERNMENT OF MAHARASHTRA**

Shri Vijay Kalantri, Chairman, informed the Board that the Company has to enter into LEASE AGREEMENT/DEED with the Government of Maharashtra, Irrigation Department (GOMID) for the government land required for setting up the Vajra Fall Hydro Electric Project on the Bhasta River at Village Sarlambe, Taluka Shahpur, District Thane (Maharashtra). He recommended the names of Shri Shrikant Somani, Managing Director of the Company and Shri M.N. Ramachandra, Director of the Company, to sign the Agreement with GOMID, on behalf of the Company. The Directors then passed the following resolution :-

‘RESOLVED THAT Shri Shrikant Somani, Managing Director of the Company and Shri M.N. Ramachandra, Director of the Company, be and are hereby authorized to sign, on behalf of the Company, the LEASE AGREEMENT/DEED to be entered into between the Company and “Government of Maharashtra Irrigation Department”.

Item No. 6

Shri Vijay Kalantri, Chairman, informed the Board that Shri Tejus Dalal, will have to append his signature as witness, on the LEASE AGREEMENT/DEED to be entered into between the Government of Maharashtra, Irrigation Department (GOMID). The Directors then passed the following resolution :-

“RESOLVED THAT Shri Tejus Dalal, Secretary to the Board of Directors, whose signature is appended below be and is hereby authorized, on behalf of the Company, the LEASE AGREEMENT/DEED to be entered into between the Company and “Government of Maharashtra Irrigation Department”.

Specimen Signature of Shri Tejus Dalal


CHAIRMAN'S INITIALS

HELD AT _____ ON _____ TIME _____

Item No. 7**CLOSING OF CURRENT ACCOUNT WITH BANK OF BARODA**

Shri Vijay Kalantri, Chairman, informed the Board that the Current Account No. 21608 with the Bank of Baroda, Mumbai Samachar Marg branch needs to be closed as the same is no longer required for the Company's operations. The Directors then passed the following resolution:

"RESOLVED THAT the Current Account of the Company which is held and operated at the Bank of Baroda, Mumbai Samachar Marg Branch be closed and the operation should be stopped from 30th April, 2000 onwards and the necessary documents should be submitted to close the Current Account No. 21608".

Item No. 8**OPENING OF CURRENT ACCOUNT WITH BANK OF MAHARASHTRA**

Shri Vijay Kalantri, Chairman, informed the Bank that the Current Account will have to be opened with the Bank of Maharashtra, Camp Branch, Pune, as the Company has approached them for term loan and cash credit facilities. The Directors then passed the following resolution :-

"RESOLVED THAT a Current Account of the Company be opened with Bank of Maharashtra and the following Director of the Company be and is hereby authorized to operate the banking account of the company by singularly signing on the cheques and all other documents.

<u>Name of the Person</u>	<u>Designation</u>	<u>Specimen Signature</u>
SHRIKANT SOMANI	DIRECTOR	

FURTHER RESOLVED that the aforesaid person shall have the authority and power to effect any withdrawal from the said account by issuing cheques, bills of exchange and/or any other mode and that the bank shall honor the instructions as may be issued by the said person with regard to the operation of the account. The authority to open the account shall include the power to close the said account, break the fixed deposit account, if any, transfer of the bank account from one branch to the other and any other matter connected therewith".


 CHAIRMAN'S INITIALS

HELD AT _____ ON _____ TIME _____

Item No. 9

The Board discussed and reviewed the progress of the Vajra Fall Hydro Power Project and Chaskaman Hydro Power Project, upto 31st March 2000.

Note of Director (Technical) dated 23rd February 2000, on project funding was also discussed and decided to pursue the same.

Item No. 10:**ISSUE AND ALLOTMENT OF REDEEMABLE CUMULATIVE PREFERENCE SHARES**

As the money have been received towards the application for shares of 9.5% Redeemable Cumulative Preference Shares of Rs. 1000/- each. It was decided to pass the following resolution:

"RESOLVED THAT pursuant to Articles of Association of the Company and subject to other applicable provisions of the Companies Act, 1956, if any, 8 (Eight), 9.5% Redeemable Cumulative Preference Shares of Rs. 1000/- each of the Company distinctively numbered from 00001 to 00008 (both inclusive) be and are hereby issued and allowed to INOX AIR PRODUCTS LIMITED, 56, Jolly Maker Chambers-II, Nariman Point, Mumbai - 400 021.

RESOLVED FURTHER THAT Shri. Shrikant Somani, Managing Director of the Company, be and is hereby authorized to file the return of allotment pursuant to Section 75 of the Companies Act, 1956, with the Registrar of Companies Maharashtra, at Mumbai.

RESOLVED FURTHER THAT share certificate bearing No. 1001 and distinctive Nos. 001 to 008 for the shares allotted as aforesaid be issued to **Inox Air Products Limited** under the signatures of Shri. Shrikant Somani, Managing Director, Shri. M.N. Ramachandra, Director and Shri. B.K. Lohia, Authorised Signatory of the Company and the common seal of the Company be affixed on the Share Certificate in their presence."

There being no other business for discussion the meeting was terminated with a vote of thanks to the Chair.


SHRIKANT SOMANI
CHAIRMAN

Date :

CHAIRMAN'S INITIALS

VILLAGE COUNCIL

**Office : Village Saralambe, Taluka Shahapur, District
Thane**

NO OBJECTION CERTIFICATE

**Laxman Hema Adhikari
Chief Jury**

With reference to the application dated 22/03/2000 by Mr. Shrikant Shrinivas Somani, Chairman of M/s. Vindhychal Hydropower Limited residing at Empire House, 3rd Floor, 214, Dr. D. N. Road, Fort, Mumbai - 400 001, the permission was granted after discussions in the monthly meeting dated 31/03/2000.

**Mrs. Kalubai Hari Shirose
Dy. Chief Jury**

As per resolution no. 150 dated 31/03/2000, the village council of Sarlambe has no objection for the construction of Vajra fall hydropower generation by M/s. Vindhychal Hydropower Limited at gut no. 25 area 4 h. 76 R and gut no. 27 area 2 h. 99 R, Khutadi, Taluka Shahapur, District Thane.

This certificate is issued by

Signed
Corporator
Village Council
Sarlambe

Signed
Chief Jury
Village Council
Sarlambe

Annexure 3g

CE(E)/HP/D-3/M-178/1206
Office of the
Chief Engineer (Ele.)
Hydro Projects,
Irrigation Department,
Hongkong Bank Bldg,
4th floor, M.G.Road,
Fort, Mumbai-23,
Dated:- 5.5.2000

✓
To,
M/s.Vindhyachal Hydro Power Ltd.,
Empire House,
214, D.N.Road, Fort,
Mumbai-400001.

Sub : Vajra Fall H.E.P. Project (1 x 3 MW)
Permission to start the work of the project.

Ref. : (1) Your office letter dated 23.3.2000.
(2) This office letter No.CE(E)/HP/D-3/M-178/863, dated
28.3.2000.

Dear Sir,

With reference to your above referred letter at Sr. No. (1), you are hereby permitted to start the work of the Project subject to your fulfillment of all requirements of Hydro Power Development Agreement and lease deed signed by you with GOMID.

This office has sent you list of Civil and E&M drawings to be submitted to Nodal Officer for approval vide letter No.863 dated 28.3.2000. Please note that No.of such drawings to be approved by GOMID may change. Govt. have finalised the charges (Fees) to be paid by you for approval of designs of Civil and E&M structures, which you have already agreed to pay. Therefore you are requested to pay Rs. 5.00 lakhs to Nodal Officer for approval of Civil and Elect. Drawings. After approval of drawings only you have to carryout the works accordingly.


Please note that as and when required, representative of GOMID will visit the site for inspection.

Please confirm that the agreements are registered.

Please acknowledge the receipt of letter.

Thanking you,

Yours faithfully,


Chief Engineer (Ele.)
Hydro Projects, Mumbai-400023.



- 1) Copy submitted to Secretary (CAD), Irrigation Department, Mantralaya, Mumbai-32 for information please.

This is submitted with reference to Govt. letter VJR 1099/(15/99)/HP dated 4.5.2000.

- 2) Copy forwarded with compliments to Chief Engineer, Konkan Region, Irrigation Department, Mumbai-23 for information → and further needful, please.
- 3) Copy forwarded to Superintending Engineer, Hydro Projects Design Circle, Kalwa, Thane-400605 for information and further necessary action.
- 4) Copy forwarded to Superintending Engineer, Central Design Organisation (PH), Nashik for information and further needful.

Annexure 2.c

FROM :

FAX NO. : 6119990

Dec. 04 2000 04:38PM P1

No.Chas/PB-2/HE.P.1/18587/20
Chaskaman Project Division,
Pune-1, Date : 4/12/2000.

To,

M/s Vindhyaahal Hydro Power Ltd.
(Project Company)
Empire House, 3 rd floor.
214 Dr. D.N.Road
Mumbai - 400 001.

Subject :- Chaskaman Hydro power project
construction through privatization.

As per the condition in the HPDA, per mission
for construction activities on the allotted Govt. land
is hereby granted.

O.C.Signed by E.E.

g/k

Accepted
Dy.Executed Engineer
Chaskaman Project Division
Pune-1.

COPY :- Submitted to the Superintending Engineer, Pune
Irrigation Project Circle, Pune-1 for information
please W.Y.T. this office marathi letter No.8029
dt.29/11/2000.

J
Chaskaman file
4/12/00

MAHARASHTRA POLLUTION CONTROL BOARD

Grains :- "PREPOLL"
Tel. : 269 2345 (4 Lines).
: 261 4459/261 4348.
Fax : 022 - 261 2320.



Shri Chhatrapati Shivaji Maharaj
Municipal Market Bldg, 4th Floor,
Mata Ramabai Ambedkar Marg,
Mumbai : 400 001.

File-93

RED / MSI

Consent No. BO/ROK-382 ULHAS/Thane/CC-1072

Dated: 6-12-2001

Consent to Establish / Operate under Section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974; under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorisation / Renewal of Authorisation under Rule 5 of The Hazardous Wastes (Management & Handling) Rules, 1989 & Amendment Rules, 2000. [To be referred as Water Act, Air Act and HW(M&H) Rules respectively].

.....

CONSENT is hereby granted to
M/s. Vindhychal Hydro Power Ltd.,
Village-Sarlambc(Khurda) Tal-Shahapur,
Dist-Thane

located in the area declared under the provisions of the Water Act, Air Act and Authorisation under the provisions of HW(M&H) Rules subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period upto -
30-11-2002.

2. The Consent is valid for the manufacture of -

<u>Sr.No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1.	Hydro Power Generation	3 MW.

3. **CONDITIONS UNDER WATER ACT :**

(i) The daily quantity of tail race water discharged from the plant shall around 1500 MLD.

(ii) The daily quantity of sewage effluent from the factory shall not exceed 4.0 M3.

(iii) Trade Effluent :

Treatment: The applicant shall provide comprehensive treatment system consisting of primary/secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards :

- 1) pH Between
- 2) Suspended Solids Not to exceed ... mg/l
- 3) BOD 3 days 27°C Not to exceed ... mg/l
- 4) C.O.D. Not to exceed ... mg/l
- 5) Oil & Grease Not to exceed ... mg/l

(iv) Trade Effluent Disposal : Nil

(iii) Sewage effluent treatment : The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

- Suspended Solids Not to exceed 100 mg/l
- BOD 3 days 27°C Not to exceed 100 mg/l

(iv) Sewage Effluent Disposal : The treated domestic effluent shall be connected to a soak pit which shall be got cleaned periodically. Overflow shall be used on land for gardening.

(v) Non-hazardous solid waste :

Type of waste	Quantity	Treatment	Disposal
Nil			

(iv) Other conditions : The industry should monitor effluent quality regularly.

4. (i) The applicant shall comply with the provisions of The Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules thereunder:

(ii) The industry falls in the 14th category of the Cess Act and the Rules made thereunder.

(iii) The daily water consumption for the following categories is as under :

- i) Domestic 1.5 CMD
- ii) Industrial Processing --- CMD
- iii) Industrial Cooling 864 CMD
- iv) Agriculture/Gardening -- CMD

(iv) The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the cess as specified under Section 3 of the said Act.

4. Conditions under Air Act.

(i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Control Equipment : Nil

(v) Standards for Emissions of Air Pollutants :

- 1) SPM/TPM Not to exceed 150 mg/Na3
- ii) SO₂ Not to exceed 13 kg./day

(ii) The applicant shall observe the following fuel pattern:

Sr.No.	Type of fuel	Quantity
1	Diesel	15 lit/hr.

(iii) The applicant shall erect the chimney/(s) of the following specifications :

Sr.No.	Chimney attached to	Height in Mtrs.
1	d.G.Set	1.6*

(* Above the roof of the building in which it is to be installed)

(vi) The applicant shall provide ports in the chimney/(s) and facilitates such as ladder, platform, etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's staff. The chimney/(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

(vii) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

(viii) Other conditions :

- 1) The industry should not cause any nuisance in surrounding area.
- 2) The industry should monitor stack emissions and ambient air quality regularly.

6. CONDITIONS UNDER HW(M&H) RULE 1989 AND AMENDED RULES, 2000

(i) The applicant shall handle hazardous wastes as specified below :

Sr. No.	Waste Category No.	Type of Wastes	Quantity	Disposal
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Industry shall not generate any Hazardous waste

(ii) Treatment : --

(iii) The authorisation is hereby granted to operate a facility for collection, storage, transport and disposal of hazardous waste.

(iv) The industry should comply with the H.W.(M. & H.) Amendment Rules, 2000.

7. The applicant shall comply with the conditions as stipulated under Annexure-I & II enclosed.

8. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.



h. Gautam
3/12/01
(Dr. Munshilal Gautam)
Member-Secretary.

To
Applicant.

Copy to : 1. Regional Officer, MPCB, Kalyan
2. Sub-Regional Officer, MPCB, Kalyan-I/II/III.
3. Chief Accounts Officer, MPCB, Mumbai.

Consent Fee received vide

Rs.	D.D.No.	Dated	Drawn on
40,000/-	239869	08.10.2001	HDFC Bank, Mumbai

MAHARASHTRA POLLUTION CONTROL BOARD

☎ : 4010701/0437/4020781
Fax : 4023516/4068



Kalpataru Point, 3rd & 4th Floor,
Sion Matunga Scheme Road No. 8,
Opp. Cine Planet Cinema,
Near Sion Circle, Sion (East),
MUMBAI : 400 022.

RED/LSI

Consent No. 80/Pune-134/0/CC-370 Dated: 22/4/02

Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974; under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorisation / Renewal of Authorisation under Rule 5 of The Hazardous Wastes (Management & Handling) Rules, 1989 & Amendment Rules, 2000. [To be referred as Water Act, Air Act and HW(M&H) Rules respectively].

.....

CONSENT is hereby granted to
M/s. Vinhyachal Hydro Power Ltd.,
At Chas, Ta. Rajgurunagar,
Dist, Pune.

located in the area declared under the provisions of the Water Act, Air Act and Authorisation under the provisions of HW(M&H) Rules subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period upto 31.03.2003.

The validity to the authorisation granted under HW(M&H) Rules, 1989 and Amendment Rules, 2000, however, will be valid for a period of 5 years from the date of issue after which the industry shall submit a fresh application for authorisation, if required.

2. The Consent is valid for the manufacture of -

<u>Sr.No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1.	Electricity (By using only water as raw material)	0.67 Million Unit/M <u>h</u>

3. CONDITIONS UNDER WATER ACT :

(i) The daily quantity of trade effluent from the factory shall be Nil.

(ii) The daily quantity of sewage effluent from the factory shall not exceed 1.0 M3.

(iii) Trade Effluent :

Treatment: The applicant shall provide comprehensive treatment system consisting of primary / secondary and / or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards :

1) pH	Between to
2) Suspended Solids	Not to exceed mg/l.
3) BOD 3 days 27oC	Not to exceed mg/l.

(iv) Trade Effluent Disposal : --

(v) Sewage Effluent Treatment : The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards :

Suspended Solids	Not to exceed 200 mg/l.
BOD 3 days 27oC	Not to exceed 100 mg/l.

(vi) Sewage Effluent Disposal : The treated sewage effluent shall be soaked in a soak pit which shall be got cleaned periodically. The overflow, if any, shall be disposed on land for gardening only.

(vii) Non-hazardous Solid Waste :

<u>Type of waste</u>	<u>Quantity</u>	<u>Treatment</u>	<u>Disposal</u>
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--Nil--

(viii) Other conditions : --

6. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules thereunder :

"The industry falls in the 14th category of the Cess Act and the Rules made thereunder.

The daily water consumption for the following categories is as under :

i) Domestic	-- 1.5 CMD
ii) Industrial Processing)	-- - CMD
iii) Industrial Cooling	-- - CMD
iv) Agriculture/Gardening	-- - CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the cess as specified under Section 3 of the said Act.

5. CONDITIONS UNDER AIR ACT :

- (1) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards :

Control Equipment :

Conditions for D.G. Set :

- 1) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- 2) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB(A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of Insertion loss will be done at different points at 0.5 metres from acoustic enclosure/room and then averaged.
- 3) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during night time. Day time is reckoned between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m. to 6 a.m.
- 4) Industry should make efforts to bring down noise level due to D.G. set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- 5) Installation of DG set must be strictly in compliance with recommendations of DG set manufacturer.
- 6) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help prevent noise levels of DG Set from deteriorating with use.
- 7) The DG set shall be operated only in case of power failure.
- 8) The applicant should not cause any nuisance in the surrounding area due to operation of the DG set.

Standards for Emissions of Air Pollutants :

- | | |
|---------------------|--|
| i) SPM/ | Not to exceed 150 mg/Nm ³ . |
| ii) SO ₂ | Not to exceed 7.2 Kg/day. |

- (ii) The applicant shall observe the following fuel pattern :-

Sr. No.	Type of fuel	Quantity
i.	H.S.D.	360 Lit/day

(iii) The applicant shall erect the chimney(s) of the following specifications :

<u>Sr.No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
1.	D.G.Set (62.5 KVA)	1.60 Mt. above the bldg., where it is to be installed.

(iv) The applicant shall provide ports in the chimney(s) and facilitates such as ladder, platform, etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's staff. The chimney(s) vents attached to various sources of emission shall be designated to/and for use of the Board/s staff. The chimney(s) vents attached to various sources of emissions shall be designated by numbers such as S-1, S-2 etc. and these shall be displayed to facilitate identification.

(v) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

(vi) Other conditions : --
1) The industry should not cause any nuisance in surrounding area.
2) The industry should monitor stack emissions and ambient air quality regularly.

6. CONDITIONS UNDER HW(M&H) RULES, 1989 & AMENDMENT RULES, 2000

(i) The applicant shall handle hazardous wastes as specified below :

<u>Sr. No.</u>	<u>Item No. of Process generating HW as per Schedule-I</u>	<u>Waste substance contain as per classes of Schedule-II</u>	<u>Type of waste</u>	<u>Quantity</u>	<u>Disposal</u>
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The industry should not generate any hazardous waste as per undertaking submitted on Rs.20/- Stamp Paper dated 30.01.2002.

(ii) Treatment : --

(iii) The authorisation is hereby granted to operate a facility for collection, storage, transport and disposal of hazardous waste.

7. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
8. - The applicant shall comply with the conditions as stipulated under Annexure-I & II enclosed.



For and on behalf of the
Maharashtra Pollution Control Board

L. Gautam
20.4.02
(Dr. Munsha Lal Gautam)
Member Secretary

To:
M/s. Vindhyachal Hydro Power Ltd.,
At Chas. Ta. Rajgurunagar,
Dist. Pune.

Copy forwarded with compliments to :

1. The Collector, ~~Solapur~~ Pune.

Copy to :

1. Regional Officer, MPCB, Pune-~~II~~.
2. Sub-Regional Officer, MPCB, ~~Solapur~~ Pune-II.
3. Chief Accounts Officer, MPCB, Mumbai.
Consent fee of Rs.40,000/- received vide D.D.No.
548897 dated 28.3.2002 drawn on Bank of Maharashtra.
4. Cess Branch, MPCB.
5. Master File.

ANNEXURE-I

1. The applicant shall maintain good house keeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area/inhabitants.
2. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation.
3. *Solid Waste.*—The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission/s from civic authorities for disposal to dumping ground.
4. The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the applicant to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent regarding pollution levels.
5. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.
6. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
7. The applicant shall make an application for renewal of the consent at least 60 days before the date of expiry of the consent.
8. The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
9. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
10. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
11. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers down-stream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
12. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
13. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

ANNEXURE-1

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2. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation.
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12. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
13. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

ANNEXURE-II

TERMS AND CONDITIONS OF AUTHORISATION

1. The authorisation shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made thereunder.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the State Pollution Control Board.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. It is the duty of the authorised person to take permission of the State Pollution Control Board to close down the facility.
6. An application for the renewal of an authorisation shall be made as laid down in rule 5 (6) (ii).
7. (a) Category No. _____ by land fill.

The hazardous waste to be disposed of through landfill shall not contain following constituents in excess of limits specified below :-

Sulphate	...	1000 mg/kg.
Chloride	...	1000 mg/kg.
Mixture of heavy metals (Cu-Ni+Cr+Zn)	...	25 mg/kg.
Lead	...	1.0 mg/kg.
Hg	...	0.01 mg/kg.

The firm shall take appropriate measures to put a lining to landfill site so as to arrest the passage of leachates to ground water. Leachates generated, if any shall be connected to existing Effluent Treatment Plant facilities for treatment and disposed of as per the consent conditions stipulated under Water (Prevention and Control of Pollution) Act 1974.

7. (b) Category No. _____ by land fill

The wastes which are either disposed of through contractor or which are sold through the contractor shall be disposed of/sold under intimation of this office. The firm shall ensure that the Contractor/s hold/s valid consent under Water (Prevention and Control of Pollution) Act, 1974 and authorisation under Environment (Protection) Act, 1986, i.e. under Rules notified on 28th July, 1989 and 27th November, 1989.

- (c) Category No. _____ by incineration through incinerator.

The firm shall meet the emission standards as prescribed below for the incineration plant :-

Particulate	...	150 mg/Nm ³ .
HCl	...	100 mg/Nm ³ .
Hf	...	2 mg/Nm ³ .
SO ₂	...	300 mg/Nm ³ .
NO _x	...	50 ppm.
Lead	...	10 mg/Nm ³ .
Mixture of As+Cd+Cr+Hg+Ni...	...	0.2 mg/Nm ³ .
TOC	...	20 mg/Nm ³ .
CO	...	100 ppm.

The firm shall make efforts to reduce emission by adopting—

- (i) Improved burning technology.
- (ii) Optimised technology for flue gas cleaning and shall create facilities for monitoring the gaseous emissions.

The ash generated in incinerator plant shall be disposed of through landfill at a designated site.