

BEFORE THE NATIONAL GREEN TRIBUNAL,  
WESTERN ZONE BENCH, PUNE

Original Application No. 107/2019 (WZ)

GOA FOUNDATION

APPLICANT

VERSUS

DEPARTMENT OF MINES AND GEOLOGY  
& ORS.

RESPONDENTS

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A Copy of the Consent to Operate order dated 19.09.2019, Corrigendum dated 20.09.2019 and Amendment dated 12.03.2020 of consent issued by Answering Board.

305-314

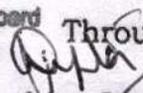
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315-316

(Goa State Pollution Control Board)  
Member Secretary

Goa State Pollution Control Board Through

  
Ruchira Gupta

Counsel for GSPCB

E-31, Basement,

Jangpura Extension

New Delhi-110001

Mobile No. 9810350333

e-mail: ruchiragupta2010@gmail.com

Place: New Delhi

Dated: 14/10/2020

BEFORE THE NATIONAL GREEN TRIBUNAL,  
WESTERN ZONE BENCH, PUNE

Original Application No. 107/2019 (WZ)

GOA FOUNDATION APPLICANT

VERSUS

DEPARTMENT OF MINES AND GEOLOGY  
& ORS. RESPONDENTS

AFFIDAVIT ON BEHALF OF RESPONDENT NO. 2, GSPCB IN  
RESPONSE TO THE REJOINDER DATED 31.08.2020,  
ADDITIONAL REJOINDER AFFIDAVIT DATED 03.09.2020 AND  
ADDITIONAL AFFIDAVIT DATED 09.09.2020

I, Dr. Shamila Monteiro, d/o Shri. Augusto Monteiro aged about 48 years, r/o H. No. 5, Uttam Darshan, opp. Sai Baba Temple, Kadamba Plateau, Chimbél, Tiswadi-Goa, holding the post of Member Secretary, Goa State Pollution Control Board, do hereby on solemn affirmation state as under:

1. That I am holding the post of Member Secretary in Goa State Pollution Control Board, the Respondent No. 2 and being well conversant with the facts of the present case and on the basis of the records maintained, am competent to depose by way of the present affidavit.
2. That the Answering Respondent Board has filed a Site Inspection Report dated 14.02.2020 in terms of Order dated 09.01.2020 passed in the matter, the contents whereof maybe treated as part of the present Affidavit and are not being repeated herein for the sake of brevity.
3. That the present Affidavit is being filed by the Answering Board in reply to the Rejoinder Affidavits filed by the Applicant

being Affidavit of the Applicant in Rejoinder dated 31.08.2020, Additional Rejoinder Affidavit dated 03.09.2020 and Additional Affidavit of the Applicant in Rejoinder dated 09.09.2020. The Answering Board is not filing para wise reply to Rejoinders and seeks liberty of this Hon'ble Tribunal to file a detail/further affidavit if so required during the pendency of the present proceedings.

4. That by way of the aforesaid Rejoinders and affidavits, the Applicant is interalia alleging as under:

- a) The various records produced in the proceeding including the report of the Goa State Pollution Control Board dated 21.01.2020 show serious contradiction and discrepancies in relation to the beneficiation activities proposed.
- b) The State Government in reference to ban imposed on mining by the Hon'ble Supreme Court from 15.03.2018, cannot grant permit for a beneficiation plant outside of a mining lease for mining operations, as beneficiation of ores is part and parcel of mining operations and can only be conducted on a valid lease.
- c) In 2012, plant II and IV were replaced with two brand new plants called IIA and IVA and there is no consent to establish order issued by GSPCB for these two plants in the record of GSPCB files. These two brand new plants were simply granted consent to operate by GSPCB without any consent to establish.
- d) GSPBC has not filed any affidavit affirming that the plants IIA and IVA were constructed before the EIA Notification 2006 came into operation nor MOEF&CC in its affidavit makes any comment on these plants.

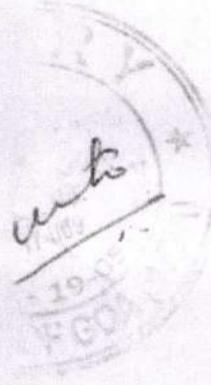
e) That Respondent No. 4 has blatantly lied on oath that the beneficiation plants were in operation since 1979 prior to EIA Notification 2006 and that Plant IIA and IVA are brand new plants erected in 2012.

5. That in the facts of the case, the beneficiation plants (I, II, IIIA, IV) belonging to the M/s SESA Goa Ltd (Now M/s Vedanta Ltd) were located within Codli mine in survey no.24/1,54 and 46 of Codli village, Goa. The beneficiation plant I [Export Oriented Unit (EOU)] and IIIA are located in survey no.54 of Codli village. The beneficiation plant II and IV are located in the survey no.24/1 of Codli village. As per the Consent to Operate order dated 05.10.2006 issued by the Answering Board to M/s Sesa Goa Ltd for the operation of iron ore Beneficiation plant located at survey no. 24, 54/1 & 46 , Codli, Kirlapale - Dhabal, Sanguem, Goa, the production limits were as below:

Sr.No.	Products	Qty
1	Iron ore fines and lumps (Plant I)	25lakh Tons/Annum
2	Iron ore fines and lumps (Plant II)	25lakh Tons/Annum
3	Iron ore fines and lumps Plant III A	25lakh Tons/Annum
4	Iron ore fines and lumps (Plant IV)	16lakh Tons/Annum

A copy of the renewed Consent to Operate order dated 05.10.2006 issued by the Answering Board is annexed herewith as **ANNEXURE R 2/1**.

6. That as stated above the total capacity of the Beneficiation plant II and IV was 41Lakhs Tons/Annum (4.1MMTPA) in the year 2006. The beneficiation process of plant II and IV involved feeding, crushing, washing, screening as per size, fines separation, thickener and tailing management. The tailings generated were disposed within the mining pit.



7. That Subsequently M/s SESA Goa Ltd obtained Environmental Clearance (EC) for expansion from MoEF & CC of **Plant III (same as plant IIIA)** from 1.2MMTPA to 5MMTPA in 2008 as per the EIA Notification 2006. The MoEF&CC issued EC to M/s SESA Goa Ltd vide Order dated 20.12.2008. Accordingly, the unit obtained Consent to Establish dated 21.03.2009 from Answering Board for expansion of Ore Beneficiation Plant no. III from 1.2 MTA to 5 MTA and subsequently obtained Consent to Operate dated 07.08.2020 for expansion of Beneficiation Plant IIIB at Codli Mine form 1.2 MTPA to 5 MTPA. The expansion was in respect of Beneficiation Plant located in survey no.24/1 Codli village.

A Copy of environmental clearance granted by MoEF&CC dated 29.12.2008 and Consent to Establish dated 21.03.2009, Consent to Operate order dated 07.08.2009 issued by Answering Board are annexed herewith as **ANNEXURE R2/2 colly.**

8. Thereafter M/s SESA Goa Ltd, in the year 2010, applied for the Consent to Establish of Dry Screening Plant IIIC within the survey number 24/1, Codli village (Adjacent to Plant IIIB). The Answering Board vide consent dated 07.07.2010 issued Consent to Establish the dry screening plant within the survey

number 24/1 Codli village for installation of dry screening plant for 4.2MTPA. Subsequently, the Consent to Operate was issued to Dry screening Plant IIIC vide order dated 18.03.2011 valid till 01.03.2013

A Copy of Consent to Establish order dated 07.07.2010 and Consent to Operate order dated 18.03.2011 issued by Answering Board is annexed herewith as **ANNEXURE R2/3 colly.**

9. That M/s Sesa Goa on 31.08.2010 submitted an application for renewal of the Consent to Operate for the benefications plant (Plant I, II, IIIB & IV). Thereafter, the Board, vide order dated 10.02.2011 granted Consent to Operate in respect of Iron Ore Beneficiation Plant (I, II, IIIB & IV) at Codli Mine, Survey no. 24, 24/1, 54/1, 46, Codli, Kirlapal Village for the following productions which was valid till 09.09.2012.

Sr.No.	Products	Qty
1	Iron ore fines and lumps (Plant I)	2.0Million T/Annum
2	Iron ore fines and lumps (Plant II)	2.0Million T/annum
3	Iron ore fines and lumps (Plant III B)	5.0Million T/annum
4	Iron ore fines and lumps (Plant IV)	1.6Million T/annum

A Copy of Consent dated 10.02.2011 issued by Answering Board is annexed herewith as **ANNEXURE R2/4.**

10. That the Answering Board officials conducted a site inspection on 21.05.2012 with regards to the complaint from one Mr. Ramesh Gawas regarding pollution of river Khandepar

and Opa due to mining activities. The Board officials had also inspected the mining lease of M/s Vedanta Ltd (Respondent no. 4) with regards to the said complaint. The complaint was regarding the river pollution and not regarding the operation of beneficiation plants. The inspection report as conducted stated that there are total 5 beneficiation plants installed within the mining boundary out of which there are two of 250 MTH capacity and two of 600 MTH capacities and one is dismantled. It was also further noted that the construction of two more plants each of 250 MTH is under progress and as soon as the installation of these plants is complete the existing two plants having 250 MTH capacities will be dismantled. The copy of the report dated 21.05.2012 is annexed as Annexure A with Additional Rejoinder dated 03.09.2020, filed by the Applicant.

11. It is submitted that the beneficiation Plant II and IV were shifted approx 500-600 meters distance within the same survey no. 24/1 Codli village in the year 2012. Subsequently all the mining operations were stopped in October 2012 due to the order of the Hon'ble Supreme Court passed in writ petition No.435/2012 filed by the Goa Foundation. In the year 2015, after the lifting of ban by Hon'ble Supreme Court, the Unit M/s Sesa Goa Ltd (M/s Vedanta Ltd) on 22/06/2015 applied for Consent to Operate in respect of their mining lease operations at Codli Mine and operations of Beneficiation plant. Based on the applications, inspections were conducted by the Answering Board and a combined Consent to Operate order including Consent for mining operations and beneficiation operations were issued to M/s Vedanta Ltd vide Consent order dated 01.09.2015. The same was valid upto 31.08.2017.

The consent order was issued for the following productions:

Sr.No.	Products	Qty
1	Iron Ore	3.155Million Tons/Annum
2	Beneficiation of Iron ore fines and lumps (Plant I)	3.155MT/Annum
3	Beneficiation of Iron ore fines and lumps (Plant IIA)	
4	Beneficiation of Iron ore fines and lumps (Plant IIIB)	
5.	Beneficiation of Iron ore fines and lumps (Plant IVA)	
6	Dry Screening Plant (3C)	

Thereafter, an amendment order to the aforesaid Consent to Operate was issued vide letter dated 09.12.2016 with the following limits:

Sr. No.	Products	Qty
1	Iron Ore	3.155Million Tons/Annum
2	Beneficiation of Iron ore fines and lumps (Plant I)	i. 3.155MT/Annum from TCno.70/1952,126/1953,69/1951 ii. 0.4MT/annum from TC no.14/1958 iii. E auctioned iron ore.
3	Beneficiation of Iron ore fines and lumps (Plant IIA)	
4	Beneficiation of Iron ore fines and lumps (Plant IIIB)	
5.	Beneficiation of Iron ore fines and	

	lumps (Plant IVA)	
6	Dry Screening Plant (IIIC)	

A Copy of Consent order dated 01.09.2015 and Amendment order dated 09.12.2016 issued by Answering Board are annexed herewith as **ANNEXURE R2/5 colly**.

12. It is submitted that the Beneficiation Plant II and IV were shifted approx 500-600meters distance within the Codli mine in the same survey no. 24/1 Codli village in 2012. The Beneficiation plant II and IV were renamed IIA and IVA respectively after shifting within the same survey number 24/1 of Codli village. As per the records, the production capacity remained the same of both the plants and had not expanded the consented capacity issued by the Answering board vide consent dated 10.02.2011. The quantity of the iron ore beneficiations as per the consent to operate dated 19.08.2015 and amendment dated 09.12.2016 was 3.555 MT/Annum which was below the actual capacity of plant which is 14.8 MMTPA. A copy of Google image of the location of the Beneficiation Plants in the year 2007 and 2019 are annexed herewith as **ANNEXURE R2/6**.

13. That in reference to the contention that the plant II and IV were replaced with two brand new plants called IIA and IVA and that there is no Consent to Establish order issued by Answering Board for these two plants and that these were constructed after the EIA Notification 2006, it is submitted that the Beneficiation Plant II and IV were shifted approx 500-600 meters distance

within the same survey no.24/1 Codli village in the year 2012 by M/s. Vedanta Limited as previous installed area was utilised for the mining operations. Therefore, the Plants IIA and IVA are the same plants II and IV for which Consent to Establish was issued by the Answering Board prior to 2006. The Beneficiation plant II and IV were renamed IIA and IVA respectively after shifting within the same survey number 24/1 of Codli village. As per the records, the production capacity remained the same of both the plants and had not expanded the consented capacity issued by the Answering Board vide consent dated 10.02.2011. Further it is submitted that the plants IIA and IVA (earlier II and IV) were constructed much prior to the enforcement of the EIA Notification 2006. As per the records available the beneficiation plant II and IV were established in 1979 and as per the regularization of old cases the unit had applied for the consent to operate on 11.01.1996. The Consent to expansion was issued by the Answering board for the plant II and IV for magnetic concentrator vide order dated 11.12.1997. Subsequently the first combined renewal of consent to operate for the Beneficiation Plant II and IV and mining leases was issued on 17.05.1999.

A copy of the Application dated 11.01.1996 is annexed herewith as **ANNEXURE R2/7**.

A copy of the Consent to expansion dated 11.12.1997 and consent to operate dated 17.05.1999 are annexed herewith as **ANNEXURE R2/8 colly**.

14. That M/s Vedanta Ltd, Respondent No. 4 herein, on 20.06.2017 submitted an application for the renewal of the consent for the operation of mine and operation of Beneficiation plant I, IIA, IIIB, IVA and IIIC. The Answering Board granted

common consent dated 01.09.2017 for same quantity which was granted in 2015 to Respondent No. 4 as under:

Sr. No.	Products	Qty
1	Iron Ore	3.155 Million Tons/Annum
2	Beneficiation of Iron ore fines and lumps (Plant I)	i. 3.155MT/Annum from TCno.70/1952,126/1953, 69/1951
3	Beneficiation of Iron ore fines and lumps (Plant IIA)	ii. 0.4MT/annum from TC no.14/1958
4	Beneficiation of Iron ore fines and lumps (Plant IIIB)	iii. E auctioned iron ore.
5.	Beneficiation of Iron ore fines and lumps (Plant IVA)	
6	Dry Screening Plant (IIIC)	

A Copy of consent dated 01.09.2017 issued by Answering Board is annexed herewith as **ANNEXURE R2/9**.

15. It is submitted that the Answering Board while issuing renewal of Consent to Operate dated 19.09.2019 to Respondent No. 4 for beneficiation process, imposed a condition no.6 (vi) that the consent is granted without any prejudice to any of the permission required under any law, by law and regulations in force. Further, the Consent granted by the Answering Board was initially valid till 10.09.2024, subsequently which was reduced to 10.09.2021 vide corrigendum dated 20.09.2019, i.e. valid only for 2 years. The Answering Board has also issued an Amendment dated 12.03.2020. The Respondent No. 4 had applied for consent capacity of 2.1 MMTPA considering the fact

that the said plant can be utilized by self and other firms for processing of e-auctioned ore auctioned by the Government. Also, the condition no. 6 (xvii) was imposed by the Answering Board "if the beneficiation plant is utilized by other ore handlers, then it should obtain permission from Directorate of Mines and Geology (DMG).

A copy of renewed Consent to Operate order dated 19.09.2019, Corrigendum order dated 20.09.2019 and Amendment dated 12.03.2020 issued by the Answering Board is annexed with as **Annexure R 2/10 colly.**

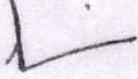
16. That the production or beneficiation capacity granted by the Answering Board to Respondent No. 4 was 2.1 MTPA in 2019 which was only for the processing of government e-auctioned ore. The Respondent no. 4 had obtained permission from the Department of Mines and Geology vide order dated 10.09.2019 for operation of beneficiation plant in survey no. 24/1 village Codli, Dharbandora for two years for processing of government e-auctioned ore. The capacity granted by the Answering Board on 19.09.2019 vide Consent to Operate order is below the capacity of the Plant II and IV as issued in the year 2006. As per the previous Consent to Operate order dated 05.10.2006, the capacity of the Plant II and IV was 41 Lakhs Tons/Annum (4.1 MTPA) and was located within the same survey no. 24/1 of Codi village.

A copy of the permission obtained by the Respondent no. 4 from the Department of Mines & Geology dated 10.09.2019 is annexed herewith as **ANNEXURE R2/11.**

17. It is submitted that as per the judgment dated 07.02.2018 in Goa Foundation v/s Sesa Sterlite Ltd. passed by the Hon'ble Supreme Court, all the mining operations were stopped in March 2018. Thereafter, Respondent No. 4 submitted application for obtaining Consent to Operate the Beneficiation Plant on 11.09.2019. The Respondent No. 4 had submitted application for benefications of Government E-auctioned iron ore qty of 2.1MT. The Respondent No. 4 obtained permission from the Department of Mines and Geology vide order dated 10.09.2019 for operation of beneficiation plant in survey no.24/1village Codli, Dharbandora for two years. Accordingly, the Answering Board had granted renewal of consent to operate dated 19.09.2019 for the beneficiation of e-auctioned iron ore to Respondent No. 4. Subsequently corrigendum dated 20.9.2019 and amendment dated 12.03.2020 has been issued to the unit.

18. That in the light of submissions made hereinabove, it is submitted that the contention of the Applicant made in the Rejoinders that the Plants IIA and IVA are brand new plants and that they were not in existence prior to EIA notification 2006 is false and denied.

19. That the annexures to the present affidavit are true copies of their respective originals.

  
DEPONENT

Member Secretary  
Goa State Pollution Control Board

VERIFICATON:

Verified in Panaji this 14<sup>th</sup> day of October 2020 that the contents of the above affidavit are true and correct to the best of

my knowledge and belief and as per the records maintained by GSPCB. No part of it is false and nothing material has been concealed therefrom.

*[Signature]*

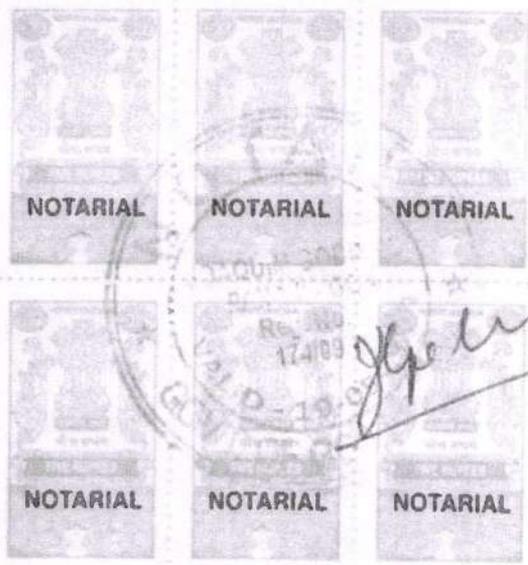
DEPONENT

Member Secretary  
Goa State Pollution Control Board

*[Handwritten initials]*

PLACE: PANAJI

DATED: 14.10.2020



*[Signature]*  
Dr. Shanula Monteiro

WHO IS IDENTIFIED BEFORE ME

BY ADV. ....

WHOM I KNOW: *Personally known*

SERIAL No. *8579* DATED: *14/10/2020*

VALID UPTO 19-05-2024

JOAQUIM GODINHO-NOTARY-PANAJI-GOA

*[Handwritten signature]*

*[Handwritten signature]*

*14.10.2020*

JOAQUIM GODINHO

B. Com. LL B

Advocate High Court  
& Notary

Navelkar Trade Centre  
C/S-3, 2nd Floor, M.G. Road,  
Panjim-Goa. Ph.: 2422113

Annexure R2/1  
GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ 238

Phone Nos. : 91-832 2438567, 2438528  
2438563, 2438550  
Fax No. : 832-2438528



Dempo Towers  
EDC Plaza, Pa  
Panaji 403 001

No. 5/791/97-PCB/ 2713

Date:- 5/10/06

**RENEWAL OF CONSENT TO OPERATE UNDER SECTION 25  
OF THE WATER (PREVENTION & CONTROL OF POLLUTION)  
ACT, 1974, AS AMMENDED.**

As per the provisions of the Water (Prevention & Control of Pollution) Act, 1974, and the Rules and the Orders made thereunder, "Renewal of Consent to Operate" is hereby granted to:

**M/s SESA GOA LTD.  
(Beneficiation Plant at Codli)**

Hereinafter referred as "The Industry"  
To operate their Iron Ore Beneficiation Plant located at  
Survey No. 24, 54/1, 46,  
Kirlapale, Dabal,  
Sanguem-Goa

This renewed Consent to Operate is subjected to the following terms and conditions:

1. This renewed Consent to Operate is issued in supersession of the earlier renewal of Consent to Operate issued vide letter No. 5/791/97-PCB/1887 dated 07/10/04 is valid upto 09/09/2008.
2. This renewed Consent is valid for the manufacture/production of:

Sr. No.	Product	Maximum Quantity
1.	Iron ore fines & lumps (Plant I)	25 Lakh Tons/ Annum
2.	Iron ore fines & lumps (Plant II)	25 Lakh Tons/ Annum
3.	Iron ore fines & lumps (Plant III)	25 Lakh Tons/ Annum
4.	Iron ore fines & lumps (Plant IV)	16 Lakh Tons/ Annum

5/10/06

TRUE COPY

- 3. (i) The daily quantity of industrial effluent from the factory shall not exceed 6900 K.L.D.
- (ii) The daily quantity of domestic effluent from the factory shall not exceed NIL
- (iii) **Industrial Effluent Treatment and Disposal:**  
The trade effluent generated in form of slurry at the Hydro Cyclones shall be released only in to the tailing pond duly approved by the Indian Bureau of Mines as a part of Mining plan.
- (iv) The tailing pond shall be so maintained that it will not overflow and if the applicant proposes to change the location of the tailing pond the same shall be done after obtaining approval of the Indian Bureau of Mines and the Board shall be informed of the change
- (v) The water percolated from the tailing pond shall be analysed at least, once a month for the following parameters and results shall be submitted to the Board Office regularly.

pH	Between	5.5 & 9.0
Suspended Solids	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg / l
Manganese	Not to exceed	2 mg / l
Oil & Grease	Not to exceed	10mg/l

*Other parameters should meet the standards specified in Schedule 1 (Rule 3) of the Environment (Protection) Act 1986 for the relevant Industry*

- (vi) The industry shall at his own cost get the effluent samples collected both before and after treatment and analyse, every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board
- (vii) **Domestic Effluent treatment and Disposal:- N.A.**  
The domestic waste water shall be treated in properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the factory premises.

TRUE COPY

4. The production process, quantity and quality of the effluent or mode of disposal of the treated effluent shall not be altered without the permission of the Board.
5. Adequate facilities shall be provided to the Board staff for collection of the effluent samples.
6. An application in prescribed form along with the prescribed fees for renewal of Consent, shall be submitted before the expiry of validity of this renewed Consent. An application for renewal of Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.
7. Any up-set condition in any plant of the factory, which is likely to result in increased effluent discharge and /or violation of the standards stipulated above shall be immediately reported to the Board office.
8. Reliable flow meter shall be installed to maintain record of water consumption per day. The records so maintained shall be made available to the Board officials whenever required.
9. A good house-keeping shall be maintained within the factory premises. All pipes, valves and drains shall be maintained in leakproof condition. Floor washings shall be maintained to the effluent collection system only and shall not be allowed to find way in open areas.
10. The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land and the action initiated to curb the resulting pollution.
11. All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:
  - i) Landfill, incase of inert materials, care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.

TRUE COPY

- ii) Controlled incineration wherever possible in case of combustible organic matter.
  - iii) Composting in case of bio degradable material
  - iv) As per the Authorization issued by this Board in case of Hazardous waste.
12. This Consent is granted without any prejudice to any other permission(s) required under any law, by-laws regulations in force.
  13. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977, as ammended (to be referred as Cess Act ) and the Rules there under. The applicant shall submit Water Consumption statement every month so as to reach this Office on or before the 5<sup>th</sup> of the succeeding month in the prescribed form and pay the Cess as specified under Section 3 of the Cess Act.
  14. **The Industry should submit an Environmental Statēment in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.**

*[Handwritten Signature]*

**Member Secretary  
For GOA STATE POLLUTION CONTROL BOARD**

To,  
M/s Sesa Goa Ltd.  
Beneficiation Plant at Codli,  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji-Goa

Copy to:- Concerned file.  
Guard file.

**TRUE COPY**

Annexure 2/2

242

J-11015/1133/2007- IA. II (M)  
Government of India  
Ministry of Environment & Forests



Telefax: 011-24367257  
e-mail: w.bharat@nic.in  
Paryavaran Bhavan, C.G.O. Complex,  
Lodi Road, New Delhi-110003.  
Dated: December 29, 2008

To  
M/s Sesa Goa Limited.  
Sesa Gho 20 EDC Complex,  
Patta, Panaji,  
Goa - 403 001.

For necessary action.  
27/1/2009  
Shri Joglekar DE.

**Sub: Expansion of Codli Iron Ore Mines (Total ML area 299.55 ha) from 4.0 to 7.0 MTPA and Expansion of Ore Beneficiation Plant No.3 from 1.20 to 5.0 MTPA capacity, at village Codli, in Sanguem Taluk, in South Goa Distt., in Goa - reg. Environmental Clearance.**

CHA  
JAN  
1296-27/1/09

Sir,

The undersigned is directed to refer to your letter dated 29.09.2008, on the above mentioned subject. The Ministry of Environment and Forests has examined the application.

2. It has been noted that the proposals are for : (a) expansion of Iron Ore mining from 4.0 to 7.0 MTPA in the three contiguous leases viz (i) Maindolicho Sodo Iro Ore Mine (ML area 99.79 ha, T.C.No. 69/51); (ii) Gadia Sodo Iron Ore Mine (ML area 100.0 ha, T.C. No. 126/53); and (iii) Gurnel Iron Ore Mine (ML area 99.76 ha, T.C. No. 70/52); and (b) expansion of ore Beneficiation Plant No.3 from 1.20 to 5.0 MTPA. The Mining plan has been approved separately for all the above three leases, whereas, a single mining scheme has been approved. The three leases are proposed to be amalgamated and for all practical purposes, the leases are worked as a single lease with common infrastructure. No horizontal expansion is proposed to be carried out. The expansion of mining will be only vertically. The total lease area is 299.55 ha, which is a private land. Out of 299.55 ha, only 141.7253 ha will be under mining during the plan period. An area of 44.6569 ha will be kept for waste dump; 14.7068 ha for mineral storage; 10.82 ha will be used for infrastructure; 11.9198 ha for roads; Tailing Pond 60.4860 ha; Beneficiation plant area 8.4677 ha; Others 6.4675 ha. The lease area has undulating terrain having highest altitude of 107 m above MSL. The total mineable reserve of the ores are 35.0 MT. Life of the mine at proposed rate of production will be 10 years. Method of mining will be open cast mechanised. Karmone river flows at a distance of about 700 m from the lease boundary. Reserve forests are located near the lease. Bhagawan Mahaveer wild life sanctuary is located at a distance of 3.0 km from the lease. Bondla wildlife sanctuary is located at a distance of 8.0 Km from the lease. Ultimate depth of mining will be at -45 m above MSL. Ground water table is at 28 m above MSL. Mining will intersect water table in future. Hydro geological study has been conducted and the study indicates the following: (i) the radius of influence due to mine pit dewatering will be 432 m from the centre of the mine pit; (ii) the stage of ground water development will be 26.98 %, which is well within the safe limit as per CGWB norms; (iii) the quality of ground water sample analysis indicates no contamination due to mining activity; and (iv) No impact is noticed on the surface water body running close to the lease. Peak water requirement at the mine will be 44740 KLD (for mine and beneficiation plant), which will be met from harvested rain water and mine pit water sources. Solid waste of around 65.0 MT will be generated. These will be used for back-filling of the worked out pits.

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No relocation and rehabilitation of population will be involved. Mining plan for all the three leases has been approved by Indian Bureau of Mines on 19.05.2008. Public hearing was held on 13.08.2008. Cost of the project will be Rs 83.0 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you, as at Para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

A. Specific conditions

- i) Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) no. 460 of 2004, as may be applicable to this project.
- ii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Competent Authority.
- iii) The three leases viz. (i) Maindvolicho Sodo Iron Ore Mine (ML area 99.79 ha, T.C No. 69/51), (ii) Gadla Sodo Iron Ore Mine (ML area 100.0 ha, T.C. No. 126/53); and (iii) Gurnel Iron Ore Mine (ML area 99.76 ha, T.C. No. 70/52) shall be amalgamated and no horizontal expansion of the mineral bearing areas other than the areas ear marked for 4.0 MTPA productions shall be carried out.
- iv) No two pits shall be simultaneously worked i.e. before the first pit is exhausted and reclamation work completed, no mineral bearing area shall be worked.
- v) After exhausting the first mine pit and before starting mining operations in the next pit, reclamation and plantation works in the exhausted pit shall be completed so as to ensure that reclamation, forest cover and vegetation are visible during the first year of mining operations in the next pit. This process will follow till the last pit is exhausted. Adequate rehabilitation of mined pit shall be completed before any new ore bearing area is worked for expansion.
- vi) Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
- v) Primary survey of flora and fauna shall be carried out and data shall be submitted to the Ministry within six months.
- vi) Conservation plan for wildlife shall be prepared in consultation with the Chief Wild Life Warden for implementation within six months and before start of expansion activity. The plan shall consist of in-built monitoring and evaluation mechanism. Necessary fund for implementation of the same shall be separately allocated and shall not be diverted for any other activity.
- vii) Zero waste mining concept shall be implemented either by putting up pelletisation plant or dispose off 100% low grade ores/fines to prospective buyers.

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- viii) Hydro-geological study of the area shall be reviewed annually. In case adverse effect on ground water quality and quantity is observed mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented. Specific hydro-geological shall be conducted at the end of mining plan period of the 5<sup>th</sup> year of mining before proceeding to undertake mining in the 6<sup>th</sup> year. The report shall be submitted to the Regional Office of the Ministry.
- ix) Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Ministry.
- x) Shelter belt i.e Wind Break of 30 m width and consisting of at least 5 tiers around lease facing the school / agricultural fields (if any in the vicinity) shall be raised.
- xi) A 50 m barrier of no mining zone all along both the side(s) facing the nallah (if any) passing through the lease area shall be demarcated and thick vegetation of native species raised. Status of implementation shall be submitted to the Regional Office of the Ministry on half yearly basis.
- xii) A 50 m barrier of no mining zone all along the side facing the the Karmone River shall be demarcated and thick vegetation of native species raised. Status of implementation shall be submitted to the Regional Office of the Ministry on half yearly basis.
- xiii) Need based assessment for the near by villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects/tools such as development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- xiv) Land-use pattern of the nearby villages shall be studied and action plan for abatement and compensation for damage to agricultural land/ common property land (if any) in the nearby villages, due to mining activity shall be submitted to the Regional office of the Ministry within six months. Annual status of implementation of the plan and expenditure thereon shall be reported to the Regional Office of the Ministry from time to time.
- xv) Maintenance of village roads through which transportation of ores are undertaken shall be carried out by the company regularly at its own expenses. The roads shall be black topped.
- xvi) Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Regional Office of the Ministry within six months and thereafter every year from the next consequent year.
- xvii) Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.

- xviii) Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs (if any) flowing through the ML area and silts arrested. De-silting at regular intervals shall be carried out.

Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and for waste dump and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de-silted at regular intervals.

- xix) Ground water in the core zone shall be regularly monitored for contamination and depletion due to mining activity and records maintained. The monitoring data shall be submitted to the regional office of the Ministry regularly. Further, monitoring points shall be located between the mine and drainage in the direction of flow of ground water shall be set up and records maintained.
- xx) Cultivable waste land shall be identified and fodder farming or other suitable productive use of waste land shall be taken up in phased manner. Status of implementation shall be submitted to the Regional office of the Ministry.
- xxi) Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Regional Office of the Ministry.
- xxii) Monitoring of soil samples for assessment of transformation to acidic state or contamination due to mining activity (as applicable) shall be regularly conducted and records maintained.
- xxiii) Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore / dust takes place. Transportation shall be done only during day time.
- xxiv) Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required.
- xxv) Top soil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.

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- xxvi) Over burden (OB) shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30 m, each stage shall preferably be of 10 m and overall slope of the dump shall not exceed 28°. The OB dump shall be backfilled. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off.
- Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis.
- xxvii) Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
- xxviii) Adequate plantation shall be raised in the ML area, haul roads, OB dump sites etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. The density of the trees shall not be less than 2500 plants per ha. The company shall involve local people with the help of self help group for plantation programme. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Regional Office of the Ministry every year.
- xxix) Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year - pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected shall be regularly sent to MoEF, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- xxx) Status of tailing pond waste disposal and its management (including leachate) shall be regularly submitted to the Regional Office of the Ministry.
- xxxi) Waste water from the Beneficiation Plant shall be regularly tested for all relevant parameters (especially for heavy metals) and records maintained. The results shall be regularly submitted to the Regional Office of the Ministry.
- xxxii) Adequate air monitoring stations shall be installed in areas of human habitations near the mine and the Beneficiation Plant and the results of ambient air quality shall be maintained and regularly submitted to the Regional Office of the Ministry.
- xxxiii) Electrical conductivity for tailing concentrate shall be regularly tested and the results submitted regularly to the Regional Office of the Ministry.
- xxxiv) The waste water from the mine and the Beneficiation plant shall be treated to conform to the prescribe standards before discharging in to the natural stream. The discharged water from the Tailing Dam (if any) shall be regularly monitored and report submitted to the Ministry of Environment & Forests, Central Pollution Control Board and the State Pollution Control Board.
- xxxv) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Transportation of ore shall be done only during day time. The vehicles transporting

ores shall be covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation. No overloading of ores for transportation shall be committed. The trucks transporting ore shall not pass through wild life sanctuary.

xxxvi) Prior permission from the Competent Authority shall be obtained for extraction of ground water, if any.

xxxvii) Action plan with respect to suggestions/improvements and recommendations made during public consultation/hearing shall be submitted to the Ministry and the State Govt within six months.

xxxviii) A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.

#### B. General conditions

(i) No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.

(ii) No change in the calendar plan including excavation, quantum of mineral and waste shall be made.

(iii) Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.

(iv) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

(v) Data on ambient air quality (RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.

(vi) Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs.

(vii) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.

(viii) Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.

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- (viii) Provision shall be made for the housing the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (ix) A separate Environmental Management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (x) The project authorities shall inform to the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xi) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.
- (xii) The project authorities shall inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiii) The Regional Office of the Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xiv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- (xv) State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office / Tehsildar's Office for 30 days.
- (xvi) The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same shall be forwarded to the Regional Office of the Ministry located in Bangalore.

5. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

6. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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7. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

8. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Yours faithfully,

(W. Bharat Singh,  
Deputy Director

Copy to:

1. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Goa, Panaji.
3. Secretary, Department of Mines and Geology, Government of Goa, Panaji.
4. Secretary, Department of Forests, Government of Goa, Panaji.
5. Chief Wildlife Warden, Government of Goa, Panaji.
6. Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4<sup>th</sup> Floor, E&F, Wings 17<sup>th</sup> Main Road, 1 Block, Koramangala, Bangalore-560 034.
7. Chairman, Central Pollution Control Board, Parvesh Bhawan, CBD-Cum-Office Complex, East Anand Nagar, New Delhi-110 032.
8. Chairman, Goa State Pollution Control Board, Dempo Tower, EDC Plaza, 1<sup>st</sup> Floor, Panaji, Goa - 403 001.
9. Member Secretary, Central Ground Water Authority, A2, W-3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
10. Controller General, Indian Bureau of Mines, Indira Bhawan, Civil Lines, Nagpur-440 001.
11. District Collector, South Goa, Govt. of Goa.
12. E.I. Division, Ministry of Environment & Forests, Parvashan Bhawan, New Delhi.
13. Monitoring File.
14. Guard File.
15. Record File.

28/12/08  
(W. Bharat Singh)  
Deputy Director

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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ

250

Phone Nos. : 91-832 2438567, 2438528  
2438563, 2438550  
Fax No. : 832-2438528



Dempo Towers, 1st Floor,  
EDC Plaza, Patto,  
Panaji 403 001, Goa

## CONSENT TO ESTABLISH (NOC)

Order No. 5/791/97-PCB/7816

21/03/09

Consent to Establish an industry / mine / beneficiation plant / screening plant / loading facility / trade / activity under section 25(1) of the Water (Prevention and Control of Pollution) Act, 1974 and section 21 (1) of the Air (Prevention and Control of Pollution) Act, 1981

1. Consent to Establish under section 25(1)(a) of the Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6 of 1974) and under section 21 (1) of the Air (Prevention and Control of Pollution) Act, 1981 (as amended upto 1987 (Central Act 14 of 1981) and the rules and orders made there under is hereby granted to:

**M/s Sesa Goa Ltd.**

(expansion of the Codli mine and ore beneficiation plant)

hereinafter referred as 'the applicant' authorizing him to establish a unit / trade / activity at the below mentioned sites:

Maindvolicho Sodo - T.C. no. 69/51 ( Survey nos. Parts of 24/18, 50, 51, 47 to 49, 46, 54 and Road, Gurmel - T.C. no. 78 (survey nos. Parts of 24/1, 26, 29, 30, 54, 96) Gadia Sodo - no. 126/53, (survey nos. Parts of 15, 24/1, 26, 97, 21, 22, 23/1, 23 and 25) Village Codli, Sanguem Taluka.

2. This Consent to Establish is valid for the manufacture / production / extraction / installation / activity as mentioned below:

Sr.No.	Description	Quantity/month
1.	Expansion of Codli mine from	4 to 7 million tons
2.	Expansion of ore beneficiation plant - 3 from	1.2 to 5 million tons

3. The unit should set up air pollution control system/s, effluent sewage treatment system/s, so as to meet the standards prescribed in Schedule 1 (Rule 3) of the Environment (Protection) Rules, 1986.

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21/3/09

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the relevant industry as well as for other parameters should meet the standards prescribed under the General standards of the said Rules

4. The unit should obtain all permissions approvals as required under the prevalent Rules Acts in force
5. This Consent to Establish for the beneficiation plant is valid subject to the condition that approval from the High Powered Coordination Committee is obtained.
6. The unit should obtain permission from the Forest Department / Wild Life Board wherever applicable.
7. This Consent to Establish is valid upto commissioning of the above or three years which ever is earlier.
8. The applicant shall apply for Consents to Operate of the Board required under section 25(1) (b&c) of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the (Prevention and Control of Pollution) Act, 1981 in the prescribed application form, 45 days before commissioning of the plant
9. The applicant shall comply with all the conditions and instructions provided in the GENERAL CONDITIONS annexed herewith.

  
Member Secretary

For GOA STATE POLLUTION CONTROL BOARD

To,  
M/s Sesa Goa Ltd.  
(Codli mines)  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji Goa.

c.c. to:

1. Concerned file    2. Guard file

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## GENERAL CONDITION FOR CONSENT TO ESTABLISH 252

1. Trees shall be planted and maintained around the plant in an area atleast 4 times the built area of the industry. Green belt development shall be started alongwith the construction activity.
2. The domestic waste water shall be treated in a properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the factory premises.
3. The applicant shall not change or alter the quantity, the rates of discharge, temperature and the mode of disposal of the effluent without previous written permission of the Board.
4. The applicant shall provide facilities for collection of samples to the Board staff.
5. The industry shall discharge the treated effluents preferably on land for irrigation/gardening/lawn within their own premises or re-use after suitable treatment.
6. Stack height for (a) Diesel generator set (s) shall be as follows:

(a) Diesel Generator set(s) : The minimum height of the stack to be provided with each generator shall be as per the formula  $H = h + \sqrt[3]{KVA}$  where  $H$  = total height of the stack in metres,  $h$  = height of the building in metres where the generator is installed and  $KVA$  = total generator capacity of the set in KVA

The generator shall be installed in a closed area with a silencer and suitable noise absorption system so as to comply with the ambient noise level standards as mentioned below.

The ambient noise level shall not exceed 75 dB(A) at a distance of 5 metres from the source.

7. The applicant shall provide ports in the chimney/ stack and facilities such as ladder, platform etc. as per the directions of Pollution Control Board for monitoring the air emissions and the same shall be open for the inspection and use by the Board's staff. The chimney /stack attached to various sources of emissions shall be designated by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification.
8. Floor washings shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm water drains or open areas. The applicant shall maintain good housekeeping both within the factory and in the premises. All pipes, valves, sewers and drains shall be leak proof.
9. All solid waste arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:
  - i) Land fill in case of inert material;
  - ii) Controlled incineration wherever possible in case of organic combustible material;
  - iii) Vermiculture composting in case of bio-degradable, chemically active/hazardous solid waste; care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or be carried away with storm run-off.

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10. The industry shall implement the following Rules and Regulations notified by the Ministry of Environment and Forests, Govt. of India

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a) Hazardous Wastes (Management and Handling) Rules, 1989;

b) Manufacture, Storage and import of Hazardous Chemicals Rules, 1989;

c) Rules for the Manufacture, Use, Import and Storage of Hazardous Micro-organism/Genetically Engineered Organisms or Cell, 1989

11. There shall not be any perceptible odour outside the industrial premises.

12. All the Rules and Regulations notified by the Ministry of Environment and Forests, Govt. of India in respect of noise pollution control measures shall be followed to avoid nuisance to public.

13. The industry shall follow the Rules and Regulations notified by the Ministry of Law and Justice, Govt. of India regarding the Public Liability Insurance Act, 1991

14. The Industry shall report progress on implementation of the project to the Goa state Pollution control Board regularly every three months

15. The applicant shall obtain consent for trial production before the industry goes into trial production

16. The applicant shall obtain consents for operation regularly from Goa State Pollution Control Board as required under section 25/26 of the Water (Prevention and control of pollution) Act 1974 and under section 21/22 of the Air (Prevention and Control of Pollution) Act 1981 for operation of the industry before starting commercial production.

17. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves its right and powers under section 27(2) of the water (Prevention and Control of Pollution) Act 1974 and under section 21(4) of the Air (Prevention and Control of Pollution) Act, 1981 to review any or all the conditions imposed hereby

18. Any change in the details made after the submission of the application/after obtaining the Consent to Establish shall be brought to the notice of the Board immediately

19. This consent to Establish is granted without any prejudice to any other permission(s) required under any laws, bye-laws and regulations in force.

20. The validity of this Consent for Establishment is for 3 years from the date of issue of this Order.

Member Secretary

For Goa State Pollution Control Board

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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ

254

Phone Nos. : 91-832 2438567, 2438528  
2438563, 2438550  
Fax No. : 832-2438528



Dempo Towers, 1st Floor,  
EDC Plaza, Patto,  
Panaji 403 001, Goa.

No. 5/791/97-PCB/3209

Date: 7 / 8 / 09

CONSENT ORDER NO / WATER/ 2234 / 2009

**CONSENT TO OPERATE UNDER SECTION 25 OF THE WATER  
(PREVENTION & CONTROL OF POLLUTION) ACT, 1974, AS  
AMMENDED.**

As per the provisions of the Water (Prevention & Control of Pollution) Act, 1974, and the Rules and the Orders made thereunder, 'Consent to Operate' is hereby granted to:

**M/s SESA GOA LTD.  
(Beneficiation Plant 3B at Codli Mine)  
(Expansion from 1.2 MTPA to 5 MTPA)**

Hereinafter referred as "The Industry"  
To operate their Iron Ore Beneficiation Plant located at  
Survey No. 24/1,  
Codli mine, Kirlapale, Dabal,  
Sanguem-Goa

This Consent to Operate is subjected to the following terms and conditions:

1. This Consent to Operate is valid upto 09/09/2010.
2. This Consent is valid for the manufacture/production of:

Sr. No.	Product	Maximum Quantity
1.	Iron ore fines & lumps	5 million tons/ annum

3. (i) The daily quantity of trade effluent from the plant shall not exceed 6000 K.L.D.  
(ii) The daily quantity of domestic effluent from the plant shall not exceed NIL

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7/8/09

*[Handwritten signature]*  
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(iii) **Trade Effluent Treatment and Disposal:**

The trade effluent generated in form of slurry at the Hydro Cyclones shall be released only in to the tailing pond duly approved by the Indian Bureau of Mines as a part of Mining plan.

(iv) The tailing pond shall be so maintained that it will not overflow and if the applicant proposes to change the location of the tailing pond the same shall be done after obtaining approval of the Indian Bureau of Mines and the Board shall be informed of the change

(v) The water percolated from the tailing pond shall be analysed at least, once a month for the following parameters and results shall be submitted to the Board Office regularly.

pH	Between	5.5 & 9.0
Suspended Solids	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg / l
Manganese	Not to exceed	2 mg / l
Oil & Grease	Not to exceed	10mg/l

*Other parameters should meet the standards specified in Schedule 1 (Rule 3) of the Environment (Protection) Act 1986 for the relevant Industry*

(vi) The industry shall at his own cost get the effluent samples collected both before and after treatment and analyse, every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board.

(vii) **Domestic Effluent treatment and Disposal:- N.A.**

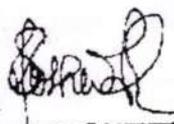
The domestic waste water shall be treated in properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the factory premises.

4. The production process, quantity and quality of the effluent or mode of disposal of the treated effluent shall not be altered without the permission of the Board.
5. Adequate facilities shall be provided to the Board staff for collection of the trade effluent samples.
6. An application in prescribed form along with the prescribed fees for renewal of Consent, shall be submitted before the expiry of validity of this renewed Consent. An application for renewal of Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.

Member Secretary  
Goa State Pollution Control Board

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- 256
7. A good house-keeping shall be maintained within the factory premises. All pipes, valves and drains shall be maintained in leakproof condition. Floor washings shall be maintained to the effluent collection system only and shall not be allowed to find way in open areas.
  8. The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land and the action initiated to curb the resulting pollution.
  9. All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:
    - i) Landfill, in case of inert materials, care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
    - ii) Controlled incineration wherever possible in case of combustible organic matter.
    - iii) Composting in case of bio degradable material
    - iv) As per the Authorization issued by this Board in case of Hazardous waste.
  10. This Consent is granted without any prejudice to any other permission(s) required under any law, by-laws regulations in force.
  11. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977, as amended (to be referred as Cess Act) and the Rules there under. The applicant shall submit Water Consumption statement every month so as to reach this Office on or before the 5<sup>th</sup> of the succeeding month in the prescribed form and pay the Cess as specified under Section 3 of the Cess Act.
  12. The Industry should submit an Environmental Statement in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.

  
Member Secretary  
For GOA STATE POLLUTION CONTROL BOARD

To,  
M/s Sesa Goa Ltd.  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji-Goa

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1 Concerned File  
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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ

Phone Nos. 91-832 2438567, 2438528  
2438563, 2438550  
Fax No. : 832-2438528  
No. 6/ 185 /97-PCB/ 340



Dempo Towers, 1st Flr.  
EDC Plaza, Patto  
Panaji 403 001, Goa.

Date:- 7 / 8 /09

**CONSENT ORDER NO: AIR/ 1740 /2009**

**CONSENT TO OPERATE UNDER SECTION 21 OF THE AIR  
(PREVENTION & CONTROL OF POLLUTION) ACT, 1981 AS AMMENDED**

As per the provisions of the Air (Prevention & Control of Pollution) Act, 1981, and the Rules and the Orders made there under for "Consent to Operate" is hereby granted to

**M/s SESA GOA LTD.  
(Beneficiation Plant 3B at Codli Mine)  
(Expansion from 1.2 MTPA to 5 MTPA)**

Hereinafter referred as "The Industry"  
To operate their Beneficiation Plant 3B located at  
Survey No. 24/1,  
Codli mine, Kirlapale, Dabal,  
Sanguem-Goa

This Consent to operate their Beneficiation Plant 3B with two D.G. Sets subject to the following terms and Conditions: -

1. This Consent to operate is valid upto 09/09/2010.
2. This Consent is valid for the manufacture/production of:

Sr No	Product	Maximum Quantity
1.	Iron ore fines & lumps	5 million tons/ annum

2. The applicant shall maintain and operate air pollution control system and let out the emission through a stack of 5 meters above the ground for D.G. Set so as to achieve the level to the following standards:

Sr. No.	Name of Equipments / Installation	No of Installation	Capacity	SO2 Kg/Hr	Particulate Matter mg/Nm3
1.	D.G. Set	2	1000 KVA	4.5	75

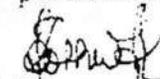
3. The applicant shall observe the following standards for D.G. Sets  $\geq$  1000 KVA

Sr. No.	Parameters	Limits
1.	Nox (as NO <sub>2</sub> )	710 ppmv (as 15% O <sub>2</sub> ) Dry basis in ppmv
2.	NMHC(as C)	100 mg/Nm <sup>3</sup> (at 15% O <sub>2</sub> )
3.	Particulate Matter	75 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
4.	CO	150 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
5.	Sulphur Content in Fuel	Less than 2%

4. The applicant shall observe the following fuel pattern:-

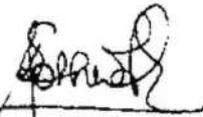
Sr. No.	Type of fuel	Quantity /hr
1.	H.S.D. for D.G. Set	125 litres/ hr (each)

6. The noise level shall meet the Ambient Air Quality Standards in respect of noise as specified in the schedule under noise pollution (Regulation & Control) Rules 2000.
7. The Industry should carry out ambient air quality monitoring within the Plant area once in every month for Suspended Particulate Matter from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and results shall be submitted regularly to this Board.
8. The industry should carry out emission monitoring from the stacks once in 3 months for Particulate Matter and Sulphur Dioxide from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and the result shall be submitted to this Board.
9. An application for renewal of consent in the prescribed form shall be submitted at least 30 days before the expiry of the current consent along with requisite fees. Application for renewal of consent submitted after the validity period shall accompany a penalty of 50% of the consent fees.
10. In case of any deviation or alteration in any process from those submitted to this Board, a fresh proposal should be submitted well in advance so as to assess the adequacy of the conditions stipulated in the consent order
11. The Industry shall furnish to the visiting officer and/or Board any information regarding the construction, installation or operation of the establishment or of Emission control system and such other particulars as may be pertinent for preventing and controlling pollution of air.

  
 Member Secretary  
 Goa State Pollution Control Board

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12. The Industry should submit an Environmental Statement in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.
13. This Consent is granted without any prejudice to any other permission(s) required under any law, by-laws, rules in force.



**Member Secretary  
For Goa State Pollution Control Board**

To,  
M/s Sesa Goa Ltd.  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji-Goa

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## GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ 260

Phone Nos. : 91-0832-2438567, 2438528  
2438563, 2438550.  
Tel./Fax No. : 0832-2438528  
Email : goapcb@yahoo.com  
goapcb@rediffmail.com  
website : www.goaspcb.gov.in



Dempo Towers,  
EDC Patto Plaza,  
Panaji, Goa - 403 001.

## CONSENT TO ESTABLISH (NOC)

Order No. 5/791/97-PC/3/3

Date: 7/10

Consent to Establish a Dry Screening Plant under section 25(1) (a) of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 (1) of the Air (Prevention and Control of Pollution) Act, 1981.

1. Consent to Establish under section 25(1)(a) of the Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6 of 1974) and under section 21 (1) of the Air (Prevention and Control of Pollution) Act, 1981 (as amended upto 1987 (Central Act 14 of 1981) and the rules and orders made there under is hereby granted to:

**M/s SESA GOA LTD.**  
**(Dry Screening Plant at Codli Mines)**

hereinafter referred as 'the applicant', authorizing him/her/ them to establish a dry screening plant at the below mentioned site:

Survey no. 24/1,  
Codli Village, Sanguem-Goa

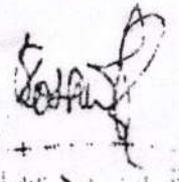
2. This Consent to Establish is valid for the manufacture/ production/ extraction/ installation/ servicing/ trade/ activity as mentioned below:

Sr.	Description	Capacity
1.	Installation of dry screening plant	4.2 MT annum

3. The unit should set up air pollution control system/s, effluent sewage treatment system/s, so as to meet the standards prescribed in Schedule I (Rule 3) of the Environment (Protection) Rules, 1986 for the relevant industry as well as for other parameters should meet the standards prescribed under the General standards of the said Rules.

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4. The unit should obtain all permissions approvals as required under the prevalent Rules Acts in force.
5. The unit should obtain permission from the Forest Deptt. and the Fire Board wherever applicable.
6. This Consent to Establish is valid upto commissioning of the above or three years which ever is earlier.
7. The applicant shall apply for Consents to Operate of the Board as required under section 25(1) (b&c) of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 in the prescribed application form. 45 days before commissioning of the plant.
8. The applicant shall comply with all the conditions and instructions provided in the GENERAL CONDITIONS annexed herewith.



Member Secretary  
For GOA STATE POLLUTION CONTROL BOARD

To,  
M/s Sesa Goa Ltd.  
(Codli Group of Mines)  
Sesa Ghor, 20, FDC Complex,  
Patto, Panaji Goa.

- c.c. to:
1. Concerned file
  2. Guard file

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## GENERAL CONDITION FOR CONSENT TO ESTABLISH

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1. Trees shall be planted and maintained around the plant in an area atleast 4 times the built area of the industry. Green belt development shall be started alongwith the construction activity.
2. The domestic waste water shall be treated in a properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the factory premises.
3. The applicant shall not change or alter the quantity, the rates of discharge, temperature and the mode of disposal of the effluent without previous written permission of the Board.
4. The applicant shall provide facilities for collection of samples to the Board staff.
5. The industry shall discharge the treated effluents preferably on land for irrigation/gardening/lawn within their own premises or re-use after suitable treatment.
6. Stack height for (a) Diesel generator set (s) shall be as follows:

(a) Diesel Generator set(s) : The minimum height of the stack to be provided with each generator shall be as per the formula  $H = h + \sqrt[3]{KVA}$  where  $H$  = total height of the stack in metres,  $h$  = height of the building in metres where the generator is installed and  $KVA$  = total generator capacity of the set in KVA

The generator shall be installed in a closed area with a silencer and suitable noise absorption system so as to comply with the ambient noise level standards as mentioned below.

The ambient noise level shall not exceed 75 dB(A) at a distance of 5 metres from the source.

7. The applicant shall provide ports in the chimney/ stack and facilities such as ladder, platform etc. as per the directions of Pollution Control Board for monitoring the air emissions and the same shall be open for the inspection and use by the Board's staff. The chimney /stack attached to various sources of emissions shall be designated by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification.
8. Floor washings shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm water drains or open areas. The applicant shall maintain good housekeeping both within the factory and in the premises. All pipes, valves, sewers and drains shall be leak proof.
- 9 All solid waste arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:
  - i) Land fill in case of inert material;
  - ii) Controlled incineration wherever possible in case of organic combustible material;
  - iii) Vermiculture composting in case of bio-degradable, chemically active/hazardous solid waste; care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or be carried away with storm run-off.

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10. The industry shall implement the following Rules and Regulations notified by the Ministry of Environment and Forests, Govt. of India
  - a) Hazardous Wastes (Management and Handling) Rules, 1989.
  - b) Manufacture, Storage and import of Hazardous Chemicals Rules, 1989;
  - c) Rules for the Manufacture, Use, Import and Storage of Hazardous Micro-organism/Genetically Engineered Organisms or Cell, 1989.
11. There shall not be any perceptible odour outside the industrial premises
12. All the Rules and Regulations notified by the Ministry of Environment and Forests, Govt. of India in respect of noise pollution control measures shall be followed to avoid nuisance to public.
13. The industry shall follow the Rules and Regulations notified by the Ministry of Law and Justice Govt of India regarding the Public Liability Insurance Act, 1991
14. The Industry shall report progress on implementation of the project to the Goa state Pollution control Board regularly every three months
15. The applicant shall obtain consent for trial production before the industry goes into trial production
16. The applicant shall obtain consents for operation regularly from Goa State Pollution Control Board as required under section 25/26 of the Water (Prevention and control of pollution) Act 1974 and under section 21/22 of the Air (Prevention and Control of Pollution) Act 1981 for operation of the industry before starting commercial production.
17. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves its right and powers under section 27(2) of the water (Prevention and Control of Pollution) Act 1974 and under section 21(4) of the Air (Prevention and Control of Pollution) act 1981 to review any or all the conditions imposed hereby.
18. Any change in the details made after the submission of the application/after obtaining the Consent to Establish shall be brought to the notice of the Board immediately.
19. This consent to Establish is granted without any prejudice to any other permission(s) required under any laws, bye-laws and regulations in force.
20. The validity of this Consent for Establishment is for 3 years from the date of issue of this Order

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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ

264

Phone Nos. : 91-832-2438567, 2438528  
2438563, 2438550.  
Tel / Fax No. : 0832-2438528  
Email : goapcb@rediffmail.com



Dempo Towers, 1st Floor,  
EDC Patto Plaza,  
Panaji, Goa 403 001.

No. 6/2304/11-PCB/8773

Date:- 18/03/11

CONSENT ORDER NO: AIR/ 2049 /2011

CONSENT TO OPERATE UNDER SECTION 21 OF THE AIR  
(PREVENTION & CONTROL OF POLLUTION) ACT, 1981 AS AMMENDED

As per the provisions of the Air (Prevention & Control of Pollution) Act, 1981, and the Rules and the Orders made there under for "Consent to Operate" is hereby granted to

**M/s SESA GOA LTD.**  
[Dry Screening Plant 3C at Codli Mine]

(Hereinafter referred as "The Industry")  
To operate their Dry Screening Plant 3C located at:-  
Codli mine, Survey no. 24/1,  
Codli, Sanguem-Goa

This Consent to operate their Dry Screening Plant 3C, subject to the following terms and Conditions: -

1. This Consent to operate is valid upto 01/03/2013.
2. This consent is valid for the operation of:

Sr. No.	Description	Capacity
1.	Dry Screening Plant 3C	4.2 MT/ annum

3. The noise level shall meet the Ambient Air Quality Standards in respect of noise as specified in the schedule under noise pollution (Regulation & Control) Rules 2000.
4. The Industry should carry out ambient air quality monitoring as per Schedule VII (table given below) from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and results shall be submitted regularly to this Board.

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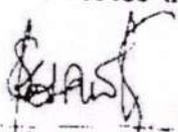
Sr. no.	Pollutant	Time weighted	Concentration in Ambient Air	
			Industrial, residential, rural & other area	Ecologically sensitive area (notified by Central Government)
1	Sulphur Dioxide (SO <sub>2</sub> ), µg/ m <sup>3</sup>	Annual*	50	20
		24 hours **	80	80
2	Nitrogen Dioxide (NO <sub>2</sub> ), µg/ m <sup>3</sup>	Annual*	40	30
		24 hours **	80	80
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub> µg/ m <sup>3</sup>	Annual*	60	60
		24 hours **	100	100
4	Particulate Matter (size less than 2.50µm) or PM <sub>2.5</sub> µg/ m <sup>3</sup>	Annual*	40	40
		24 hours **	60	60
5	Ozone (O <sub>3</sub> ) µg/ m <sup>3</sup>	8 hours**	100	100
		1 hour **	180	180
6	Lead (Pb) µg/ m <sup>3</sup>	Annual*	0.50	0.50
		24 hours **	1.0	1.0
7	Carbon Monoxide (CO) mg/ m <sup>3</sup>	8 hours**	02	02
		1 hour **	04	04
8	Ammonia (NH <sub>3</sub> ) µg/ m <sup>3</sup>	Annual*	100	100
		24 hours **	400	400
9	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/ m <sup>3</sup>	Annual*	05	05
10	Benzo(a)pyrene (BaP) - particulate phase only, ng/ m <sup>3</sup>	Annual*	01	01
11	Arsenic (As), ng/ m <sup>3</sup>	Annual*	06	06
12	Nickel (Ni) ng/ m <sup>3</sup>	Annual*	20	20

\* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

\*\* 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring

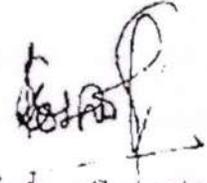
5. An application for renewal of consent in the prescribed form shall be submitted at least 30 days before the expiry of the current consent along with requisite fees. Application for renewal of consent submitted after the validity period shall accompany a penalty of 50% of the consent fees.

6. In case of any deviation or alteration in any process from those submitted in this Board, a fresh proposal should be submitted well in advance so as to assess the adequacy of the conditions stipulated in the consent order.

  
Member Secretary

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7. The Industry shall furnish to the visiting officer and / or Board any information regarding the construction, installation or operation of the establishment or of Emission control system and such other particulars as may be pertinent for preventing and controlling pollution of air.
8. The Industry should submit an Environmental Statement in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.
9. This Consent is granted without any prejudice to any other permission(s) required under any law, by-laws, rules in force.



- Member Secretary  
For Goa State Pollution Control Board

To,  
M/s Sesa Goa Ltd.  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji-Goa

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Annexure - R2/4

# GOA STATE POLLUTION CONTROL BOARD 267

गोंय राज्य प्रदुशण नियंत्रण मंडळ

Phone Nos. : 91-832-2438567, 2438528  
2438563, 2438550.  
Tel / Fax No. : 0832-2438528  
Email : goapcb@rediffmail.com



Dempo To  
EDC Patto  
Panaji, Goa

No. 5/791/97-PCB/7982

Date:- 15/02/11

**RENEWAL OF CONSENT TO OPERATE UNDER SECTION 25 OF THE WATER  
(PREVENTION & CONTROL OF POLLUTION) ACT, 1974, AS AMMENDED.**

As per the provisions of the Water (Prevention & Control of Pollution) Act, 1974, and the  
Rules and the Orders made thereunder,

**“Renewal of Consent to Operate”** is hereby granted to:

**M/s SESA GOA LTD.  
(Beneficiation Plants (1, II, 3B & IV) at Codli Mine)**

Hereinafter referred as “The Industry”  
To operate their Iron Ore Beneficiation Plant located at  
Survey No. 24, 24/1, 54/1, 46,  
Codli mine, Kirlapale, Dabal,  
Sanguem-Goa

This renewed Consent to Operate is subjected to the following terms and conditions:

1. This renewed Consent to Operate is issued in supersession of the earlier renewal of Consent to Operate issued vide letter No 5/791/97-PCB/3883 dated 10/09/08 and No 5/791/97-PCB/3209 dated 7/08/09 is valid upto 09/09/2012.
2. This renewed Consent is valid for the activity of:

Sr. No.	Description	Maximum Quantity
1.	Beneficiation of iron ore fines & lumps (Plant I)	2 MT/ annum
2.	Beneficiation of iron ore fines & lumps (Plant II)	2 MT/ annum
3.	Beneficiation of iron ore fines & lumps (Plant 3 B)	5 MT/ annum
4.	Beneficiation of iron ore fines & lumps (Plant IV)	1.6 MT/ annum

3. (i) The daily quantity of trade effluent from the factory shall not exceed 9000 K.L.D.
- (ii) The daily quantity of domestic effluent from the factory shall not exceed NIL.
- (iii) **Trade Effluent Treatment and Disposal:**  
The trade effluent generated in form of slurry at the Hydro Cyclones shall be released only in to the tailing pond duly approved by the Indian Bureau of Mines as a part of Mining plan.

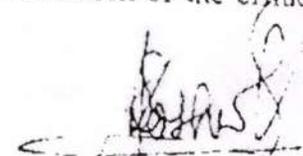
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- (iv) The tailing pond shall be so maintained that it will not overflow and if the applicant proposes to change the location of the tailing pond the same shall be done after obtaining approval of the Indian Bureau of Mines and the Board shall be informed of the change.
- (v) The water percolated from the tailing pond shall be analysed at least, once a month for the following parameters and results shall be submitted to the Board Office regularly

pH	Between	5.5 & 9.0
Suspended Solids	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg / l
Manganese	Not to exceed	2 mg / l
Oil & Grease	Not to exceed	10 mg/l

*Other parameters should be meet the standards specified in Schedule I (Rule 3) of the Environment (Protection) Act 1986 for the relevant Industry*

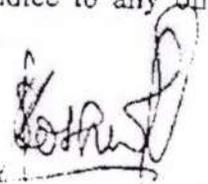
- (vi) The industry shall at his own cost get the samples of water discharged from the mining lease area collected and analyse, every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board.
4. The production process, quantity and quality of the effluent or mode of disposal of the treated effluent shall not be altered without the permission of the Board.
  5. An application in prescribed form along with the prescribed fees for renewal of Consent, shall be submitted before the expiry of validity of this renewed Consent. An application for renewal of Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.
  6. Any up-set condition in any plant of the factory which is likely to result in increased effluent discharge and /or violation of the standards stipulated above shall be immediately reported to the Board office.
  7. Reliable flow meter shall be installed to maintain record of water consumption per day. The records so maintained shall be made available to the Board officials whenever required.
  8. Adequate facilities shall be provided to the Board staff for collection of the effluent samples.

  
 Member Secretary  
 Goa State Pollution Control Board

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9. All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:
  - i) Landfill, incase of inert materials, care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - ii) Controlled incineration wherever possible in case of combustible organic matter.
  - iii) Composting in case of bio degradable material
  - iv) As per the Authorization issued by this Board in case of Hazardous waste.
10. A good house-keeping shall be maintained within the premises. All pipes, valves and drains shall be maintained in leakproof condition. Floor washings shall be maintained to the effluent collection system only and shall not be allowed to find way in open areas.
11. The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land and the action initiated to curb the resulting pollution.
12. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 , as amended (to be referred as Cess Act ) and the Rules there under:

The applicant shall submit Water Consumption statement every month so as to reach this Office on or before the 5<sup>th</sup> of the succeeding month in the prescribed form and pay the Cess as specified under Section 3 of the Cess Act
13. The Trade effluent in the form of slurry generated at the mining pit shall be released only to the exhausted mining pit duly approved by Indian Bureau of Mines as a part of the Mining Plan.
14. The exhausted mining pit shall be so maintained that it will not overflow.
15. The Industry should submit an Environmental Statement in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.
16. This Consent is granted without any prejudice to any other permission(s) required under any law, by-laws regulations in force.

  
Member Secretary

For GOA STATE POLLUTION CONTROL BOARD

To,  
M/s Sesa Goa Ltd.  
Sesa Ghor, 20 EDC Complex,  
Patto, Panaji-Goa

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# GOA STATE POLLUTION CONTROL BOARD

## गोंय राज्य प्रदुशण नियंत्रण मंडळ

Phone Nos. : 91-832-2438567, 2438528  
2438563, 2438550.  
Tel / Fax No. : 0832-2438528  
Email : goapcb@rediffmail.com



Dempo Towers, 1st Floor,  
EDC Patta Plaza,  
Panaji, Goa 403 001.

No. 6/185/97-PCB/ 7479

Date: 02/11

CONSENT ORDER NO: AIR/ 1820 /2011

### RENEWAL OF CONSENT TO OPERATE UNDER SECTION 21 OF THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 AS AMMENDED

As per the provisions of the Air (Prevention & Control of Pollution) Act, 1981, and the Rules and the Orders made there under for "Renewal of Consent to Operate" is hereby granted to

**M/s SESA GOA LTD.**  
**(Beneficiation Plants (I, II, 3B & IV) at Codli Mine)**

Hereinafter referred as "The Industry"  
To operate their Iron Ore Beneficiation Plant located at  
Survey No. 24, 24/1, 54/1, 46,  
Codli mine, Kirlapale, Dabal,  
Sanguem-Goa

This Renewed Consent to operate their beneficiation plants with five D.G. Sets, subject to the following terms and Conditions: -

1. This renewed consent to operate is issued in supersession of the earlier Consent to operate vide Order No Air/1313/2008 issued vide letter No. 6/185/97-PCB/4798 dated 17/10/08 and Order No Air/1740/2009 issued vide letter No. 6/185/97-PCB/3210 dated 7/08/09 is valid upto **09/09/2012**.
2. This renewed consent is valid for the activity of:

Sr. No.	Description	Maximum Quantity
1.	Beneficiation of iron ore fines & lumps (Plant I)	2 MT/ annum
2.	Beneficiation of iron ore fines & lumps (Plant II)	2 MT/ annum
3.	Beneficiation of iron ore fines & lumps (Plant 3 B)	5 MT/ annum
4.	Beneficiation of iron ore fines & lumps (Plant IV)	1.6 MT/ annum

3. The applicant shall maintain and operate air pollution control system and let out the emission through a stack of 6.7 meters height above ground levels for 1250 KVA D.G. Set, 5.8 and 5 meters height above ground levels for 1000 KVA D.G. Set and 6.5 meters height above ground levels for 750 KVA D.G. Set so as to restrict the emission level to the following standards:

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Sr. No.	Name of Equipments/ Installation	No. of Installation	Capacity	SO <sub>2</sub> Kg/Hr	Particulate Matter mg/Nm <sup>3</sup>
1	D.G. Set	1	1250 KVA	5.28	75
2	D.G. Set	3	1000 KVA	3.28	75
3.	D.G. Set	1	750 KVA	3.28	150

4. The applicant shall observe the following standards for D .G. Sets ≥ 1000 KVA

Sr. No.	Parameters	Limits
1.	NOx (as NO <sub>2</sub> ) for 1250 KVA D.G. Set	1100 ppmv (as 15% O <sub>2</sub> ) Dry basis in ppmv
	NOx (as NO <sub>2</sub> ) for 1000 KVA D.G. Set	710 ppmv (as 15% O <sub>2</sub> ) Dry basis in ppmv
2.	NMHC(as C) for 1250 KVA D.G. Set	150 mg/Nm <sup>3</sup> (at 15% O <sub>2</sub> )
	NMHC(as C) for 1000 KVA D.G. Set	100 mg/Nm <sup>3</sup> (at 15% O <sub>2</sub> )
3.	Particulate Matter	75 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
4.	CO	150 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
5.	Sulphur Content in Fuel	Less than 2%

5. The applicant shall observe the following standards:-

Sr. No.	Type of fuel	Quantity /hr
1.	H.S.D. (for 1250 KVA D.G. Set)	132 kg/ hr
2.	H.S.D. (for 1000 KVA D.G. Set)	82 kg/ hr (each)
3.	H.S.D. (for 750 KVA D.G. Set)	82 kg/ hr

6. The noise level shall meet the Ambient Air Quality Standards in respect of noise as specified in the schedule under noise pollution (Regulation & Control) Rules 2000.

7. The Industry should carry out ambient air quality monitoring as per Schedule VII (table given below) from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and results shall be submitted regularly to this Board.

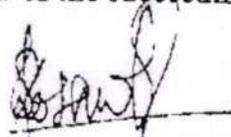
Sr. no.	Pollutant	Time weighted	Concentration in Ambient Air	
			Industrial, residential, rural & other area	Ecologically sensitive area (notified by Central Government)
1	Sulphur Dioxide (SO <sub>2</sub> ), µg/ m <sup>3</sup>	Annual*	50	20
		24 hours **	80	80
2	Nitrogen Dioxide (NO <sub>2</sub> ), µg/ m <sup>3</sup>	Annual*	40	30
		24 hours **	80	80
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub> µg/ m <sup>3</sup>	Annual*	60	60
		24 hours **	100	100
4	Particulate Matter (size less than 2.50µm) or PM <sub>2.5</sub> µg/ m <sup>3</sup>	Annual*	40	40
		24 hours **	60	60
5	Ozone (O <sub>3</sub> ) µg/ m <sup>3</sup>	8 hours**	100	100
		1 hour **	180	180
6	Lead (Pb) µg/ m <sup>3</sup>	Annual*	0.50	0.50
		24 hours **	1.0	1.0

*[Handwritten Signature]*

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7	Carbon Monoxide (CO) mg/ m <sup>3</sup>	8 hours** 1 hour **	02 04	02 04
8	Ammonia (NH <sub>3</sub> ) µg/ m <sup>3</sup>	Annual* 24 hours **	100 400	100 400
9	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/ m <sup>3</sup>	Annual*	05	05
10	Benzo(a)pyrene (BaP) - particulate phase only, ng/ m <sup>3</sup>	Annual*	01	01
11	Arsenic (As), ng/ m <sup>3</sup>	Annual*	06	06
12	Nickel (Ni) ng/ m <sup>3</sup>	Annual*	20	20

7. The industry should carry out emission monitoring from the stacks once in every 3 months from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and the result shall be submitted to this Board.
8. An application for renewal of consent in the prescribed form shall be submitted at least 30 days before the expiry of the current consent along with requisite fees. Application for renewal of consent submitted after the validity period shall accompany a penalty of 50% of the consent fees.
9. In case of any deviation or alteration in any process from those submitted in this Board, a fresh proposal should be submitted well in advance so as to assess the adequacy of the conditions stipulated in the consent order.
10. The Industry shall furnish to the visiting officer and / or Board any information regarding the construction, installation or operation of the establishment or of Emission control system and such other particulars as may be pertinent for preventing and controlling pollution of air.
11. The industry shall forthwith keep the Board informed of any accident or unforeseen act or event of any poisonous, noxious or polluting matter is being discharged into an atmosphere, as result of such discharge air is being polluted.
12. This Consent is granted without any prejudice to any permission(s) required under any law, by-laws and regulations in force.
13. The Industry should submit an Environmental Statement in Form V for the Financial Year April to March by 30<sup>th</sup> September of the succeeding year.



Member Secretary  
For Goa State Pollution Control Board

To,  
M/c Sree Goa Ltd

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Annexure R2/5  
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# GOA STATE POLLUTION CONTROL BOARD

## गोंय राज्य प्रदूशन नियंत्रण मंडळ

(An ISO 9001-2008 Certified Board)

Phone Nos : 91-832-2438567, 2438528  
2438563, 2438550

Fax No : 0832-2438528



Email id's :

Member Secretary, GSPCB - ms-gspcb.goa@nic.in  
Environment Engineer, GSPCB - ee-gspcb.goa@nic.in  
Scientist, GSPCB - scientist-gspcb.goa@nic.in  
Asst. Env Engineer, GSPCB - aee-gspcb.goa@nic.in  
Asst. Law Officer, GSPCB - alo-gspcb.goa@nic.in

Date: 4/08/2015

No: 5/4963/15-PCB/CI-505

Consent to 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 Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008

[To be referred as Water Act, Air Act and HW (M,H & T) Rules respectively]

CONSENT TO OPERATE AND AUTHORIZATION is hereby granted to:

M/s. VEDANTA LIMITED  
(UNIT: CODLI MINES)  
(Large Scale Industry)  
(Red Category)

T.C No: 70/1952, 126/1953, & 69/1951  
Codli Mine, Kirlapale - Dabal V.P.  
Dharbandora - Goa

Located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW (M,H & T) 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. This Consent to operate and Authorization is valid upto 31/08/2017.

2. This Consent to operate and Authorization is valid for the manufacture of:

Sr. No	Description	Quantity
1.	Iron Ore	3.155 MT/annum
2.	Beneficiation of Iron Ore fines & lumps (Plant I)	
3.	Beneficiation of Iron Ore fines & lumps (Plant II A)	
4.	Beneficiation of Iron Ore fines & lumps (Plant 3 B)	
5.	Beneficiation of Iron Ore fines & lumps (Plant IV A)	
6.	Dry Screening Plant (Plant - 3 C)	

### CONDITIONS UNDER WATER ACT:

The rain accumulated mining pit water if any should be routed through settling ponds and filter beds and meet the standards prescribed in condition no. (vii) below.

The daily quantity of domestic sewage from the unit shall not exceed 25 KLD

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- (iii) The daily quantity of industrial effluent from the beneficiation plant shall not exceed 9000 KLD
- (iv) The daily quantity of domestic effluent from the beneficiation plant shall not exceed NIL

(v) **Industrial Effluent treatment and Disposal for the Beneficiation Plants:-**  
 The industrial effluent generated in form of slurry at the Hydro Cyclones shall be released only into the tailing pond duly approved by the Indian Bureau of Mines as a part of Mining Plan.

(vi) The tailing pond shall be so maintained that it will not overflow and if the applicant proposes to change the location of the tailing pond the same shall be done after obtaining approval of the Indian Bureau of Mines and the Board shall be informed of the change.

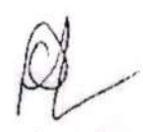
(vii) The water from the tailing pond shall be analysed for the following parameters and results shall be submitted to the Board office in the event of discharge

pH	Between	5.5 & 9.0
Suspended Solids	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg/l
Manganese	Not to exceed	2 mg/l
Oil & Grease	Not to exceed	10mg/l

(iii) The unit shall at his own cost get the effluent samples collected both before and after treatment and analysed. every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board, by 15<sup>th</sup> of the succeeding month.

(viii) **Domestic Effluent treatment and Disposal for Mine:-**  
 The domestic wastewater shall be treated in a existing septic tank and soak pit.

- (ix) The mining companies shall provide with wheel washing station with tyre sprinkler and shallow pond with running water.
- (xi) Filter beds shall be provided and maintained around reject dumps for settlement of suspended particles and to prevent siltation.
- (xii) Coursing of water down the slope to the settling ponds.
- (xiii) The tailing pond water let out from the beneficiation plants shall meet the standards as specified in the Consent to operate issued by the Board.
- (xiv) To prevent siltation of rivers/ nallahs/ fields catch drains and siltation/settling ponds shall be maintained. The water collected should be utilized for watering the mine area, roads and green belt development. Garland drains to be provided around the reject dumps.
- (xv) The mining companies should meet the water requirements of the nearby villages if required.



Member Secretary  
 Goa State Pollution Control Board

Date: 2000

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(xvi) Regular monitoring of ground water & surface water level and quality should be carried out in all seasons.

Ground Water Monitoring Location
1. Well water ( near Codli Nursery - West Direction)
2. Well water (near Mr.Vishnu Naik - South East direction)
3. Well water below Old tailing Pond
4. Well water ( Mr.Inhas's house - North west direction)

Surface Water Monitoring Location
1. Upstream Rivulet Karmone
2. Discharge from Dump 9- Talaulikar side
3. Discharge from Dump 9- Figredo Side
4. Discharge from Dump 9- RI Side
5. Downstream Rivulet Karmone/Upstrem River Khandepar
6. Mine water discharge
7. Downstream River Khandepar
8. Upstream Kirlapal river
9. Discharge near Dump 4
10. Downstream Kirlapal river
11. Discharge Towards Kalsai

(xvii) The companies should maintain the pumping schedule for pumping the rain accumulated water from the mining pit.

(xviii) The mining industry shall strive to implement suitable conservation measures to augment ground water resources wherever possible in the area.

(xix) The company should maintain a pumping Log book in the following format:

Sr. No.	Capacity of the pump (litres/min)	Date	Start time	Start time R.L	End time	End time R.L	Duration of pumping (in minutes)	Qty. of water pumped (in KLD)	Remarks

(xx) The company should stack their ore/ and or ore over burden as per the approved mining plan.

(xxi) Reliable flow meter shall be installed to maintain record of water consumption per day. The records so maintained shall be made available to the Board officials whenever required.

(xxii) A good house-keeping shall be maintained within the mining lease area.

Member Secretary  
Goa State Pollution Control Board

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(xxiii) Non-Hazardous Solid Waste:

All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:

- Composting in case of bio degradable material

The total quantity shall be segregated and treated as follows:

Sr. no.	Type of segregated solid waste	Quantity	Disposal
1.	Overburden	7 MT/annum	Step dumping and backfilling of exhausted pits.

The non recyclable non - biodegradable waste to be segregated and handed over to the local body or Solid Waste Management Cell of DSTE at Karapur, Sarvona or any other locations specified by cell

(xxiv) The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977, as amended (to be referred as Cess Act ) and the Rules there under. The daily water consumption for the following categories shall not exceed, as under:

Spray in mines	880 KLD
Domestic	125 KLD
Manufacturing processes	175 KLD

The applicant shall submit Water Consumption statement annually by 30<sup>th</sup> April online in the prescribed format and pay the Cess as specified under Section 3 of the Cess Act.

(xxv) The Mining unit shall monthly monitor the quality of water which is pumped into River Khandepar from the mining pits.

CONDITIONS UNDER AIR ACT:

The unit shall maintain and operate air pollution control system of adequate capacity for the following equipments

Sr. No.	Name of Equipments/ Installation	No of Installation	Capacity	SO <sub>2</sub> Kg/Hr	NO <sub>x</sub>	HC	CO	PM
1.	D.G. set	01	350 KVA	3.28	9.2	1.3	3.5	0.3
2.	D.G. set	01	750 KVA	3.28	9.2	1.3	3.5	0.3

Sr. No.	Name of Equipments/ Installation	No of Installation	Capacity	SO <sub>2</sub> Kg/Hr	Particulate Matter mg/Nm <sup>3</sup>
1.	D.G. set	01	1250 KVA	5.28	75
2.	D.G. set	03	1000 KVA	3.28	75

(ii) The applicant shall observe the following standards for D. G. Sets ≥ 1000 KVA

Sr. No	Parameters	Limits
1.	NO <sub>x</sub> (as NO <sub>2</sub> )	1100 ppmv (as 15% O <sub>2</sub> ) Dry basis in ppmv
2.	NMHC(as C)	150 mg/Nm <sup>3</sup> (at 15% O <sub>2</sub> )
3.	Particulate Matter	75 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
4.	CO	150 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
5.	Sulphur Content in Fuel	Less than 2%

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Goa State Pollution Control Board

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

Sr. No	Chimney attached to	Height
1.	D.G. set (350 KVA)	5.6 mtrs
2.	D.G. set (1250 KVA)	7 mtrs
3.	D.G. set (1000 KVA)	5 mtrs (each)
4.	D.G. set (750 KVA)	6 mtrs

(iv) The unit shall observe the following standards:-

Sr. No	Type of fuel	Quantity /hr
1.	H.S.D. (for D.G. set of 350 KVA)	82 kgs/hr
2.	H.S.D. (for D.G. set of 1250 KVA)	132 kgs/hr
3.	H.S.D. (for D.G. set of 1000 KVA)	82 kgs/hr (each)
4.	H.S.D. (for D.G. set of 750 KVA)	82 kgs/hr

(v) The Stack Port Hole and Platform is to be designed as per CPCB guidelines Method 1 Part 1 of Stack Monitoring – Material & methodology for isokinetic sampling

(vi) The unit should comply with all the standards for D.G. Sets prescribed at Sr. no. 94, 95 and 96 of Schedule I of the Environment (Protection) Rules, 1986.

(vii) The unit should carry out emission monitoring from the stacks connected to D.G. set once in a year from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and the result shall be submitted to this Board.

(viii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for monitoring RPM, SPM, NOx and SO<sub>2</sub>. Location of the ambient air quality stations and the frequency of monitoring should be twice a week for the core zone and the buffer zone from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and results shall be submitted regularly to this Board.

Applicant shall achieve following Ambient Air Quality standards:

Core Zone Monitoring Locations	
1.	Near Pit 3
2.	EOU Plant
3.	Office premises
4.	Near Weigh bridge

The monitoring in core zone would be as per the table below:

Fugitive Emission Standards	
Particulate matter	1200 µg/m <sup>3</sup>
Fugitive emission shall be monitored in the predominant downwind direction at a distance 25.0±2.0 meters from the source of fugitive emission as per following:	

Buffer Zone Monitoring Locations	
1.	Kalsai village
2.	Khauli village
3.	Karmone village
4.	Davcona village



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Goa State Pollution Control Board

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The monitoring in Buffer zone would be as per the table below:

SO <sub>2</sub>	Not to Exceed (Annual Average)	50 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	80 µg/ m <sup>3</sup>
NO <sub>x</sub>	Not to Exceed (Annual Average)	40 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	80 µg/ m <sup>3</sup>
PM <sub>10</sub>	Not to Exceed (Annual Average)	60 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	100 µg/ m <sup>3</sup>
PM <sub>2.5</sub>	Not to Exceed (Annual Average)	40 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	60 µg/ m <sup>3</sup>

All other parameters should meet the standards specified in NAAQS notification dated 18<sup>th</sup> November 2009 for the relevant industry

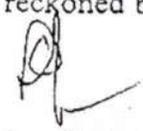
- (ix) The trucks/tippers engaged in transportation of ore shall have sufficient free board after filling the cargo box to avoid spillage.
- (x) All trucks/ tippers engaged in the transportation of ore shall be covered with tarpaulin and the tarpaulin shall be properly fastened to the cargo box to ensure the ore does not get air borne or spill on the road.
- (xi) In case of break down of loaded trucks / tippers unloading of ore at the road side shall be strictly avoided.
- (xii) The roads in mining areas shall be sprinkled with water to suppress dust pollution.
- (xiii) To take afforestation in abandoned mining areas and on reject dumps.
- (xiv) Spillage of ore on the public roads shall be removed immediately on occurrence.
- (xv) The shoulders of roads in mining areas to be fully tarred.
- (xvi) The mining company should submit details regarding transportation of ore in the following format every month

Sr. No.	Source	Destination	Qty.	No. of trips (tipper trucks)	Route (names of villages through which transportation takes place)	Remarks

- (xvii) The mining Company should make suitable arrangements for sweeping of roads affected due to transportation of iron ore.
- (xviii) The unit shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise. The limits are as follows:

Category of Area/ Zone	Limits in dB (A) Leq	
	Day time	Night time
Industrial Area	75	70
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

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.



Member Secretary  
Goa State Pollution Control Board

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# GOA STATE POLLUTION CONTROL BOARD

## गोंय राज्य प्रदुशण नियंत्रण मंडळ

(An ISO 9001-2008 Certified Board)

Phone Nos : 91-832-2438567, 2438528  
2438563, 2438550

Tel/Fax No. : 0832-2438528



Email id's :

Member Secretary, GSPCB - ms-gspcb.goa@nic.in  
Environment Engineer, GSPCB - ee-gspcb.goa@nic.in  
Scientist, GSPCB - scientist-gspcb.goa@nic.in  
Asst. Env Engineer, GSPCB - aee-gspcb.goa@nic.in  
Asst. Law Officer, GSPCB - alo-gspcb.goa@nic.in

No.5/4963/15-PCB/12244

Date: 9 /12/2016

### AMENDMENT

Sub: Partial modification in the Consent to Operate under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) order issued to M/s. Vedanta Limited. (Unit: Codli Mines).

Ref:-1) Consent to Operate under the Water Act and Air Act and Authorization under the Hazardous Wastes order bearing no.5/4963/15-PCB/CI-505 dated 19/8/2015.

In partial modification in the Consent to Operate under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) order issued to M/s. Vedanta Limited. (Unit: Codli Mines), the serial no.2, 3 (ii), 4 (xv), 5 (i) of the said orders referred at (1) above shall be read as follows:-

2. This Consent to Operate and Authorization is valid for the manufacture of:

Sr.No.	Description	Quantity
1	Iron Ore	3.155 MT/annum
2	Beneficiation of Iron Ore fines & lumps (Plant I)	i. 3.155 MT/annum from TC no. 70/1952, 126/1953, 69/1951
3	Beneficiation of Iron Ore fines & Lumps (Plant II A)	
4	Beneficiation of Iron Ore fines & Lumps (Plant 3 B)	
5	Beneficiation of Iron Ore fines & Lumps (Plant IV A)	ii. 0.4 MT/annum from TC no. 14/1958
6	Dry Screening Plant (Plant-3 C)	
		iii. E. auctioned ore.

3 (ii). The daily quantity of domestic sewage from the unit shall not exceed **110 KLD**

4 (xv). The shoulders of transportation roads in mining areas to be fully tarred.

5 (i) The unit is hereby granted authorization to operate a facility for collection, storage and disposal of hazardous wastes as specified below:

Sr.No.	Category	Type of waste	Quantity	Mode of disposal
1	5.1	Used/ Spent Oil	2,80,000 ltrs/annum	To recycler registered with CPCB and having valid authorization of SPCB
2	5.2	Waste residues	9,500	To be sent to M/s. Sesa Goa Ltd.

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		containing oil (oil soaked in cotton waste)	kgs/annum	Metcoke Division Amona for incineration.
	33.3	Paint tins	2,000 nos/annum	Thinner to be used for cleaning paint tins and same thinner to used for dilution of paint and decontaminated tins given for recycling

the rule made thereunder.

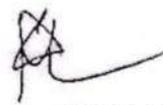
- (iii) The person authorized shall not rent, lend, sell or transfer or otherwise transport the hazardous waste without obtaining prior permission of the Goa State pollution Control Board.
- (iv) Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
- (v) It is a duty of the authorized person to take permission of the Goa State Pollution Control Board to close down the facility.
- (vi) The inner bottom surfaces of the tank shall be impervious enough to prevent leakage or seepage of these wastes into the sub surface soil or ground water.
- (vii) The occupier shall maintain a manifest system as per Rule 19 for disposal of hazardous wastes to ensure that these wastes are delivered to the designated facility preventing pilferage and clandestine disposal due to unforeseen events that may occur during transit.
- (viii) The manifest shall be endorsed by the dispatcher, transporter and receiver of hazardous wastes. The endorsed copy shall be furnished to the Goa State Pollution Control Board.
- (ix) Under no circumstances the hazardous waste shall be disposed to unauthorized facilities.
- (x) The occupier shall maintain the records for collection, storage and disposal of hazardous waste in Form 3 of as per Hazardous & other Waste (Management & Transboundary Movement) Rules 2016.
- (xi) The occupier shall furnish monthly returns for collection, storage and disposal of hazardous waste through online XGN system.
- (xii) The unit shall put up an online board (minimum size 6x4 Feet) at prominent location near the main gate providing details as follows in English and Konkani languages:-
  - Hazardous Waste category number.
  - Hazardous Waste quantity number.
  - Treatment facility for each category.
  - Mode of disposal for each category.
  - Hazardous Waste Authorization number, date and validity period.
  - Water Consent number, date and validity period.
  - Air Consent number, date and validity period.
  - Quantity and Nature of Hazardous Chemicals being used.

The occupier shall ensure that the Hazardous Wastes are not allowed to be stored for more than 180 days.

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All other conditions mentioned in the Consent to Operate under the Air Act and Water Act and Authorization under the Hazardous Waste Order cited at serial no. (1) above shall remain unchanged.

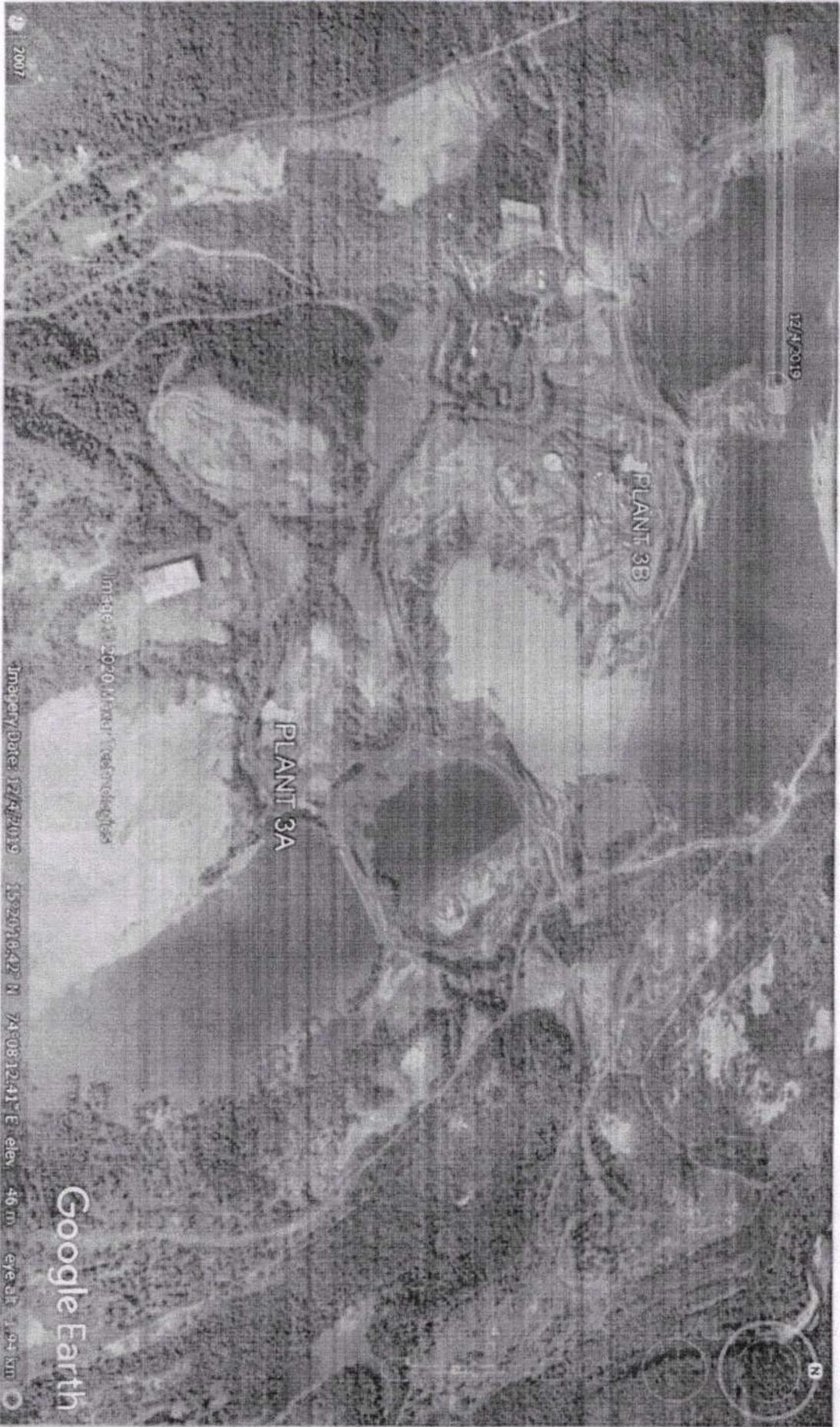


(Levinson J. Martins)  
Member Secretary

To,  
M/s. Vedanta Limited,  
(Unit: Codli Mines),  
Sesa Ghor, 20 EDC Complex,  
Patto Panaji Goa.

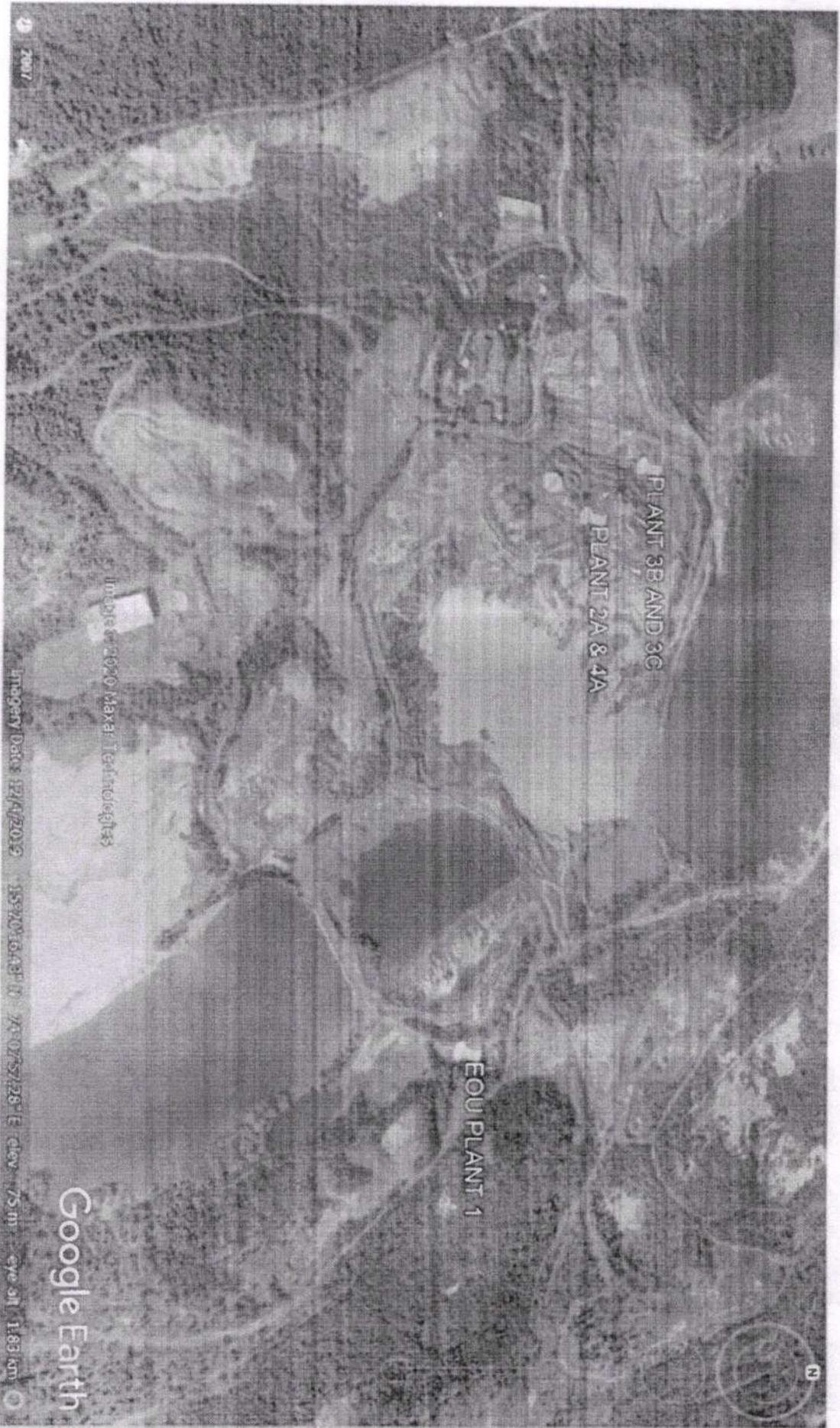
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GOOGLE IMAGE WITH RESPECT TO PLANT 3A AND 3B (Expansion)

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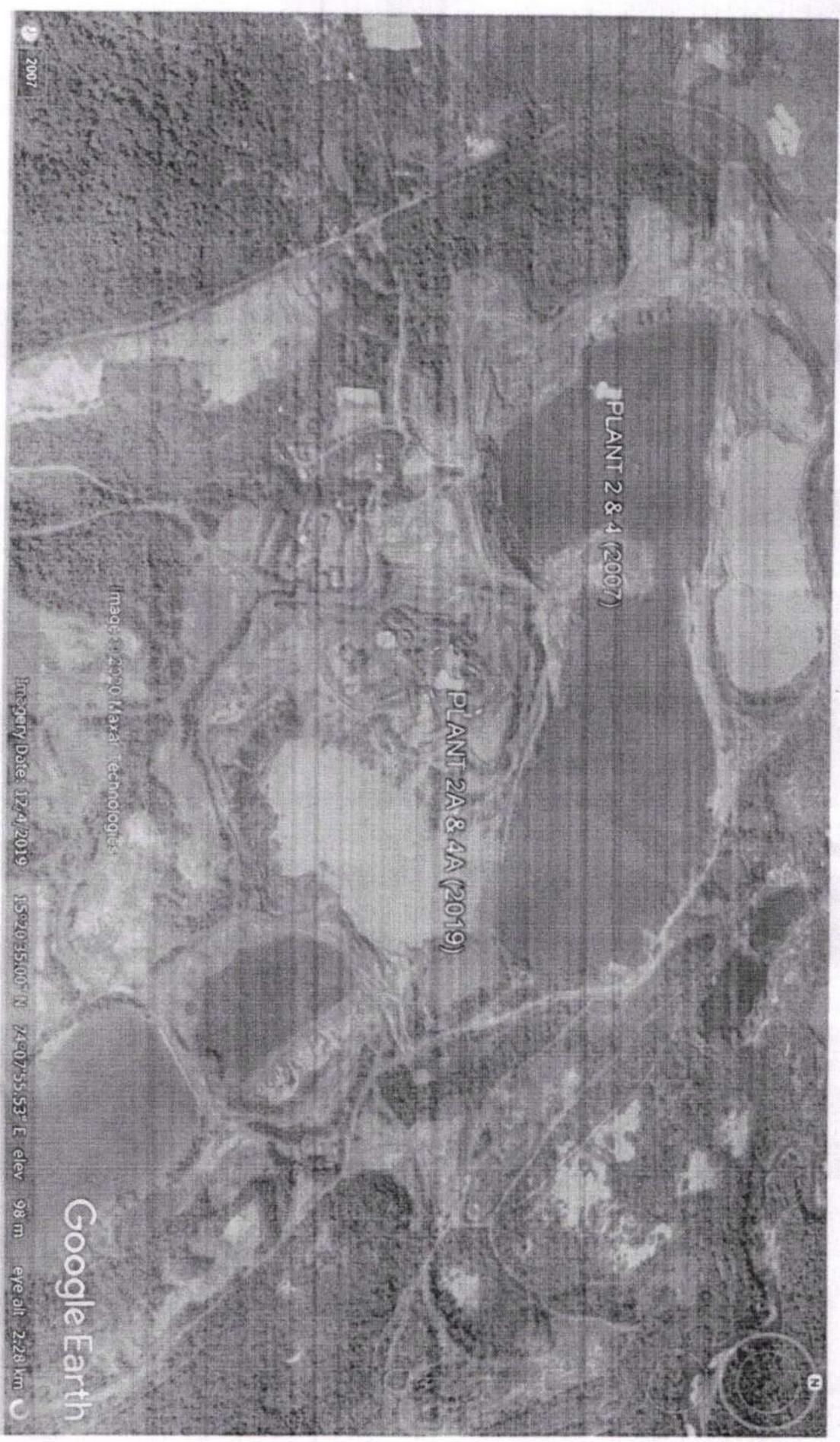


GOOGLE IMAGE PLANTS IN THE YEAR 2019 (PRESENT LOCATIONS)

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GOOGLE IMAGE WITH RESPECT TO SHIFTING OF PLANT 2 AND 4

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286  
Fisher Jila  
Annexure R2/7

Codli,  
11th January, 1996

The Member Secretary,  
The Coal State Pollution Control Board,  
House No. 243, Patto,  
PANAJ COA.

Dear Sir,

Re: Consent under section 25/26 of the water  
[prevention and control of pollution]  
Act 1974 for Codli Plant II & IV

Beneficiation Plant II and IV was commissioned in 1979 and under the scheme of regularisation of old cases we had applied for consent application on 8th February 1991. However we have not heard anything in that respect from your end.

Therefore we, once again submit herewith an application in form No. IV in triplicate in respect of our Beneficiation Plant at Codli. A demand draft No. 159366 dated 26.12.95 for Rs. 6400/- [Rupees six thousand four hundred only] drawn in your favour towards consent fee for eight years is enclosed herewith.

Kindly issue us the necessary consent at your earliest.

Thanking you,

Yours faithfully,  
SESA COA LIMITED

General Manager -  
Mining Operations [Coa]

Encl: a.a.

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# GOA STATE POLLUTION CONTROL BOARD

PATTO, PANAJI - GOA 403 001.

CONSENT ORDER FOR ESTABLISHMENT (NOC)

ORDER NO. **5/1077/97-PCB/1278**

DATE: **11/12/97**

SUB.: Consent for establishment or to take steps to establish the industry under section 25 of the Water (Prevention and Control of Pollution) Act 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act 1981 - Issued-Reg.

REF.: 1. Your application dated **27/9/1997**  
 2. GSPCB/TAC meeting no. **26**  
 3. -

dated **28/10/97**

1. Consent to establish or take steps to establish is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act 1974 as amended in 1988 (Central Act 6 of 1974) and under section 21 of the Air (Prevention and Control of Pollution) Act 1981 as amended in 1987 (Central Act 14 of 1981) and the rules and orders made there under to:

M/s. **Sesa Goa Ltd.**

**(Extension to Beneficiation Plant II & IV)**

(herein after referred to as 'The applicant') authorising him/her/them to establish or take steps to establish the industry in the site mentioned below: Location: **Codli Village, Sanguem-Goa**

2. This consent to establish is valid for the manufacture of products and the rate of production mentioned below. Any change in rate of, and the quantity of the products has to be brought to the notice of the Board.

Sr. No.	Description	Quantity/Month
1.	<b>Magnetic Concentrator</b>	<b>200,000 Tonnes/Annually</b>

3. The applicant shall obtain consents from Goa State Pollution Control Board as required under section 25 of the Water (Prevention and Control of Pollution) Act 1974 and section 21 of the Air (Prevention and Control of Pollution) Act 1981 for operation including testing and trial production before starting commercial production. Prescribed application for such consents to operate including testing and trial production, before commercial production shall be submitted to this Board 45 days in advance.

4. Further, this order is subject to the conditions in schedule 'A' enclosed herewith.

MEMBER SECRETARY  
 FOR GOA STATE POLLUTION CONTROL BOARD

To:

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SCHEDULE A

1. The industry shall install suitable Effluent Treatment Plant to treat the industrial effluent so as to conform to the Environment (Protection) Standards.
2. The industry shall submit the design drawings etc. of the Effluent Treatment Plant within a period of one month from the date of issue of this establishment consent order.
3. The industry shall prepare and submit the Environment Management Plan before applying for consent.
4. The industry shall not cause any nuisance to the surrounding areas arising from bad smell, waste water discharge, gaseous emission, noise, filth etc.
5. The handling, transportation and storage of raw materials and finished products shall be carried out in a way as to avoid any nuisance to the nearby areas.
6. The domestic effluent shall be treated in properly designed septic tank and discharged on land for percolation through soak pit within the factory premises.
7. No oil, grease, paints and allied matters shall be discharged into water or on land.
8. The industry shall submit comprehensive plan for utilisation of solid waste generated in the process to the Goa State Pollution Control Board.
9. The waste solids if any shall be treated with appropriate treatment technology so that it should conform to the Environmental (Protection) Standards.
10. The industry shall take massive plantation of trees within the premises of the company.

MEMBER SECRETARY  
For GOA STATE POLLUTION CONTROL BOARD

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गोंय राज्य प्रदुशण नियंत्रण मंडळ  
GOA STATE POLLUTION CONTROL BOARD  
(DEPARTMENT OF ENVIRONMENT, GOVT. OF GOA)

NO:6/185/97-PCB/253

Date: 17/5/99

RENEWAL OF CONSENT ORDER NO: AIR/182/97 DATED 14/1/99.

Consent is hereby renewed under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under for the following operations mentioned below, located at Codli, Sanguem-Goa.

1. Mining lease consisting of:

	Lease Name	T.C. No.
a. M/s. Sesa Goa	1. Gadia Sodo	126 of 53
	2. M.V. Sodo	69 of 54
	3. Gurmel	70 of 52
b. M/s. Pandurang Timblo Industries	1. Bondra Advona	61 of 53
c. M/s. Timblo Pvt.Ltd.	1. Gautona E. Dushi Fal	14 of 58

2. Ore Processing Plants consisting of:

1. Codli Beneficiation Plant II & IV with ultra Magnetic Separator	163,000 tons/month
2. EOU Beneficiation Plant	45,000 tonns/month
3. Dry Screening Plant I	24,000 tonns/month

*[Signature]*  
.....2.....

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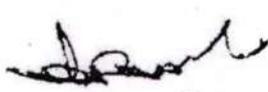
- 1) This consent is valid upto 9/9/2000.
- 2) Water sprays of suitable capacity shall be installed to control flying of dust to the surrounding areas.
- 3) The industry shall plant trees around places, wherein iron ore is stacked and different varieties of trees shall be planted along boundaries of premises.
- 4) The applicant shall take all those necessary steps to maintain the good and healthy ambient air quality in and around the mining lease.
- 5) All solid wastes i.e, mining rejects shall be properly graded and disposed off within the mining lease area.
- 6) All other conditions and instructions as provided in the schedule 'A' as enclosed herewith are to be strictly followed.
- 7) An application shall be made for renewal of consent in the prescribed form atleast 30 days before the date of expiry of consent order.
- 8) The Goa State Pollution Control Board reserves the right to add any new condition or amend the existing one in the consent issued herewith.



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- 9) This consent would automatically stand revoked in case of not meeting any of the above condition by the applicant.
- 10) The industry shall submit Environmental Statements as required under section 14 of the Environment Protection Rules 1986 for the financial year ending the 31st March in form no.V to this Board, on or before the 15th May of every year.
- 11) The industry shall install 3 nos. of ambient air quality monitoring stations at 120° apart to each other. The 3 stations may be located on the periphery of your unit. These stations may be operated for 24 hours thrice in a week preferably 6 a.m. to 6 a.m. of next day. The monitoring of ambient air should include SPM, SO<sub>2</sub> and NO<sub>x</sub>.
- 12) The industry shall install a micro-meteorological station at appropriate place for continuous monitoring of wind speed, wind direction, temperature & turbulence and relative humidity.



(Member Secretary)  
For Goa State Pollution Control Board

Enclosed is Schedule 'A'

To,  
Kasa Goa Ltd.  
(group of Mines)

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Company shall observe consequential mining strictly and use over-burden to exhausted blocks.

They shall simultaneously restore filled blocks as follow -

- a) Prepare an inventory of existing species of large trees in a block and try to restore same as far as possible. The removed top soil shall be used for restoration work
- b) Information shall be furnished to this Board in respect of hydrology of area and ground water and estimates for the change in ground water profile in the periphery of the mine and specially deeper section where over burden is more than 100 meters.

Green belt and restoration. Entire mine shall be restored and green belt to be provided in consultation with Forest Dept

The Mining Company shall properly design stock pile area drainage and the collected water shall be treated before releasing into the natural water body

Resorts, when used for landfill in low lying area or widening roads shall be properly levelled and provided with top soil and vegetation. The cover shall be minimum 100mm

To avoid siltage of river courses and reservoir

- (a) Big dam may be constructed to stop the storm water flowing through the sloppy hills from the mining areas. This will prevent the rush of storm water carrying the loose soil down below either to the reservoir or to the fields.
- (b) Construction of several check dams from the top of the hills down to the dam constructed below.
- (c) The lessee will have to construct terraces to prevent the speedy rush of water as well as the disturbance on the earth settled several hundred years ago.
- (d) The tree plantation will have to be continuously taken-up year after year during rainy seasons either under compensatory forest scheme or on their own to preserve the enviro. and the nature's status-quo.

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8. The lessee should take up planting work on the waste dumps during the advance mining operations.

9. The Mining Company should undertake the afforestation measures in the area proposed for afforestation and also in other blank areas of the lessees area.

10. The Mining Company should carry out soil and water conservation measures as suggested by the Forest Department.

11. The Mining Company should protect and nurture the natural growth in the area proposed for lease.

12. The lessee should undertake to protect rigidly the leased area surrounding forest areas upto one kilometre distance from the fire.

13. The degraded land has to be reclaimed. The reclamation of degraded land has to be carried out in two states namely Technical Reclamation and Biological Reclamation.:

(a) Technical Reclamation

External dumps.

Over burden dumps shall be formed in benches of not more than 30 mts of height. When the overburden reaches its predetermined level, the top is levelled by dozer and scrapper. The top will be divided into a number of suitable plots of about 1.5 to 2.5 Hectors which will enable storm water to flow in a pre-determined direction through mining chutes. In between two subsequent benches, terraces of 3mts to 5mts vertical interval, wider terraces, 2mts to 4mts wide shall be provided. Terraces are shaped inwards. Open masonry drains are provided on all terraces at the foot of the next higher terrace to carry the water down. The spoil slopes shall be flattened to about 20 degree to 23 degree and ends may have gentler slopes. At the foot of the overburden dump, a protective trench 2mts x 4mts may be provided to prevent washing up soil. A bund shall be provided at one place to remove the suspended particles and water will be let into storm water drain.

(b) Biological Reclamation

Pits of a depth of 20 to 30cm and diameter of 30 - 40 cm are planned to be dug and filled with a mixture of soil and manure. Saplings may then be planted preferably at the begining of the monsoon. On the spoil slopes, leguminous grass seeds or quick growing herbaceous spices should be sown so as to help rapid binding and consolidation of soil on slopes and improve soil fertility.

14. Trees may also be planted around the foot of the bank to check soil erosion. This area should be irrigated during the dry season as far as practicable. The selection of appropriate plant species may be done after a careful study.

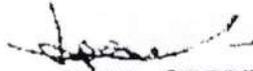
15. Social Afforestation may be undertaken wherever possible.

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Concrete roads may be constructed for longlife of haul roads and service

17. Clean and clear water from the mining pits shall be pumped out. If concentration of any pollutants in the dump water exceeds the tolerable limits, corrective measure shall be taken.

18. The runoff water from the over burden dumps contains many suspended solids. A suitable drain shall be provided at the foot of the bank which will take the water to a pond where the suspended solids will settle down and clean water is allowed to pass on to the storm water drain. The storm water or garland drain shall be provided around the mine area to collect surface runoff water



MEMBER SECRETARY  
GOA STATE POLLUTION CONTROL BOARD

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Annexure 219 295

# GOA STATE POLLUTION CONTROL BOARD

## गोंय राज्य प्रदुशण नियंत्रण मंडळ

(An ISO 9001-2008 Certified Board)

Phone Nos : 91-832-2438567, 2438528  
2438563, 2438550

Tel / Fax No. : 0832-2438528



Email id's :  
Member Secretary, GSPCB - ms-gspcb.goa@nic.in  
Environment Engineer, GSPCB - ee-gspcb.goa@nic.in  
Scientist, GSPCB - scientist-gspcb.goa@nic.in  
Asst. Env Engineer, GSPCB - aee-gspcb.goa@nic.in  
Asst. Law Officer, GSPCB - alo-gspcb.goa@nic.in

Date: | /09/2017

No. 5/4963/15-PCB/CI-3177

Renewal of Consent to 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 Authorization under Rule 6(i) of the Hazardous Other Wastes (Management and Transboundary Movement) Rules 2016.

[To be referred as Water Act, Air Act and HW (M & T) Rules respectively]

RENEWAL OF CONSENT TO OPERATE AND AUTHORIZATION is hereby granted to:

**M/s. VEDANTA LIMITED**  
**(UNIT: CODLI MINES)**  
(Represented by: Shri. Sauvick Mazumdar)  
(Large Scale Industry)  
(Red Category)

Mining Lease No.03/AMLG(ML-3)/VL/17  
(Earlier T.C. Nos. 70/1952, 126/1953, & 69/1951)  
Codli Mine, Kirlapale - Dabal V.P.  
Dharbandora - Goa.

Located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW (M & T) 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. This Renewal of Consent to operate and Authorization is issued in supersession of the earlier Consent Orders issued vide Order No. 5/4963/15-PCB/CI-505 dated 19/08/2015, Amendment No.5/4963/15-PCB/16244 dated 19/12/2016 is valid up to 31/08/2019
2. This Renewal of Consent to operate and Authorization is valid for the extraction, processing and transportation of:

Sr. No	Description	Quantity
1.	Iron Ore	3.155 MT/annum
2.	Beneficiation of Iron Ore fines & lumps (Plant I)	i) 3.155 MT/annum from Mining Lease No. 03/AMLG(ML-3)/VL/17 ii) 0.4 MT/annum from Mining Lease No. 03/AMLG(ML-3)/VL/17 iii) 0E- Auctioned Ore
3.	Beneficiation of Iron Ore fines & lumps (Plant II A)	
4.	Beneficiation of Iron Ore fines & lumps (Plant 3 B)	
5.	Beneficiation of Iron Ore fines & lumps (Plant IV A)	
6.	Dry Screening Plant (Plant - 3 C)	

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3. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE WATER ACT:

(i) The rain accumulated mining pit water if any should be routed through technically sound settling ponds and filter beds and meet the standards as below and results shall be submitted to the Board office online/email in the event of discharge before the 15<sup>th</sup> of every month

pH	Between	5.5 & 9.0
Suspended Solids (Non rainy day)	Not to exceed	50 mg/l
Suspended Solids (Rainy day)	Not to exceed	100 mg/l
Oil & Grease	Not to exceed	10mg/l
Fe	Not to exceed	3 mg/l
Mn	Not to exceed	2 mg/l

If applicable GSPCB shall monitor water quality at random times for surface water and ground water for the above parameters and the cost towards monitoring will be borne by the mining unit.

(ii) Domestic Effluent treatment and Disposal for Mine:-

The domestic wastewater shall be treated in existing septic tank and soak pit until the Sewage Treatment Plant is made operational. The daily quantity of domestic sewage from the unit shall not exceed 110 KLD. Treated water shall be utilized for green belt development and dust suppression.

(iii) Effluent Treatment and disposal for the Wet Beneficiating Plant:-

The effluent generated in form of slurry shall be released only into the tailing pond duly approved by the Indian Bureau of Mines as a part of Mining Plan.

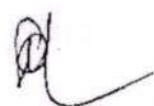
(iv) The tailing pond shall be so maintained that it will not overflow and if the applicant proposes to change the location of the tailing pond the same shall be done after obtaining approval of the Indian Bureau of Mines and the Board shall be informed of the change.

(v) The unit shall at his own cost get the effluent samples collected both before and after treatment and analysed, every month the parameters indicated above from a laboratory recognized by Ministry of Environment, Forest and Climate Change under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board, by 15<sup>th</sup> of the succeeding month.

(vi) Filter beds, checkdam, garland drains, arrestor wall, toe wall which have been provided shall be maintained all the times around reject dumps for settlement of suspended particles and to prevent siltation.

(vii) Coursing of runoff water down the slope into the settling ponds/mining pits.

(viii) To prevent siltation of rivers/ nallahs/ fields catch drains, toe wall, filter bed, check dam, garland drains, arrest wall and siltation/settling ponds shall be maintained.

  
(Levinson J. Martins)  
Member Secretary  
Goa State Pollution Control Board

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(ix) Regular monitoring of ground water & surface water level and quality should be carried out in seasons.

Ground Water Monitoring Location		
1. Well water ( near Codli Nursery - West Direction)	15°20'23.9" N	74°07'34.4"E
2. Well water (near Mr. Vishnu Naik - South East direction)	15°19'46.9" N	74°08'50.1"E
3. Well water below Old tailing Pond	15°20'13.2" N	74°07'41.1"E
4. Well water ( Mr.Inhas's house - North west direction)	15°20'53.8" N	74°07'12.7"E
Surface Water Monitoring Location		
1. Upstream Rivulet Karmone	15°19'58.399"N	74°09'21.172"E
2. Discharge from Dump 9- Talaulikar side	15°20'14.931"N	74°09'03.902"E
3. Discharge from Dump 9- Figredo Side	15°20'53.882"N	74°08'54.119"E
4. Discharge from Dump 9- RI Side	15°21'00.698"N	74°08'49.262"E
5. Downstream Rivulet Karmone/Upstream River Khandepar	15°21'23.369"N	74°08'37.465"E
6. Mine water discharge	15°21'09.147"N	74°08'03.750"E
7. Downstream River Khandepar	15°21'28.630"N	74°07'36.100"E
8. Upstream Kirlapal river	15°19'39.816"N	74°07'39.604"E
9. Discharge near Dump 4	15°19'51.994"N	74°07'49.446"E
10. Downstream Kirlapal river	15°20'07.553"N	74°07'08.804"E
11. Discharge Towards Kalsai	15°21'15.490"N	74°07'21.465"E

(x) The companies should maintain the pumping schedule for pumping the rain accumulated water from the mining pit into settling ponds.

(xi) The mining industry shall strive to implement suitable conservation measures to augment ground water resources wherever possible in the area.

(xii) The company should maintain a pumping Log Book in the following format

Sr. No.	Capacity of the pump (litres/min)	Date	Duration of pumping	Qty. of water pumped in KLD	Remarks

(xiii) The company should stack their ore/ and or ore over burden as per the approved mining plan.

(xiv) Reliable flow meter shall be installed to maintain record of water consumption per day. The records so maintained shall be made available to the Board officials whenever required.

(xv) A good house-keeping shall be maintained within the mining lease area.

  
 (Levinson J. Martins)  
 Member Secretary  
 Goa State Pollution Control Board

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(xvi) Non-Hazardous Solid Waste:

All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:

- Composting in case of bio degradable material
- The non recyclable, non – biodegradable waste to be segregated and handed over to the local body

Sr. no.	Solid waste	Quantity & Disposal
1	Overburden	As per IBM approved plan

(xvii) The Mining unit shall monitor the quality of water which is pumped into water body from the mining pits.

4. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE AIR ACT:

(i) The unit shall maintain and operate air pollution control system of adequate capacity for the following equipments

Sr. No.	Name of Equipments/ Installation	No of Installation	Capacity	SO <sub>2</sub> Kg/Hr	Particulate Matter mg/Nm <sup>3</sup>
1.	D.G. set	01	1010 KVA	5.51	75
2.	D.G. set	01	1000 KVA	3.28	75

(ii) The applicant shall observe the following standards for D. G. Sets ≥ 1000 KVA

Sr. No	Parameters	Limits
1.	NOx (as NO <sub>2</sub> )	1100 ppmv (as 15% O <sub>2</sub> ) Dry basis in ppmv
2.	NMHC(as C)	150 mg/Nm <sup>3</sup> (at 15% O <sub>2</sub> )
3.	Particulate Matter	75 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
4.	CO	150 mg/Nm <sup>3</sup> (at 15 % O <sub>2</sub> )
5.	Sulphur Content in Fuel	Less than 2%

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

Sr. No	Chimney attached to	Height
1.	D.G. set (1000 KVA)	5 mtrs
2.	D.G. set (1010 KVA)	5 mtrs

(iv) The unit shall observe the following standards:-

Sr. No	Type of fuel	Quantity /hr
1.	H.S.D. (for D.G. set of 1000 KVA)	82 kgs/hr
2.	H.S.D. (for D.G. set of 1010 KVA)	82 kgs/hr

(v) The Stack Port Hole and Platform is to be designed as per CPCB guidelines Method 1 Part 1 of Stack Monitoring – Material & methodology for isokinetic sampling

(vi) The unit should comply with all the standards for D.G. Sets prescribed at Sr. no. 94, 95 and 96 of Schedule I of the Environment (Protection) Rules, 1986.

(Levinson J. Martins)  
Member Secretary  
Goa State Pollution Control Board

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The unit should carry out emission monitoring from the stacks connected to D.G. set once in a year from a laboratory recognized by Ministry of Environment Forest and Climate Change under the Environment Protection Act, 1986 and the result shall be submitted to this Board.

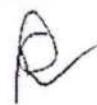
3.10) Air Quality Monitoring stations as stated in the table below should be established in the core zone as well as in the buffer zone for monitoring Particulate Matter, PM10, PM2.5, NOx and SO2. Location of the ambient air quality stations and the frequency of monitoring should be twice a week for the core zone and the buffer zone from a laboratory recognized by Ministry of Environment, Forest & Climate Change under the Environment Protection Act, 1986 and the report should be submitted online/email to the Board by the 15<sup>th</sup> of the subsequent months. In addition GSPCB shall monitor Air quality at random times in the buffer and core zone for Particulate Matter, PM10, PM2.5, NOx, SO2 and the cost towards monitoring will be borne by the mining unit. Whenever habitants are within the lease boundary or nearby to lease boundary atleast one Ambient Air Quality Monitoring Station has to be installed near to the habitation.

Applicant shall achieve following Ambient Air Quality standards in the core zone:

Fugitive Emission Standards	
Particulate matter	1200 µg/m <sup>3</sup>
Fugitive emission shall be monitored in the predominant downwind direction at a distance 25.0±2.0 meters from the source of fugitive emission as per following:	
Area	Monitoring location
Mine face/ benches	Drilling, excavation and loading applicable for operating benches above water table
Haul roads/ service roads	Haul roads to ore processing plant, waste dumps and loading areas and service road
Crushing plant	Run-off mine unloading at hopper, crushing areas, screens and transfer points
Screening plant	Screens, conveying and transportation of ore discharge points
Ore storage & loading	Intermediate stock bin/ pile areas, ore stock bin/ pile areas, wagon/ truck loading areas
Waste dump	Active waste/ reject dumps

\*Shall monitor at four locations within core zone

Buffer Zone/Transportation Monitoring Locations		
	Latitude	Longitude
1. Kaitan House Capxem (Residential + Transportation Route)	15°16'19.4"	74°06'16.2"
2. Davcona village (Residential)	15°21'36.2"	74°07'19.2"
3. Khedekar House (Residential + Transportation Route)	15° 19' 36.9"	74° 07' 59.8"
4. Talap Village (Residential)	15°20'23.2"	74°07'10.6"

  
 (Levinson J. Martins)  
 Member Secretary  
 Goa State Pollution Control Board

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The monitoring in Buffer zone would be as per the table below:

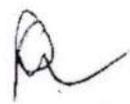
SO <sub>2</sub>	Not to Exceed (Annual Average)	50 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	80 µg/ m <sup>3</sup>
NO <sub>x</sub>	Not to Exceed (Annual Average)	40 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	80 µg/ m <sup>3</sup>
PM <sub>10</sub>	Not to Exceed (Annual Average)	60 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	100 µg/ m <sup>3</sup>
PM <sub>2.5</sub>	Not to Exceed (Annual Average)	40 µg/ m <sup>3</sup>
	Not to Exceed (24 hours)	60 µg/ m <sup>3</sup>

All other parameters should meet the standards specified in NAAQS notification dated 18<sup>th</sup> November 2009 for the relevant industry

- (ix) The trucks/tippers engaged in transportation of ore shall have sufficient free board after filling the cargo box to avoid spillage.
- (x) All trucks/ tippers engaged in the transportation of ore shall be covered with tarpaulin and the tarpaulin shall be properly fastened to the cargo box to ensure the ore does not get air borne or spill on the road.
- (xi) In case of break down of loaded trucks / tippers unloading of ore at the road side shall be strictly avoided.
- (xii) The roads within mining lease areas shall be sprinkled with water to suppress dust pollution.
- (xiii) To take afforestation in abandoned mining areas and on reject dumps located within lease area as per Approved Mining Plan. The unit should also maintain the Filter Beds, checkdam, garland drains, arrestor walls, toe wall and afforestation on and around the reject dumps located outside the lease area
- (xiv) Spillage of ore on the public roads shall be removed immediately on occurrence.
- (xv) The mining Company should make suitable arrangements for sweeping of roads affected due to transportation of iron ore.
- (xvi) The unit shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise. The limits are as follows:

Category of Area/ Zone	Limits in dB (A) Leq	
	Day time	Night time
Industrial Area	75	70
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

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.

  
**(Levinson J. Martins)**  
**Member Secretary**  
**Goa State Pollution Control Board**

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4. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDARY MOVEMENT) RULES 2016:

The unit is hereby granted authorization to operate a facility for collection, storage and disposal of hazardous wastes as specified below:

Sr. No.	Category	Type of waste	Quantity	Mode of disposal
1.	5.1	Used /Spent Oil	2,80,000 ltrs/annum	To recycler registered with CPCB and having valid authorization of SPCB
2.	5.2	Waste Residues containing Oil (Oil soaked Cotton waste)	9,500 kgs/annum	To be sent to M/s Vedanta Ltd. Met Coke Division, Amona for incineration
3.	33.3	Contaminated filters	8 MT/annum	To recycler registered with CPCB and having valid authorization of SPCB
4.	33.1	Empty Paint Tins	2,000 nos/annum	Thinner to be used for cleaning paint tins & same thinner to used for dilution of paint & decontaminated tins given for recycling.

- (ii) The authorizer shall comply with the provisions of the Environment (Protection) Act, 1986 and the rule made thereunder.
- (iii) The person authorized shall not rent, lend, sell or transfer or otherwise transport the hazardous waste without obtaining prior permission of the Goa State pollution Control Board.
- (iv) Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
- (v) It is a duty of the authorized person to take permission of the Goa State Pollution Control Board to close down the facility.
- (vi) The inner bottom surfaces of the tank shall be impervious enough to prevent leakage or seepage of these wastes into the sub surface soil or ground water.
- (vii) The occupier shall maintain a manifest system as per Rule 21 (1) for disposal of hazardous wastes to ensure that these wastes are delivered to the designated facility preventing pilferage and clandestine disposal due to unforeseen events that may occur during transit.
- (viii) The manifest shall be endorsed by the dispatcher, transporter and receiver of hazardous wastes. The endorsed copy shall be furnished to the Goa State Pollution Control Board.
- (ix) Under no circumstances the hazardous waste shall be disposed to unauthorized facilities.
- (x) The occupier shall maintain the records for collection, storage and disposal of hazardous waste in Form 3 of as per Hazardous and other Wastes (Management & Transboundary Movement) Rules 2016.

  
(Levinson J. Martins)  
Member Secretary  
Goa State Pollution Control Board

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- (xii) The occupier shall furnish monthly returns for collection, storage and disposal of hazardous waste through online XGN system.
- (xiii) The unit shall put up an board (minimum size 6x4 Feet) at prominent location near the main gate providing details as follows in English and Konkani languages:-
  - Hazardous Waste category number.
  - Hazardous Waste quantity number.
  - Treatment facility for each category.
  - Mode of disposal for each category.
  - Hazardous Waste Authorization number, date and validity period.
  - Water Consent number, date and validity period.
  - Air Consent number, date and validity period.
  - Quantity and Nature of Hazardous Chemicals being used.
- (xiv) The occupier shall ensure that the Hazardous Wastes are not allowed to be stored for more than 270 days.

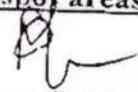
**6 GENERAL CONDITIONS:**

- (i) The applicant shall not change or alter the quantity, quality of discharge, temperature or the mode of the effluent/ emission or hazardous wastes or control equipments provided for without previous permission of the Board.
- (ii) The company should submit details regarding production of iron ore produced and the over burden generated in the month by 10<sup>th</sup> of the succeeding month.
- (iii) The company should comply with all the conditions laid down in the Environmental Clearance issued by the Ministry of Environment, Forest & Climate Change Govt. of India.
- (iv) The applicant shall provide facility for collection of samples of effluent, air emissions and hazardous wastes to the Board staff.
- (v) The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land or into the atmosphere, as result of such discharge water/ air is being polluted.
- (vi) An application in prescribed form along with the prescribed fees for renewal of Consent shall be submitted at least 90 days before the expiry of validity of this Consent. An application for renewal of Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.
- (vii) The Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the applicant.
- (viii) The applicant shall submit to this office, the Environmental Statement Report in Form V for the Financial Year ending April to March by 30<sup>th</sup> September of the succeeding year as per the provisions of the rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.

  
 (Levinson J. Martins)  
 Member Secretary  
 Goa State Pollution Control Board

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- (ix) This Consent does not entitle the party to commence activities until and unless all the other Permissions as required under the relevant statutes are obtained by the party and this Consent to Operate is confined to matters arising out of the Air Act and Water Act only.
- (x) The unit shall bear the cost of analysis / monitoring in case of complaints received by the Board/ reinspections due to non compliances observed by the Board & monitoring carried by the Board.
- (xi) The unit shall submit the details of the Public Liability Insurance Policy under the PLI Act 1991, to the Board office as applicable.
- (xii) The unit shall submit returns for disposal of batteries under the Batteries (Management & Handling) Rules 2011, if applicable.
- (xiii) The unit shall submit returns for disposal of e - waste under the E- Waste (Management & Handling) Rules 2016, if applicable.
- (xiv) The mining firm should manage the daily trips in staggered manner in consultation with DMG, so that traffic congestion is avoided at major junctions.
- (xv) The mining activity shall be strictly in accordance to the mining plan approved by the Indian Bureau of Mines.
- (xvi) Those mines having part forest and part non-forest areas and have not obtained forest clearance, consent to operate should be limited to non-forest area
- (xvii) Mining lease with common transport route should carry out Ambient Air Quality Monitoring along the transport route in consultation with the Board before the commencement of transport operation.
- (xviii) Lat Long to be done in consultation with GSPCB/IIT(DHANBAD)/CPCB/Industry.
- (xix) Other related permissions as applicable by the EC has to be obtained from the competent authorities before the commencement of the mining operations
- (xx) The unit shall submit the year-wise production & developmental plan duly approved by the IBM before the commencement of the mining operations
- (xxi) The unit should install wheel washing system, followed by a adequate tarred/cement/pavers road upto the main approach road with a cattle trap near the exit, so that dust is not carried on the transportation roads.
- (xxii) Speed of ore carrying trucks should be controlled by online GPS monitoring done by DMG through its authorized agency.
- (xxiii) Road sweeping machines, may be jointly/severally developed in hotspot areas/stretch.

  
 (Levinson J. Martins)  
 Member Secretary  
 Goa State Pollution Control Board

  
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- (xxiv) The shoulders of the mining transport roads may be tarred whenever needed.
- (xxv) Maintenance of public road in the mining area with respect to repair of potholes/widening roads whenever necessary shall be undertaken from the proceeds of the District Miner Fund.
- (xxvi) The mining company shall strictly adhere to the conditions of Ministry of Environment Forest & Climate change Office Memorandum No. Z-11013/57/2014-IAII (M) dated 29 October, 2014.
- (xxvii) The mining companies under the direction of government authorities and in consultation with the stake holders shall endeavor to introduce/replace higher capacity trucks for the transportation of ore in a view to reduce Carbon footprint in the transportation routes.
- (xxviii) The unit shall install Sewage Treatment Plant within a period of six months from the date of issue of this consent and thereafter submit compliance report to this office.

To,  
 M/s. VEDANTA LIMITED  
 (UNIT: CODLI MINES)  
 Sesa Ghor, 20 EDC Complex,  
 Patto, Panaj - Goa

- Copy to:-
- 1 Accounts Section
  - 2 Concerned File
  - 3 Guard File

Received Consent fee of: **The capital Investment of the unit is Rs. 29966.25 Lakhs**

Challan no.	Amount	Date
2725	Rs. 365212.50 (Consent fees)	20/06/2017

Typed by	Verified by
<i>Arane</i>	<i>Naabhud...</i>

- Copy to: 1. Scientist 'C' GSPCB (Air/Water Monitoring Cells)... to monitor the Air/Water Quality & inform the Technical Section of the Board immediately upon noticing abnormalities in the parameters monitored so as to take further appropriate action.
- 2. Accounts section
  - 3. Concerned File
  - 4. Guard File

  
 (Levinson J. Martins)  
 Member Secretary  
 Goa State Pollution Control Board

  
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**GOA STATE POLLUTION CONTROL BOARD**

(An ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Board)

Phone Nos : 0832- 2407700,  
2407701, 2407702  
Tel/Fax No: 0832- 2407700



Email Ids:  
Chairman, GSPCB, [chairman-gspcb.goa@nic.in](mailto:chairman-gspcb.goa@nic.in)  
Member Secretary, GSPCB, [ms-gspcb.goa@nic.in](mailto:ms-gspcb.goa@nic.in)  
Environment Engineer, GSPCB, [ee-gspcb.goa@nic.in](mailto:ee-gspcb.goa@nic.in)  
Scientist, GSPCB, [scientist-gspcb.goa@nic.in](mailto:scientist-gspcb.goa@nic.in)  
Office, [goapcb@gspcb.in](mailto:goapcb@gspcb.in)

No.12/2019-PCB/311271/R0002569

Date: 19/09/2019

Renewal of Consent to 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 Authorization of under Rule 6(i) of the Hazardous and Other Wastes (Management and Transboundary Movement) Amended Rules 2018.

[To be referred as Water Act, Air Act and HW (M & T) Rules respectively]

RENEWAL OF CONSENT TO OPERATE AND AUTHORIZATION is hereby granted to:

M/s. VEDANTA LIMITED  
(Unit: Codli Beneficiation Plant)  
(Represented by: Mr. Joseph Coelho)  
(Large Scale Enterprise)  
(Red Category)

Survey nos. 24/1,  
Villages Amona & Navelim,  
Bicholim - Goa

Located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW (M & T) 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. This Consent to operate and Authorization is issued is valid up to valid upto 10/09/2024.

2. This Renewed Consent to operate and authorization is valid for the activity of:

Sr. No	Product	Maximum Quantity
1.	Processing of Iron Ore e – auctioned by the State Government	2.1 MTPA

3. CONDITIONS UNDER WATER ACT:

(i) Tailing Disposal:-

The effluents generated in the form of slurry shall be released into the tailing pond. The tailing pond will be so maintained that it will not overflow.

Near Pilerne Industrial Estate, Opp.- Saligao Seminary, Saligao-Bardez Goa-403511

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(ii) The Surface runoff/ discharge water from tailing pond shall conform to the following standards:

pH	Between	5.5 & 9.0
Suspended Solids (non-rainy day)	Not to exceed	50 mg/l
Suspended Solids (rainy day)	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg / l
Manganese	Not to exceed	2 mg / l
Oil & Grease	Not to exceed	10 mg/l

(iii) The unit shall at his own cost get the samples of discharge water collected and analyse, every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board by the 15<sup>th</sup> of the succeeding month.

(iv) Filter beds, check-dams, garland drains will have to be maintained all around the plant.

(v) **Domestic Effluent treatment and Disposal:-**

The domestic wastewater shall be treated in a properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the unit premises.

(vi) All efforts shall be made to reuse and re-circulate the surface water after it meets the discharge parameters.

(vii) Coursing of surface run off down the slope to the settling pond through the garland drains

(viii) To prevent siltation of rivers/ nallahs/ fields catch drains and siltation ponds should be constructed. The water collected should be utilized for watering the plot area, roads and green belt development after meeting standards in Sr. No. (iii) Garland drains to be provided around the stacks.

(ix) The company should not stack their ore within 50 mts. of water bodies like rivers, lakes, streams (perennial or otherwise).

(x) Cleanliness & neatness shall be maintained within the premises.

(xi) The mining company should submit details regarding transportation of ore in the following format every month

Sr. No.	Source	Destination	Qty.	No. of trips (tipper trucks)	Route (names of villages through which transportation takes place)	Remarks

(xii) **Non-Hazardous Solid Waste:**

All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board.

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4. CONDITIONS UNDER AIR ACT:

- (i) The applicant shall provide wind breaking walls/barriers.
- (ii) The applicant shall provide dust containment cum suppression system.
- (iii) The approach roads to the premise shall be metalled.
- (iv) The applicant shall carry out regular cleaning and wetting of ground within the plot to suppress dust pollution.
- (v) The applicant shall construct garland drains along the periphery of the unit to avoid siltation of dust into seasonal streams/ agricultural land, etc.
- (vi) The applicant shall plant fast growing trees along the periphery/ compound wall of the plot to arrest dust pollution.
- (vii) One ambient air quality monitoring stations should be established in the core zone for monitoring of particulate matter and two in buffer zone for monitoring PM<sub>2.5</sub>, PM<sub>10</sub>. Location of the ambient air quality stations should be decided based on meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be twice a week for the core zone from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and results shall be submitted regularly to this Board by the 15<sup>th</sup> of every succeeding month.
- (viii) The trucks/tippers engaged in transportation of ore shall have sufficient free board after filling the cargo box to avoid spillage.
- (ix) All trucks/ tippers engaged in the transportation of ore shall be covered with tarpaulin and the tarpaulin shall be properly fastened to the cargo box to ensure the ore does not get air borne or spill on the road, in case if transportation of ore going outside the premises.
- (xi) In case of break down of loaded trucks / tippers unloading of ore at the road side is strictly prohibited
- (xii) The roads in Plot areas shall be sprinkled with water to suppress dust pollution.
- (xiii) Spillage of ore on the public roads shall be removed immediately on occurrence.
- (xiv) The mining Company should make suitable arrangements for sweeping of roads affected due to transportation of iron ore.
- (ix) The maximum height of the stock piles should be restricted to 10 meters above general ground level.
- (xv) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise. The limits are as follows:

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Near Pilerne Industrial Estate, Opp - Saligao Seminary, Saligao-Bardez Goa-403511

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Category of Area/ Zone	Limits in dB (A) Leq	
	Day time	Night time
Industrial Area	75	70
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

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.

5. **CONDITIONS REQUIRED TO BE COMPLIED UNDER THE HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDRY MOVEMENT) AMENDED RULES 2018:**

- (i) The unit is hereby granted authorization to operate a facility for collection, storage and disposal of hazardous wastes as specified below:

Sr. No.	Category	Type of waste	Quantity	Mode of disposal
1.	5.2	Waste Residues Containing Oil	500 Kgs/month	To be sent to M/s. Vedanta Limited, Met Coke Division, Amona for incineration OR to be sent to M/s. Mumbai Waste Management Ltd, Taloja for incineration
2.	5.1	Used Oil	10,000 ltrs/month	To recycler registered with CPCB and having valid authorization of SPCB OR to be sent to M/s. Mumbai Waste Management Ltd, Taloja for incineration
3.	33.1	Paint tins	500 nos year	To recycler registered with CPCB and having valid authorization of SPCB OR to be sent to M/s. Mumbai Waste Management Ltd, Taloja for landfill
4.	33.3	Oil Filters	4 MT/year	To recycler registered with CPCB and having valid authorization of SPCB OR to be sent to M/s. Mumbai Waste Management Ltd, Taloja for landfill

- (ii) The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rule made there under.
- (iii) The person authorized shall not rent, lend, sell or transfer or otherwise transport the hazardous waste without obtaining prior permission of the Goa State pollution Control Board.
- (iv) Any unauthorized change in personnel, equipment or working conditions as mentioned in the hotel unit by the person authorized shall constitute a breach of his authorization.
- (v) It is a duty of the authorized person to take permission of the Goa State Pollution Control Board to close down the facility.
- (vi) The inner bottom surfaces of the tank shall be impervious enough to prevent leakage or seepage of these wastes into the sub surface soil or ground water.

Near Pilems Industrial Estate, Opp.- Salgao Seminary, Salgao-Bardez Goa-403511

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- (vii) The occupier shall maintain a manifest system as per Rule 19 for disposal of hazardous wastes to ensure that these wastes are delivered to the designated facility preventing pilferage and clandestine disposal due to unforeseen events that may occur during transit.
- (viii) The manifest shall be endorsed by the dispatcher, transporter and receiver of hazardous wastes. The endorsed copy shall be furnished to the Goa State Pollution Control Board.
- (ix) Under any circumstances the hazardous waste shall not be disposed to unauthorized facilities.
- (x) The occupier shall maintain the records for collection, storage and disposal of hazardous waste in Form 3 of as per Hazardous and Other Waste (Management & Transboundary Movement) Rules 2016.
- (xi) The occupier shall furnish monthly returns for collection, storage and disposal of hazardous waste through online OCMMS systems.
- (xii) The unit shall put up an board (minimum size 6x4 Feet) at prominent location near the main gate providing details as follows in English and Konkani languages:-
- Hazardous Waste category number.
  - Hazardous Waste quantity number.
  - Treatment facility for each category.
  - Mode of disposal for each category.
  - Hazardous Waste Authorization number, date and validity period.
  - Water Consent number, date and validity period.
  - Air Consent number, date and validity period.
  - Quantity and Nature of Hazardous Chemicals being used.
- (xiii) The occupier shall ensure that the Hazardous Wastes are not allowed to be stored for more than 270 days.
- (xiv) The unit shall submit annual returns in prescribed format to the Board for financial year by 30<sup>th</sup> June of every year for the previous financial year.

6. **GENERAL CONDITIONS:**

- (i) The applicant shall not change or alter the quantity, quality of discharge, temperature or the mode of the effluent/ emission or hazardous wastes or control equipments provided for without previous permission of the Board.
- (ii) The applicant shall provide facility for collection of samples of discharge, air emissions and hazardous wastes to the Board staff.
- (iii) An application in prescribed form along with the prescribed fees for renewal of Consent shall be submitted at least 60 days before the expiry of validity of this Consent. An application for renewal of
- (iv) Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.

- (v) The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land or into the atmosphere, as result of such discharge water/ air is being polluted.
- (vi) This Consent is granted without any prejudice to any of the permission(s) required under any law, by laws and regulations in force.
- (vii) The Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the applicant.
- (viii) The applicant shall submit to this office, the Environmental Statement Report in Form V for the Financial Year ending April to March by 30<sup>th</sup> September of the succeeding year as per the provisions of the rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- (ix) The industry shall bear the cost of analysis / monitoring in case of complaints received by the Board/ reinspections due to non compliances observed by the Board & monitoring carried by the Board.
- (x) The unit shall submit the details of the Public Liability Insurance Policy under the PLI Act 1991, to the Board office as applicable.
- (xi) The unit shall submit returns for disposal of batteries under the Batteries (Management & Handling) Rules 2011, if applicable.
- (xii) The unit shall submit returns for disposal of e - waste under the E- Waste Management amended Rules 2018, if applicable.
- (xiii) The unit shall submit returns for disposal of plastic waste under the Plastic Waste Management amended Rules 2018, if applicable.
- (xiv) Unit shall maintain and operate the wheel washing system and tarred/cemented road and utilize the same during the iron ore transportation.
- (xv) Road sweeping machine will have to be jointly/severally deployed in hotspot area or starches along with other transporters.
- (xvi) Unit will have to submit bank guarantees of rupees 5 lakhs of two years validity for handling/processing and transportation of e-auctioned iron ore as per the consent conditions within 30 days.
- (xvii) Board shall carryout AAQM on the transportation route and the same will have to be borne by the industry.
- (xviii) The units shall manage the daily trips in staggered manner in consultation with DMG, so that traffic congestion is avoided at major junctions. Truck transportation will have to be restricted to 40trucks per hour.

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Near Pitane Industrial Estate, Opp - Saligao Seminary, Saligao-Bardez Goa-403511

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(xviii) In case if the beneficiation plant facility is utilized by other ore handlers, the unit will have to intimate same to the Board in advance and necessary permission will have to be obtained from Department of mines and geology.

To,  
M/s Vedanta Limited  
(Codli Beneficiation Plant),  
Sesa Ghor, 20 EDC,  
Patto Panaji -Goa.

Received Consent fee of: The capital Investment of the unit is Rs. 4343 lakhs

Challan no.	Amount	Date
147612	Rs. 3,35,000/- (Air & water fees)	25/03/2019

SHAMILA Digitally signed  
by SHAMILA  
DOS DOS MILAGRES  
MILAGRES MONTEIRO  
MONTEIRO Date: 2019.09.19  
15:10:55 +05'30

(Dr. Shamila Monteiro)  
Member Secretary  
Goa State Pollution Control Board

1. Copy to:- 1. The Director, Department of Mines & Geology, Ground Floor, Institute Menezes Braganza, Panaji - Goa.
2. Accounts Section
3. Scientific "C": To carryout Ambient air quality monitoring along the transportation route.
4. Concerned File
5. Guard File

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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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(An ISO 9001-2015, ISO 14001:2015, OHSAS 18007:2017 Certified Organization)

Phone Nos. : 0832-2407700  
2407701, 2407702  
2407703

Tel/Fax No. : 0832-2407700



Chairman, GSPCB: chairman@gspcb.goa.gov.in  
Member Secretary GSPCB: ms-gspcb.goa.gov.in  
Environment Engineer, GSPCB: ee-gspcb.goa.gov.in  
Scientist, GSPCB: scientist@gspcb.goa.gov.in  
Officer: goapcb@gspcb.in

No.12/2019-PCB/311271/R0002569/8576/ **Amde-32**

Date: 19/09/2019

## CORRIGENDUM

Sub: Partial modification in the Renewal of Consent to 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 Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2018. Order issued to M/s. VEDANTA LIMITED (Unit: Codli Beneficiation Plant).

Ref:-1) Renewal of Consent to Operate under the Water Act and Air Act Order bearing No. 12/2019-PCB/311271/R0002569 dt. 19/09/2019.

In partial modification in the Renewal of Consent to 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 Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2018 Order issued to M/s. VEDANTA LIMITED (Unit: Codli Beneficiation Plant) the address and the validity of the Consent of the said order referred at (1) above may be read as follows:-

**M/s. VEDANTA LIMITED**  
(Unit: Codli Beneficiation Plant)  
Survey no. 24/1, Village Codli, Dharbandora Goa

(1) This Renewal of Consent to Operate and Authorization is valid up to 10/09/2021.

All other conditions mentioned in the Renewal of Consent to Operate under the Water Act, Air Act as serial no. (1), remain unchanged.

(Dr. Shamila Monteiro)  
Member Secretary

To  
M/s. VEDANTA LIMITED,  
Unit: Codli Beneficiation Plant,  
Sesa Ghor, 20, EDC Complex,  
Patto Plaza, Panaji - Goa.

Typed by	Checked by
<i>Joia</i>	<i>Edwards</i>

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# GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700  
2407701, 2407702  
2407703

Tel/Fax No. : 0832-2407700



Email Ids:  
Chairman, GSPCB: chairman-gspcb.goa@nic.in  
Member Secretary GSPCB: ms-gspcb.goa@nic.in  
Environment Engineer, GSPCB: ee-gspcb.goa.nic.in  
Scientist, GSPCB: scientist-gspcb.goa@nic.in  
Office: goapcb@gspcb.in

No.12/2019-PCB/311271/R0002569/10466/Amde-71

Date: 12/03/2020

## AMENDMENT

Sub: Partial modification in the Renewal of Consent to 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 Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2018 Order issued to M/s. VEDANTA LIMITED (Unit: Codli Beneficiation Plant).

- Ref:-1) Renewal of Consent to operate under the Water Act and Air Act Order bearing no. 12/2019-PCB/311271/R0002569 dt. 19/09/2019.  
2) Corrigendum bearing no. 12/2019-PCB/311271/R0002569/8576 dt. Amde-32 dt. 20/09/2019

In partial modification in the Renewal of Consent to 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 Authorization under Rule 5 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2018 Order issued to M/s. VEDANTA LIMITED (Unit: Codli Beneficiation Plant), the address and the serial no. 6 General Conditions (xvii) above may be read as follows above may be read as follows:-

**M/s VEDANTA LIMITED**  
**(Unit Codli Beneficiation Plant 2A&4A)**  
**Survey No.24/1, Village Codli, Dharbandora Goa.**

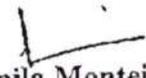
### 6. GENERAL CONDITIONS:

(xvii) The units shall manage the daily trips in staggered manner in consultation with DMG, so that traffic congestion is avoided at major junctions.

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All other conditions mentioned in the Renewal of Consent to Operate under the Water Act, Air Act at serial no. (1), remain unchanged.

  
(Dr. Shamila Monteiro)  
Member Secretary

To  
M/s. VEDANTA LIMITED,  
Unit: Codli Beneficiation Plant,  
Sesa Ghr, 20, EDC Complex,  
Patto Plaza, Panaji - Goa,

Typed by	Checked by
<i>Joia</i>	<i>Neabhadur</i>

  
TRUE COPY



Government of Goa  
Directorate of Mines & Geology  
Institute Menezes Braganza, Gr. Floor, Panaji-Goa  
Website: dmgon.goa.gov.in e-mail: dir-mine.goa@nic.in  
Ph: (0832) 2426431 Fax: (0832) 2425291

File No.03/72/2019/Major/Mines/ 9939

Date: 10/09/2019

**ORDER**

Read: Application dated 30/07/2019 and 26/08/2019.

Permission of the Directorate of Mines & Geology is hereby granted to M/s. Vedanta Ltd. for operating the Beneficiation Plants situated in part of property bearing Survey No. 24/1 in village Codli of Dharbandora taluka, South Goa and as per plan annexed herewith, subject to the compliance of the following conditions:

- a. The Applicant shall submit an undertaking that the land which will be allowed to be used by the State Government shall be used only for limited tenure of 2 years and the Beneficiation Plant shall be strictly used only for processing the ore which has been won by the successful bidder in the E-auction process which was conducted by the State Government as per the directions of the Hon'ble Supreme Court in W.P. NO. 435/12.
- b. The applicant should also give an Undertaking that by using of the Beneficiation Plant and the land which is proposed to be used, the applicant shall claim no rights/ interest towards the land on which the said Plant is situated.
- c. That the Applicant shall obtain all the necessary consents from the Goa State Pollution Control Board and other Statutory permissions/approvals as required without fail from other Government Authorities to operate the Beneficiation Plant before actual operation of the Plant.

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This Permission is also issued subject to the Applicant obtaining all the required permissions and paying all fees which will be charged by the Revenue Department towards the usage of land beneath the Beneficiation Plant and surrounding areas as surveyed by the Revenue Department.

The Permission to use the land beneath the Beneficiation Plant is subject to revocation at any time by the State Government without any intimation or Notice to the applicant.

The Applicant is further informed that in case any of the above conditions are breached then this Order will be terminated with immediate effect without issuing any further Notice to the applicant.

This issues with the approval of the State Government.



  
(Ashutosh Apte)  
Director of Mines & Geology

Place: Panaji, Goa  
Dated: 09/09/2019

To:  
✓ M/J Vedanta Ltd.  
Sector, 20 EDC Complex,  
Fatorda, Panaji, Goa-403001.

Copy to:

- 1) The Member Secretary, Goa State Pollution Control Board, Opp. Salgao Seminary, Saligao, Bardez, Goa.
- 2) The Director, Directorate of Mines & Safety, Opp. RTO Office, Fatorda, Margao, Goa.
- 3) The Regional Control of Mines, IBM, Opp. RTO Office Fatorda, Margao, Goa.
- 4) The Under Secretary, Revenue Department, Secretariat, Porvorim, Bardez, Goa.

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