

CENTRAL EMPOWERED COMMITTEE

REPORT IN IA NO. 1324 REGARDING THE ALUMINA REFINERY PLANT BEING SET UP BY M/S VEDANTA ALUMINA LIMITED AT LANJIGARH IN KALAHANDI DISTRICT, ORISSA

This report is being filed by the CEC in IA No. 1234 regarding the one million tonne per annum capacity alumina refinery project together with the 75 MW coal based captive power plant being set up by M/s Vedanta Alumina Limited (M/s Vedanta) at an estimated cost of about Rs. 4000 crores at Lanjigarh, District Kalahandi, Orissa and the associated bauxite mining project at Niyamgiri Hills, Lanjigarh.

2. The alumina refinery project will require 3 million tones per annum bauxite which is proposed to be sourced from the nearby Niyamgiri hills. After completing the preliminary works, M/s Sterlite Industries (India) Limited transferred the project for implementation to its subsidiary, M/s Vedanta. The land required for the alumina refinery and the mines are 723.343 ha. and 721.323 ha., respectively. The environmental clearance for the project was accorded by the MoEF on 22nd September, 2004 wherein it is stated that the project does not involve any diversion of forest land and that the source of bauxite for the alumina refinery will be the Niyamgiri bauxite mines near Lanjigarh. At the time of the grant of the environmental clearance, a proposal for the diversion of 58.943 ha. of the forest land for the alumina refinery was pending with the MoEF. The proposal for the use of 672.018 ha. forest land for mining is at present pending with the Ministry of Environment and Forests. The project involves the displacement of 102 families. Permission for the use of 30,000 cu. mtrs. of water per day from River Tel has been accorded by the State Government on 31.10.2003.

3. Shri Biswajit Mohanty of Wildlife Society of Orissa, Shri Prafulla Samantara and Academy of Mountain Environics have filed Application Nos. 564, 571 and 579, respectively

before the CEC against the establishment of the project. The main issues raised in these applications are collectively summarized as under:

Validity of environmental clearance:

- i) out of the land requirement of 723.343 ha. for the alumina refinery and 721.323 ha. for the bauxite mining, 58.943 ha. and 672.018 ha., respectively are forest land. The government revenue land and the private land also contain thick forest and therefore are eligible for classification as "forest" as per the Hon'ble Court's orders dated 12.12.1996;
- ii) since the project involved the use of the forest land for the alumina refinery itself, the environmental clearance could have been granted by the MoEF only after the use of the forest land was permitted under the F.C. Act. Similarly, the environmental clearance for the alumina refinery could not have been accorded without taking a decision on the mining component which is an integral part of the project;
- iii) M/s Vedanta has deliberately and consciously concealed the involvement of the forest land in the project. In the acquisition notice dated 6.6.2002 issued by the District Collector, Kalahandi it is clearly mentioned that 118 acre of forest land is included in the project site. In the application made by M/s Vedanta for the environmental clearance and also during the examination of the proposal, this vital fact was concealed so that environmental clearance is not kept pending for want of the F.C. Act clearance;
- iv) in violation of the F.C. Act guidelines, the project has been split into alumina refinery project and bauxite mining project even though the bauxite mining is an integral part of the refinery project. Though the MoEF was fully aware that the

use of the forest land for the mining at Niyamgiri hills is absolutely necessary if the alumina refinery is to be established at Lanjigarh, the environmental clearance to the alumina refinery has been accorded by the MoEF by overlooking these facts;

- v) at the time of the grant of the environmental clearance even the proposal under the F.C. Act for the use of the forest land for the Niyamgiri bauxite mines had not been filed with the MoEF;
- vi) the construction work of the alumina refinery was started on the project site much before the environmental clearance which was accorded on 22nd September, 2004. This will be evident from the annual reports and the other documents filed before the CEC. As per the statements given by the Company, 45 % of the work had been completed by 31st March, 2005 i.e. within 4 ½ months and an amount of US \$ 29 million had been spent;

Importance of Niyamgiri forests :

- vii) Niyamgiri forests are historically recognized for its rich wildlife population. It was declared a game reserve by the ex-Maharaja of Kalahandi. It has also been proposed to notify it as a wildlife sanctuary in the Working Plan for Kalahandi Forest Division, and which has been approved by the MoEF on 16th December, 1998. This area has been constituted as an Elephant Reserve by the State of Orissa vide Order N4643/WL(Cons)34/04 dated 20.8.2004. It contains elephant, sambhars, leopards, tigers, barking deers, various species of birds and other endangered species of wildlife. More than 75% of the hill is covered by thick forests with an average density of 0.6. Wild relatives of sugarcane plant are found here and which are valuable genetic sources for the future hybrids and

therefore need preservation to maintain a pure gene bank; it has more than 300 species of plants, trees, etc. including about 50 species of medicinal plants. Six of the species are listed in the IUCN Red Data Book. These forests are yet to be surveyed properly for their floral and faunal wealth;

- viii) the alumina plant and the mining project linked with it will have serious adverse effect on the flora and fauna due to mining, overburden dumping, construction of proposed road through the dense forests, liquid and gaseous effluents emissions, bright illumination, blasting with explosives, drilling and resultant vibration and dust, operation of heavy loading and unloading equipment, pollution etc.

Improper withdrawal and FC clearance proposal :

- ix) M/s Vedanta had applied for the diversion of 58.943 ha. of the forest land for the alumina refinery project. Subsequently on 27th March, 2005, which happened to be a Sunday, it made a request through the State Government to withdraw the proposal. The very next day i.e. on 28th March, 2005, the proposal was accepted by the MoEF. There was no application of mind by the regulatory agency i.e. MoEF to find out the reasons for the withdrawal, whether the project could be implemented without the forest land or

whether it will affect other issues related to the environmental clearance;

- x) the forest area of 58.63 ha. extends over a number of patches distributed in the seven villages. These patches have now lost the character of forest. It is not clear how the project can be implemented without these areas when these are widely spread inside the project site itself. They are within the compound walls of the project and can only be left out of the project on paper but not on site;
- xi) though the State Government officials were fully aware that forest land is involved in the project, the forest offence report (FOR), issue of notices to the company etc. for breaking/encroachment of forest land was initiated by the Forest Department/Revenue Department as late as 18th December, 2004 which was only after the matter was brought before the CEC and there was a public outcry over the violation of the Acts;

Niyamgiri Hills – critical water source

- xii) many perennial streams originate from the Niyamgiri hill top. It is a permanent source of water to the entire area including Kalahandi and Rayagada districts;

- xiii) 22 water harvesting structures are located in the foothills which provide year round water supply. Vamsdhara and Nagvalli are two major rivers of South Orissa which emanate from this hill. Lakhs of people of South Orissa and Andhra Pradesh depend for drinking water and irrigation on these rivers. The mining of bauxite is bound to destroy the water recharging capacity of the hill and will also cause the desertification of perennial streams;
- xiv) there is an intimate relationship between the bauxite topped mountains in Orissa and the perennial flow of water. All flat topped malis with bauxite deposits have a large number of perennial springs and streams along its slopes and which form the major source of lean season flow to the rivers in the region. This is because the bauxite is oolitic and pisolitic with high level of porosity giving it a high water retention capacity. It occurs beneath the laterite-capped plateaus and is characterized by the existence of a plateau supported by relatively impervious laterite layer with poor water retention capacity. This leads to a phyto-geographic condition wherein the plateaus are vegetated by grasses and shrubs providing a picture of a relatively unforested upland. In the present case the mining of bauxite deposits on the top of the Niyamgiri will mean the water capacity will be destroyed and the entire system of the perennial springs will be adversely affected;

Change in source of water and its impact:

- xv) in the EIA it was shown that the water for the plant would be sourced from the Vamsdhara river. Now the water is being sourced from Tel river. This river is an important source of water for irrigation and drinking for the lakhs of people of Bolangir district downstream. It is basically a dry river with very little water flow. The temporary flow in Tel river even during the lean season is because of the fact that the canal system in the command area of the Indrawati Multipurpose Irrigation Project is yet to be fully developed and implemented.

After completion of the Indravati Multipurpose Irrigation Project there will be severe shortage of water. No EIA has been conducted to assess the likely impacts of water being used from the Tel river;

Forcible eviction and rehabilitation package :

- xvi) the people have been displaced from their houses through physical eviction by the district administration. Many were beaten up by the employees of M/s Vedanta. The National R&R policy requires that land for land should be given after due process of consultation, particularly in the case of the tribals. Contrary to the above cash compensation was offered to them and which was not acceptable to many. The tribal people living on the plant site are mainly Kondhs who are illiterate and depend completely on their agricultural lands and forest for their subsistence. They have deep spiritual and cultural attachment to their ancestral lands and settlements. The displacement was opposed vehemently by them despite being offered large cash compensation by M/s Vedanta. In the face of resistance, the District Collector and the company officials collaborated to coerce and threaten them. An atmosphere of fear was created through the hired goons, the police and the administration. Many of the tribals were badly beaten up by the police and the goons. After being forcibly removed they were kept under watch and ward by the armed guards of M/s Vedanta and no outsider was allowed to meet them. They were effectively being kept as prisoners;
- xvii) apart from the land acquired by the District administration from the large number of tribals and the harijans of Bandhagunda and Rengopali villages, land was also illegally taken over by M/s Vedanta for which neither acquisition notice was served nor compensation was paid;
- xviii) about 64 households of Jaganathpur Village, most of whom are Kandha tribals have been cultivating for generations Khasra No. 186 – a revenue land.

Encroachment cases have been filed against many of them. These tribal families were evicted by force from the land being cultivated by them for generations without any compensation or any shelter thereby taking away their main source of livelihood. This has taken place even though these cultivators have been officially shown to be in possession of this land and cultivating. The eviction has taken place without any process of verification and is in violation of the special protection provided to the scheduled tribes. Though they approached the District Collector against the forcible eviction, no action was taken by him;

Transfer of land – violation of Samta judgement and MoEF guidelines:

- xix) transfer of land to the non-advasis in this area in violation of the judgment of the Hon'ble Supreme Court in Samta Vs. Andhra Pradesh case. A highly endangered primitive tribe – the Dongaria Kandha whose population is less than 6000 reside in the Niyamgiri hills. They are dependent on farming / agroforestry and have no other source of livelihood. Niyamgiri Hill is a sacred hill for the Dongaria Kandha tribe. They do not cultivate on the hill top out of respect and the hill is worshipped as Niyam Raja. The entire tribe with its unique custom and practice will become extinct if Niyamgiri hills are diverted for mining;
- xx) in the Guidelines No. 2-1/2003-FC dated 20.10.2003 of the MoEF it has been specifically stated that the maintenance of good cover is essential for sustaining the livelihood of tribal population and that in tribal areas only infrastructure development projects (other than commercial) should be encouraged. The manufacture of alumina is a commercial project which will only benefit the promoter company and cannot be described as infrastructure development project. It will thus be seen that the MoEF in this case has not followed its own guidelines;

xxi) the provisions of the Orissa Scheduled Areas Transfer of Immovable Property (by Scheduled Tribe Regulation) 1956, the Scheduled Tribe And Scheduled Tribes (Prevention of Atrocities Act), 1989 have been violated;

Disposal of toxic effluents and mining overburden :

xxii) Red Mud Pond and the Ash Pond are being established on the banks of river Vamsdhara with a part of the river actually covered by the red mud pond. A flashflood in the river can cause a breach in the pond and which could result in a massive spill in the river of noxious and poisonous red mud which is a mix of highly toxic alkaline chemicals and heavy metals including radioactive element all of which could have disastrous consequences;

xxiii) the dangerous heavy metals and the chemicals may leach the ground water and destroy all the plant life that comes into contact with it. This aspect has been glossed over in the EIA and ignored by the MoEF;

Other issues:

xxiv) the overburden from the mining will flow into the streams and pollute them and in the process also destroy the unique micro-niches along the streams as well as the habitat of many of the unique species and the drinking water source for the wild animals. The streams will dry up in the summer and no surface flowing water will be available for drinking/agricultural use. Considering the acute water scarcity in the Kalahandi district one of the few sources of perennial water should not be allowed to be destroyed;

xxv) the rehabilitation colony has been located too close to the reserve forest which may have serious adverse effect on the forest; and

xxvi) rapid EIA is only a mechanism to initiate the assessment and in the case of small projects it could cover substantive aspects of the implications. Large projects such as that being implemented by M/s Vedanta demands a comprehensive EIA. A detailed analysis is therefore essential to ensure that the eco-systems are not damaged beyond resilience. It is inappropriate to clear projects of such magnitude based on a study of only 60 days.

A copy of submission dated 5.7.2005 filed by one of the applicant is annexed hereto as **ANNEXURE - R 20** to this report alongwith extract of guidelines issued by the MoEF (**Annexure – R 7**), copy of the Executive Summary of the EIA Report of the Alumina Refinery Project (**ANNEXURE – R 3**), relevant extract of the Working Plan for the Kalahandi Division (**ANNEXURE - R 21**), relevant extract of the publication titled "Adibasi - A Journal of Anthropological Research" (**ANNEXURE - R 22**) and photographs of the area (**ANNEXURE- R 23**).

SUBMISSIONS MADE BY THE M/S VEDANTA ALUMINA LTD.

4. As per the submissions made by M/s Vedanta, M/s Sterlite Industries (India) Ltd. had entered into an MOU with the Government of Orissa on 7.6.2003 specifically for setting up one million tonne per annum alumina refinery alongwith associated 75 MW Captive Power Plant and a 3 million tones per annum bauxite mining facilities at Lanjigarh in Kalahandi district. The MOU envisaged procuring land for the project through the Industrial Development Corporation of Orissa and other State support for infrastructure and that the Orissa Mining Corporation (OMC) would take steps for executing the agreements with M/s Sterlite and the State Government for the mining lease. Pursuant to the approval for the grant of mining lease to the OMC by the Department of Mines, Government of India on 13.9.2004, an agreement was entered into between M/s Sterlite and the OMC on 5.10.2004 for the purpose of mining of bauxite reserves at Lanjigarh. As per the agreement the ownership of the mining lease is to continue with the OMC and the mines are to be operated by a Joint Venture Company of the OMC and M/s Vedanta. The agreement is subject to the OMC obtaining the mining lease from the Government of Orissa and completion of all the formalities and approvals. The land acquisition for the alumina plant was carried out through the Industrial Development Corporation of Orissa (IDCO) – a Government of Orissa undertaking. As on date, 702 acres of non-forest revenue land has

been acquired and handed over to it by the IDCO after completing the requisite legal procedure as applicable to the scheduled area.

5. The submissions made by M/s Vedanta in favour of the project are summarized as under:

About environment clearance:

- i) the public hearings on the alumina refinery and mining projects were held on 7.2.2003 and 17.3.2003, which were not attended by the applicants at all. The objections have now been raised after the project has reached a critical stage of implementation;
- ii) the MoEF by letter dated 24.3.2004 indicated that since the functioning of the alumina refinery would be dependent on the proposal for mining it has been decided to consider the two proposals for environmental clearance i.e. alumina refinery and mining together;
- iii) M/s Sterlite by letter dated 25.3.2004 sought environmental clearance for the alumina refinery on the ground that it would take three years to build the alumina refinery whereas only one year will be needed to open the bauxite mines. Thereafter the MoEF granted the environmental clearance to the refinery on 22.9.2004 inter alia on the condition that the refinery would be operationalised only after the linked mining component is permitted;
- iv) the allegation that construction was started by M/s Vedanta before the grant of environmental clearance by the MoEF is incorrect;
- v) averment that M/s Vedanta did not disclose that reserve forest area exist within the 10 km. radius of the project site is not borne out by the records. Full and accurate disclosure has been made by it including the fact of the proximity of reserved forest area. In reply to a query dated 16.9.2004 by the MoEF it had disclosed by a letter of the same date that the alumina refinery is located at the foothills of the Niyamgiri Hills. The fact that Niyamgiri Hills are reserved forests has been abundantly disclosed in the EIA report;
- vi) against Item No. 3 (a) of the application filed by it for environmental clearance it was stated that no forest land was required for the refinery and the captive power plant. At the time when the application for environmental clearance was made, there was no involvement of forest land for the refinery project and therefore against Item No. 3 (a) of the application it was correctly stated that no forest land was required (as Gramya Jungle Jogya land could not be perceived as forest land);
- vii) it is not correct to say that at the time of the grant of environmental clearance on 22.9.2004, the MoEF was not aware that forest land is involved in the project because the proposal under the F.C. Act for the use of 58.943 ha. forest land for the project was pending with the MoEF since 16th August, 2004;
- viii) after the grant of the environmental clearance on 22.9.2004, the refinery work was started without involving any "Gramya Jungle Jogya" land. Similarly, the reserve forest meant for the mine access road and the conveyor belt was not used. The work was started pursuant to the clearance granted by the MoEF;

- ix) the MoEF vide its letter dated 23.3.2005 instructed it not to take up any further construction at the project site without obtaining the forestry clearance for 58.943 ha. of forest land. On account of business expediency and to ensure that the project is not derailed it took a conscious decision to specifically inform the concerned authorities that it will implement the refinery project without involving 28.943 ha. of "Gramya Jungle Jogya" land. Further since the proposal for the diversion of 30 ha. was for "mine access road" and "conveyor corridor" it could also be included in the mining proposal. Meanwhile, it withdrew the entire 58.943 ha. of forest diversion proposal. On its request, the State of Orissa vide letter dated 27.3.2005 recommended for the withdrawal of the FC Act proposal which was accepted by the MoEF vide letter dated 28.3.2005. Pursuant to the permission granted by the MoEF for the withdrawal of the FC Act proposal, no forest land was involved in the refinery project, and therefore the MoEF withdrew its letter dated 23.3.2005 vide its letter dated 28.3.2005. Hence, there is no pending issue in respect of the involvement of the forest land in the refinery project and the project is proceeding in full compliance with the environmental clearance granted by the MoEF read with letters dated 23.3.2005 and 28.3.2005;
- x) as is usually practiced, preparation of a comprehensive EIA will be undertaken during the implementation of the project;

Use of forest land:

- xi) the MoEF guidelines regarding "not starting work on non-forest land till FC Act clearance is obtained" itself states that starting of the work on non-forest area does not technically violate the FC Act. The rationale of the guidelines is to ensure that the resources of the public sector undertakings are not wasted if the proposal is not approved under the FC Act;
- xii) 28.93 ha. of "Gramya Jungle Jogya" land within the alumina refinery is not a forest land since it is still in the custody of the Revenue Department. It is described in the revenue records only as 'suitable for village forest' and not as forest land. The TATA-AIG study did not perceive the land as forest land;
- xiii) when an ambiguity arose during the detailed land acquisition process, by way of abundant precaution, IDCO applied for the FC Act clearance for 28.93 ha. of the above said land along with 30 ha. reserve forest for road / conveyor belt. It has only 89 trees. The said proposal was received by the MoEF during August, 2004;
- xiv) Niyamgiri Reserved Forest has not been notified as a Wildlife Sanctuary;
- xv) pursuant to the queries raised by the CEC vide letter dated 2.3.2005 M/s Vedanta wrote to the MoEF and the Orissa Government on 24.3.2005 that the alumina refinery project will be carried out without involving 58.943 ha. forest land for which FC Act clearance proposal was sent by the Orissa Government to the MoEF on 16.8.2004. Accordingly, the MoEF has allowed withdrawal of the proposal;

- xvi) M/s Vedanta will not reactivate at a later stage the proposed diversion of 30 ha. of forest land sought by it for the mine road and conveyor belt. The OMC is the mining lessee who would be assessing their requirements for the effectual operation of any mining lease;
- xvii) the Forest Advisory Committee, which is the statutory body dealing with the forest diversion proposal, is yet to examine the proposal for the diversion of the forest land for the Niyamgiri mines;
- xviii) the proposal by the Orissa Government also makes it clear that the conveyor belt would be necessary only with respect to the mining proposal. Therefore, the diversion proposal for 30 ha. has been withdrawn with respect to the alumina refinery project;
- xix) it has committed about Rs. 111 crore towards various compensatory measure;
- xx) it is only the bauxite mining project which involves forest diversion. Though this project is vital to the functioning of refinery, but that by itself does not make the two projects integrated such that the commencement of the construction in the alumina refinery project would amount to a violation of guidelines under the FC Act. In any case, the mines belong to the OMC and it is going to procure the bauxite from the OMC as per agreement with it;

Rehabilitation package:

- xxi) the relief and rehabilitation package provided to approximately 300 project affected persons is the best in the State. There was not a single litigation in the acquisition process. Over 100 displaced families have been rehabilitated in the rehabilitation colonies built by M/s Vedanta Alumina Ltd. Land compensation between Rs. 1.0 lakhs per acre to Rs. 1.5 lakhs per acre has been given;
- xxii) the rehabilitation colony is barricaded and the existence of revenue land between the rehabilitation colony and the Niyamgiri Reserved Forest would serve as a buffer zone and should prevent encroachment in the reserve forest;

xxiii) Dongaria Kandha tribes do not inhabit the area proposed for the diversion;

Requirement of bauxite for Niyamgiri forest :

- xxiv) the project of alumina refinery in Lanjigarh has been planned considering the proximity to the Lanjigarh bauxite deposits. A situation of these deposits not being available to the refinery has never been envisaged;
- xxv) the concept of the mining project being integral to the alumina refinery project is inaccurate. In case, the mineral from Lanjigarh mines are not available it would obtain bauxite from other sources;
- xxvi) the raw material 'bauxite' is vital to its functioning and its availability would be an important consideration in deciding the location of the refinery. The proximity of mine would be an important factor for the successful functioning of the refinery and the production of aluminium at competitive prices. The mining project is necessary for the successful functioning of the refinery;

Drawl of water for the project:

- xxvii) the water for the project would be drawn from the Tel river. It would be negligible namely 0.44% of the average flow of the water in the lean season and about 2% of the minimum flow during the lean period and therefore would not have environmental / ecological effect; and

Mining Plan:

- xxviii) the Mining Plan and Wildlife Management Plan will be prepared by the various Expert Bodies and would cover all aspects of preservation of wildlife and eco-friendly mining practices.

Copies of affidavit dated 16.2.2005 filed by M/s Vedanta is annexed at (**ANNEXURE- R 25**) together with affidavit dated 28.3.2005 (**ANNEXURE- R 26**), affidavit dated 28.4.2005 (**ANNEXURE- R 27**) and affidavit dated 22.7.2005 (**ANNEXURE- R 28**) to this report.

STAND OF THE STATE GOVERNMENT

6. The submissions made by the State of Orissa are summarized as under:
- i) the alumina refinery and the Lanjigarh mines are complementary to each other;
 - ii) when a major project is set up, some industries do resort to undertaking parallel activities at their risk and cost. The State Government has not accorded any express permission to undertake any activity on non-forest land. At the same time it is to be appreciated that under the present legal arrangement, there is no scope for the State Government to stop the work undertaken by the project authorities on the non-forest land at their own risk;
 - iii) in the instant case the MoEF has permitted the refinery proposal to be split from the mines proposal. The mining lease has been approved in favour of the Orissa Mining Corporation (OMC) by the Department of Mines, Government of India on 3rd September, 2004. The agreement between the OMC and M/s Vedanta Alumina Ltd. was signed on 5th October, 2004. The proposal for seeking the clearance under the FC Act and the environmental clearance of the Niyamgiri mines is pending with the MoEF and the mining activity will commence only after obtaining the requisite clearance. The agreement signed with the M/s Vedanta is in no way violative of the law;
 - iv) after receipt of MoEF's letter dated 22.9.2004 by which environmental clearance was accorded for the alumina refinery complex, the State Government vide letter dated 24.11.2004 has pointed out that the project involves use of forest land;
 - v) different bauxite deposits of the State have been explored. They have either been under operation or is being processed for exploitation as per the prevailing law of the land, hence not considered for the project;

- vi) 58.943 ha. of forest land consisting of 28.94 ha. "suitable for village forest" and 30 ha. reserve forest, is an integral part of the alumina refinery project. This land is required for the development of alumina refinery complex over 26.12 ha. and construction of the service corridor, conveyor belt and approach road over 32.82 ha.;
- vii) M/s Vedanta is found to have encroached 10.41 acre of the "Gramya Jungle Jogya" land by way of land breaking and leveling activities. For this DFO, Kalahandi South Forest Division has issued show-cause notices to M/s Vedanta on 5.11.2004, 18.12.2004 and 23.2.2005 for violation of the forest laws and Tehsildar, Lanjigarh has booked encroachment cases against it under O.P.L.E. Act, 1972. After registering forest offence case against M/s Vedanta, the prosecution case has been sent to the Court of S.D.J.M., Bhawaniptana for trial;
- viii) the proposal for the diversion of 58.943 ha. of forest land for the plant was sent to the Central Government on 16.8.2004. Subsequently, on request from the M/s Vedanta and the IDCO, the State Government vide letter dated 27.3.2005 recommended for the withdrawal of the proposal which was accepted by the MoEF vide letter dated 28.3.2005. The proposal for the diversion of 660.749 ha. of forest land for Bauxite mine in favour of the Orissa Mining Corporation has been sent to the MoEF vide letter dated 26.2.2005. Earlier, approval under the MMRD Act for the grant of mining lease has been given by the Department of Mines, Government of India vide letter dated 13.9.2004 for a period of 30 years;
- ix) in the Working Plan for the Kalahandi Forest Division for the period from 1997-98 to 2006-07 it is stated that the composition of the bio-diversity in Niyamgiri Reserved Forest and the adjoining area demands creation of protected area covering 9129 ha. A portion of the Niyamgiri Reserved Forest also falls under the proposed elephant reserve. However, this area has not been notified as a national park or a sanctuary;
- x) the Niyamgiri Hill area is a habitat of wildlife. Elephants, Sambar, Spotted Deer, Leopard, Barking Deer etc. are noticed in the area. In order to preserve the flora and the fauna in the locality a scheme for the conservation and management of the wildlife has been prepared and approved by the Chief Wildlife Warden involving a financial outlay of Rs. 41.63 crore. This will be implemented as part of the project cost. A number of measures have been suggested by the Chief Wildlife Warden to minimize the adverse impact of noise pollution, use of heavy machineries, illumination at night in the project area, vehicular traffic etc. on wildlife. These include selection of eco-friendly equipment with properly designed silencers, effective equipment maintenance, no blowing of horns, use of controlled blasting technique and no heavy machinery movement during night hours etc.;
- xi) from the Niyamgiri Hill forest area, only 383 ha. is proposed to be utilised for mining. To mitigate any

adverse impact, suitable management plans are under consideration and the mining activity will start only after these plans are approved by the Government of India;

- xii) the river Vamsdhara originates about 250 meters below the plateau top of Niyamgiri Reserved Forest . Since the bauxite mining will be confined only to a maximum of 35 meters at the plateau top along with the concurrent reclamation of excavated earth, this would not affect the water source of the river;
- xiii) Dongaria Kandha tribals reside in the Niyamgiri Hills but not in the areas proposed for diversion by the M/s Vedanta. The mining activities will not affect their livelihood, custom, practices and their lifestyle;
- xiv) no endangered medicinal species grow in the Niyamgiri Hills. Nagvalli river does not originate from the Niyamgiri Hills. Some of the minor tributary rivulets of Vamsdhara and Nagvalli rivers originate from Niyamgiri Hills;
- xv) the construction of 22 pillars for the purpose of conveyor belt has been taken up by M/s Vedanta in the non-forest land;

- xvi) within a policy of promoting value addition to the mineral resources of the state, with respect to steel and related industries the State insist on 25% of the investment before recommendation of mining lease to Government of India;
- xvii) the guidelines dated 20.10.2003 issued under the FC Act regarding the stepping up of development project in tribal areas permit infrastructure development in tribal areas but do not ban undertaking of commercial projects;

Copies of affidavit dated 16.2.2005 and 28.3.2005 and comments dated 22.7.2005 filed by the State of Orissa are annexed hereto as **(ANNEXURE- R 24 (Colly.))** to this report. Copy of notice dated 6.6.2002 issued by the District Collector, Kalahandi regarding acquisition of land for the Alumina Refinery Project is annexed hereto as **Annexure – R 1**. A copy of the State Government's letter dated 24.11.2004 about the involvement of forest land in the Alumina Refinery Project is annexed hereto as **Annexure – R 6** to this report.

REPORT OF THE FACT FINDING TEAM

7. A Fact Finding Team (FFT) consisting of Shri S.C. Sharma, Former Additional Director General of Forests (Wildlife),

MoEF and Shri S.K. Chadha, Assistant Inspector General of Forests (Wildlife), MoEF was deputed by the CEC to carry out site visit between 18-23th December, 2004. A copy of the report given by the FFT is enclosed at **ANNEXURE – R 8** to this report. During the visit, the Fact Finding Team held detailed discussions with the project authorities, State Government officials, public representatives, NGOs, applicants and other stake holders and carried out the site visit to the alumina refinery site and other connected areas. The findings of the FFT are reproduced below:

"i) the project authorities have taken up the construction work of the refinery on non-forest lands without getting the clearance under the Forest (Conservation) Act, 1980 for 58.93 hectares of forest land which is an integral part of the refinery project. This is violative of the guidelines of the Ministry of Environment and Forests on the subject. In addition, they have cleared parts of the village forest land in village Kottadwar and Kinari. Show cause notice has been issued by Divisional Forest Officer, Kalahandi South Division to the user agency. It may also be mentioned that no felling of trees has been done by the company/OMC during the process of exploration drilling in the mining area;

ii) environmental clearance of the mining site should either precede or should be linked with the clearance of the refinery site. By granting site clearance without linking the project with an approved mining site an anomalous situation has been created. The Ministry of Environment and Forests in their letter No. J-11011/81/2003-IA-II dated 5.2.2004 had specifically mentioned about the linkage between the clearance of the refinery site and the mining site. Why environmental clearance for the refinery site has been granted by the Ministry without the clearance of the mining site is not understood;

iii) the rehabilitation package for the displaced persons given by the user agency is not in the interest of sustainable livelihood of the local communities as no land has been given for grazing purposes, raising agricultural crops and carrying out other income generating activities, etc. The location of the rehabilitation colony has been decided totally ignoring the interest of the conservation of forests. It is just a few meters away from the Niyamgiri Reserved Forest. Adverse impact of this colony and the labour force staying near the forest is already visible. The team saw four stumps of freshly cut sal trees in the Niyamgiri forests;

iv) Niyamgiri is a very rich forest from biodiversity point of view. A proposal has already been approved in the working plan to declare this area as a sanctuary. The relevant abstracts are part of the petition. It was further revealed that the State Government have made a proposal to include this area in the proposed new Elephant Reserve. Further, the hills form the origin of Vamsdhara river. The rivulets coming across these hills are source of water for the local communities. Any mining in this area is bound to destroy the biodiversity and

affect the availability of water for the local people. The question of pollution of Vamsdhara river is also there. Under these circumstances, alternative sources of ore should be explored for the project;

v) although the village forests extending over 58.93 hectares exist in the refinery site but these have lost their utility for the villagers. The project authorities should acquire equivalent non forest land for carrying out plantations to meet the biomass requirement of the villagers and the area be notified as village forests;

vi) appropriate action should be taken against the company for clearing the village forest land in violation of the Forest Conservation Act and clearing the trees in the project site without the proper sanction of the competent authority;

vii) the project authorities should provide free gas connections/electricity to its rehabilitation colony and labour force working in the project. The parking site for heavy vehicles, particularly trucks, etc. should be made at a place away from the Niyamgiri Reserved Forest ;

viii) project authorities should provide funding for the establishment of a Forest Section Office with the entire infrastructure and the salary of one Forester and four Forest Guards for safeguarding against illicit felling in Niyamgiri hills;

ix) the team observed lot of natural vegetation in the lands classified as Abad Ajogya Anabadi and Dongers. D.L.C. (*District Level Committee*) has not included these areas in the definition of deemed forests. Unregulated felling in these areas is likely to have severe environmental impact. The State Government should be asked to consider these areas in the list of deemed forests, wherever the extent is more than five hectares;

x) the present practice of OMC getting into agreement for allotment of the mining areas, in respect of which clearance under the Forest (Conservation) Act, 1980

and Environment (Protection) Act has not been taken, is violative of the spirit of the aforesaid Acts. Creation of the infrastructure for processing the mineral without firm commitment of the availability of the mineral puts the Government in an awkward situation;

- xi) the area proposed to be given for mining of Bauxite to M/s Sulakhmi Mines is too close to the Karlapat Sanctuary and is part of the proposed elephant reserve. Environment Impact Assessment and broad based environment management plans need to be prepared for areas having bauxite before entertaining applications for setting up of new industries in the area; and
- xii) the Ministry of Environment and Forests has to set up a mechanism under which close coordination is maintained between Impact Assessment Division, Forest Conservation Division and Wildlife Division so that the Ministry is not put in an awkward situation by issuing sanctions on the basis of information supplied by the project proponents."

AGREEMENT BETWEEN ORISSA MINING CORPORATION AND M/S VEDANTA FOR MINING OF BAUXITE

8. An agreement has been signed between the Orissa Mining Corporation Ltd., a Government of Orissa Undertaking and M/s Vedanta on 5th October, 2004 in respect of the Lanjigarh mines and Karlapat mines. The agreement provides that:

- (a) a Joint Venture Company (JVC) will be incorporated as a private limited company with 26% share holding with the Orissa Mining Corporation Limited (OMC) and the balance 74% with M/s Vedanta;

- (b) the shares will be allotted to the OMC without any payment in consideration of the services rendered by it for operating the mines. The JVC will have six directors out of which two will be nominees of the OMC (part time directors, not involved in day to day operations / running of the JVC) and four of M/s Vedanta. The Chairman and M.D. will be chosen from amongst the Vedanta nominee directors. The management control and control over its day to day operation will vest solely with M/s Vedanta;
- (c) the JVC will be the sole raising contractor to explore, exploit, develop, operate and maintain the mines. The JVC would exploit the bauxite deposits from Lanjigarh mines exclusively for supplying the said ore to the alumina refinery. The mining lease will be operated by the JVC as the raising contractor;
- (d) the OMC will assist the JVC in obtaining requisite approvals (*such as FC Act clearance, environmental clearance, MMRD Act clearance, clearance from IBM and Director General of Mines Safety etc.*) and to successfully implement the project. The expenditure incurred by the OMC in obtaining the prospecting licenses / mining lease (s) will be reimbursed by M/s Vedanta;
- (e) the cost associated with the mining of bauxite from the mines (raising cost) will be reimbursed to the JVC by the OMC; and
- (f) the bauxite raised by the JVC will be purchased by M/s Vedanta. It will pay to the OMC raising cost reimbursed by it to the JVC, royalty and other statutory dues payable to the State Government and an additional amount equivalent to the royalty / 50% of the royalty (after the alumina smelter becomes operational). For payments delayed beyond 90 days, interest at prime lending rate will be payable by it to the OMC.

9. From the above it may be seen that the agreement provides that though the mining lease will be in the name of the OMC and it will be responsible for complying with all the statutory and legal requirements, M/s Vedanta through the joint venture company will be de facto managing the mines and will be the principal beneficiary on payment of development charges, royalty and other statutory dues payable to the State Government on the extracted mineral. Thus while on the one hand M/s Vedanta will be getting all the benefits of captive mines, on the other hand it is free from obtaining all the onerous statutory clearances because the lease holder is the OMC.

A copy of the said agreement is enclosed at **ANNEXUR – R 5** to this report.

PRESENT STATUS OF THE MINING PROJECT

10. As stated earlier, an area of 721.323 ha. at Niyamgiri consisting of 672.018 ha. of forest land and 49.305 ha. non-forest land is proposed for the mining lease linked with the alumina refinery project. The mining lease has been applied for and sanctioned under the MMRD Act by the Department of Mines, Government of India on 13.9.2004 in favour of the Orissa Mining Corporation. As per the agreement between M/s Vedanta and the OMC, a Joint Venture Company with 76% and 24% share holding respectively with them will be established and which will be solely responsible for the development of the mines and extraction of the minerals. The cost towards the net present value of forest land (Rs. 55 crores), compensatory afforestation (Rs. 1.80 crores), phased reclamation plan (Rs. 0.80 crores), wildlife management scheme (Rs. 41.63 crores) and tribal welfare (Rs. 12.20 crores) totaling to about Rs. 111 crores will be reimbursed by M/s Vedanta. The mining site on the plateau top does not have any habitation. Mechanized open cast mining will be done with concurrent back filling and reclamation of mined out areas. The average thickness of bauxite is 12.6 mtrs. The project has a cost benefit ratio of 1:5.

11. The Orissa Pollution Control Board has given the No Objection Certificate on 27.5.2005. The site clearance for the bauxite mines has been given by the MoEF on 12.7.2004. The proposal

seeking the approval under the F.C. Act for use of the forest land for the mining project has been recommended by the State Government to the MoEF on 26.2.2005 and is pending with the MoEF.

WATER REQUIREMENT FOR THE PROJECT

12. As per the rapid EIA, initially it was envisaged to draw water from River Vamsdhara and a dam was to be constructed for this purpose. Subsequently it has been decided to draw water from River Tel for which about 65 km of underground water pipeline is being laid. During the construction phase about 30,000 cum water is required per day. As per the project authorities, the drawl will not have any environment/ecological effect as the drawl will be only 0.44% of the average flow of water in the lean season and about 2% of the minimum flow. On the other hand the applicants are of the view that it will have serious adverse effect on the water availability and that without proper impact assessment studies for the proposed drawl of water from River Tel the Environment Clearance has been granted by the MoEF.

VIEWS OF THE MINISTRY OF ENVIRONMENT AND FORESTS

13. During the hearing held on 28.2.2005, the MoEF was requested to forward its views on the following specific issues pertaining to the validity of the environmental clearance and the report of the Fact Finding Team:

- (i) environmental clearance to the project was accorded on the premise that the project does not involve forest land whereas actually about 58 ha. and 660 ha. of forest land is involved for setting up of the plant and for mining respectively. Under these circumstances, how can the environmental clearances remain valid and whether any action to stop the work has been initiated by the MoEF!
- (ii) the MoEF guidelines prohibit starting of work on non-forest land pending a decision about use of forest land under the FC Act, substantial work has been carried out in violation of the said guidelines whether any action in this regard has been initiated by the MoEF?
- (iii) as per the guidelines issued by the MoEF, environmental clearance and the FC Act clearance are issued simultaneously. Since, FC Act clearance has not been accorded so far, whether environmental clearance is being withdrawn!
- (iv) action if any proposed to be initiated against the project authorities for obtaining environmental clearance on wrong premise and starting the work without obtaining FC Act clearance!

- (v) views of the MoEF on the report of the Fact Finding Team;
- (vi) views of the MoEF about the origin of the rivers; and
- (vii) factual position about the 17 reported cases of illegal mining water in Orissa regularised by granting permission under the FC Act.

14. The MoEF was also requested that pending filing of the report on the project by the CEC before the Hon'ble Supreme Court, the decision on the project under the FC Act may be kept pending. A copy of the CEC's letter dated 2.3.2005 on the above is enclosed at **ANNEXURE - R 9** to this report.

15. In response, the MoEF vide affidavit dated 4th April, 2005 informed that the MoEF will take a decision on the proposal only after filing of the report by the CEC and direction thereon by the Hon'ble Supreme Court (**ANNEXURE- R 10**) Subsequently on 14.7.2005 the MoEF filed an affidavit dealing with the issues raised by the CEC, a copy of which is enclosed at **ANNEXURE - R 11** to this report. The views / observations of the MoEF are summarized as under:

- (i) in the original application made by M/s Sterlite Industries (India) Ltd. on 19.3.2003 (**Annexure – R 2**) for environmental clearance, it was stated that no forest land was required for the refinery and the Captive Power Plant and that 828.84 ha. of forest land was required for the mine. It was also stated that within a radius of 10 km. of the project site no National Park, Sanctuary or Reserved Forest was located. Based on the details provided by the applicant, MoEF vide letter dated 19.6.2003 asked him to indicate the status of FC Act clearance only in respect of the associated bauxite mining project. In the absence of any information about involvement of forest land for the project, the appraisal was carried out by the Expert Committee as per procedure on the basis of documents made available by the Applicant Company. On the basis of Expert Committee's recommendations environmental clearance was accorded on 22nd September, 2004 (**Annexure – R 4**);
- (ii) it was only after CEC's letter dated 2nd March, 2005, M/s Vedanta Alumina Ltd. (the successor company to M/s Sterlite Industries (India) Ltd.) informed the MoEF on 3rd March, 2005 that as a matter of abundant precaution during August 2004 it had moved a proposal for diversion of 58.93 ha. of forest land, comprising 28.98 ha. "Gramya Jungle Jogya" land (suitable for village forest) for refinery and about 30 ha. of forest land for the mining project for conveyor belt and road, for seeking approval under the FC Act. This fact was never brought to the notice of the Impact Assessment Agency prior to the grant of environmental clearance by the MoEF in September, 2004;
- (iii) after it was brought to the notice of the MoEF that for the establishment of alumina refinery forest land is involved, the MoEF vide letter dated 23.3.2005 amended the environmental clearance by stipulating a specific condition that "the project authorities shall not take up any further construction at the project site without obtaining the forestry clearance under the Forest (Conservation) Act, 1980 from the competent authority";
- (iv) the proposal for the diversion of 58.943 ha. forest land for the construction of the alumina refinery in favour of M/s Vedanta Alumina Ltd. was subsequently

withdrawn by the State of Orissa on 28.3.2005 (**Annexure – R 14 to R 19**) stating that the user agency will not utilise the forest land for the project. In view of the withdrawal of the project, no case under the FC Act is now pending with the Central Government;

- (v) pursuant to the directions given by the MoEF on 5.11.2004 site inspection in respect of the proposal received for 58.943 ha. of the forest land required for the alumina refinery was carried out by the MoEF's Regional Office, Bhubneshwar;
- (vi) the proposal for the diversion of 660.749 ha. of the forest land for the mining of the bauxite in Lanjigarh bauxite mines was received by the MoEF on 28.2.2005. As per the proposal, M/s Orissa Mining Corporation Ltd. (OMC) has signed an agreement dated 5.10.2004 with M/s Vedanta for the utilization of the bauxite from the mines in the proposed alumina refinery at Lanjigarh and that the bauxite will be carried by a conveyor belt from the mine to the refinery;
- (vii) the conveyor belt was proposed to be constructed on the forest land. The requirement of the forest land for the conveyor belt was included in the proposal for the diversion of 58.943 ha. for the construction of alumina refinery, but that has already been withdrawn by the State Government as stated above.
- (viii) pursuant to the MoEF's directions dated 3.3.2005, a site inspection of the area was carried out by the MoEF's Regional Office. The Regional Office has suggested that the impact of the project on the various issues mentioned in the site inspection report be fully examined / assessed by the Experts / Organisation in the relevant field;
- (ix) the MoEF agrees with the comment of the Fact Finding Team of the CEC that the starting of the construction work on the non-forest land by M/s Vedanta Alumina Ltd. is in violation of the guidelines issued under the FC Act, 1980. It is the responsibility of the user agency to seek all the statutory clearances including the environment clearance and the forestry clearance before start of the work on any project involving forest land;
- (x) the MoEF agrees with the suggestion of the Fact Finding Team that the detailed Environment Impact Assessment and the broad based Environmental Management Plans need to be prepared by Impact Assessment Division of the MoEF for the better management of the area having bauxite; and
- (xi) as per the procedure being followed now by the MoEF, in respect of the proposals involving use of the forest land while granting the environmental clearance, the MoEF stipulates a specific condition that the project authorities shall not start the construction activity without obtaining the clearance under the FC Act.

SITE INSPECTION REPORT OF THE MOEF

16. The site inspection in respect of diversion of 58.943 ha. of the forest land for the alumina refinery plant as well as the diversion of 660.749 ha. of the forest land for the bauxite mining was

carried out by the officials of Regional CCF, Bhubneshwar, MoEF. The recommendations made by the Regional CCF, Bhubneshwar are summarized as under:

For 58.943 ha. of forest land – (Annexure – R 12)

- (i) M/s Vedanta Alumina Ltd. has commenced work on the non-forest land in violation of para 4.4 of the guidelines issued under the Forest (Conservation) Act, 1980;
- (ii) the forest land proposed for the diversion is required for only a few components of projects i.e. refinery, construction of conveyor belt and mine access road. The proposal for the diversion of the forest land for the other components like mine etc. for sourcing major raw material has not been submitted so far. The present proposal is therefore a piecemeal one and does not fully reflect the extent of the forest land needed for the project. It will be appropriate that a comprehensive proposal for the diversion of all the forest land required for the alumina refinery project including the forest land needed for the mining is submitted for the consideration of the MoEF; and
- (iii) the requirement of the forest land for some components of the project should not be viewed separately from the requirement of the forest land for the other components as all the components of the project like refinery, mine access road, conveyor belt, ore mine etc. are interdependent and in case the requirement of the forest land for anyone component does not receive the permission of the MoEF it will affect the other components.

With respect to 660.749 ha. for mining – (Annexure – R 13)

- (i) alternative bauxite ore deposits are stated to exist at Karlapat, Kutrumali, Sasbahumali – Pasangmali and Sijimali. The reasons for not considering the above deposits ahead of the present proposal has not been stated though the aforesaid deposits are considered to be the future areas of raw material (refer para 2.0 of the mining plan) for the alumina plant being set up at Lanjigarh;
- (ii) 49.305 ha. of area included in the category of non-forest area in the proposal has very good vegetative cover and therefore needs to be treated as forest land in accordance with the Hon'ble Supreme Court's order dated 12.12.96;
- (iii) forest land required for the construction of the mine approach road and the conveyor belt needs to be added to the proposal. The MoEF vide letter dated 28.3.2004 has permitted the State Government to withdraw another proposal for the diversion of 58.943 ha. of the forest land which included 30 ha. reserve forest for the construction of the mine approach road and the conveyor belt;
- (iv) soil erosion is the one single factor which deserves to be studied in depth. Construction of the approach road to the hill top, excavations likely to be made for the installation of the crusher plant, vibrations caused by the blasting may result in the loosening of the surrounding earth permitting accelerated erosion. Exposure of the fresh rock surface over an extensive area having variation of around 250 meters in elevation which will then be subjected to action of the

wind, rain, heat and other natural weathering factors which may also result in rapid soil erosion;

- (v) the area is important from the wildlife point of view so much so that it was proposed to be made part of a Wildlife Sanctuary. Endangered and vulnerable faunal species have been reported from the area. The EIA report mentions of a well-balanced ecosystem with poised prey-predator relationship which will undoubtedly suffer due to the proposed mining project. The tree cover is expected to be reduced by 20%, which will result in the migration of the wildlife to the least disturbed area. The impact of the noise created by the blasting, ripping of the earth, movement of the heavy machinery, night illumination, shrinkage of the habitat and its fragmentation may all affect the physical, physiological and reproductive behaviour of the animals including the avian population. It will be difficult to take corrective measures later on. Hence, an additional in-depth study needs to be undertaken by the institutes like the Wildlife Institute of India to assess the impact and formulate best suited measures; and
- (vi) the project is located in a drought prone area where the rainfall is deficient and erratic and drought is normal occurrence. Thus, any activity that interferes with the flow of water or is likely to pollute it will be detrimental. The Niyamgiri Hills and the surrounding areas are the originating place of two major drainage system – the Vamsdhara and the Nagvalli rivers. The proposed mining project covers a major part of the hill top. The extensive land degradation / disturbance at the plateau in all probability, will alter the direction and the preferential path of the land water flow as well as the water system at the plateau and in the surrounding valley and thereby influence the natural flow of the water to the nallas, streams and rivers. Interception of the rain water from the surrounding areas through the peripheral / garland drains and its discharge downhill may further disrupt the natural water system and can also trigger soil erosion in this erosion prone area. The impact of the ground vibration on hydro-geological characteristics including ground porosity and permeability needs also to be studied to assess the impact of the project on the water system. Thus, extensive studies need to be undertaken to conclusively establish the impact of the project on the water system and the river flow in Vamsdhara and Nagvalli rivers and to evolve measures to minimize the impact.

DELINKING OF ALUMINA REFINERY WITH MINING PROJECT FOR ENVIRONMENT CLEARANCE

17. Normally environmental clearance for a project is accorded by the MoEF after considering the interdependent and integral mining project. In this case also after the examination of the proposal the MoEF vide letter dated 24.3.2004 informed M/s Sterlite that the environmental clearance for the project will be considered together with the linked mining project. In response M/s Sterlite vide letter dated 25.3.2004 requested the MoEF to consider the grant of environmental clearance to the alumina refinery project by delinking it from the mining project on the ground that the alumina refinery will require about 3 years for establishment whereas the mines can be reopened within a period of one year. Thereafter, the MoEF accorded the environmental clearance to the alumina refinery project by delinking it with the mining project. In case the diversion of the forest land for the mining project is not approved under the FC Act or the mining project is not found suitable for environmental clearance, the alumina

refinery, after incurring an expenditure of about Rs. 4000 crore, will be left without any commercially viable amount of bauxite though the main reason for selecting the project site was its proximity to the bauxite mine.

USE OF 58.943 HA. OF FOREST LAND EARLIER SOUGHT FOR THE ALUMINA REFINERY PROJECT

18. In the application dated 19.3.2003 (refer Annexure – R 2) made by the project authorities for seeking the environmental clearance to the project it is stated that the project does not involve any forest land and accordingly the proposal for the environmental clearance was examined. Earlier, in the notice dated 6.6.2002 (refer Annexure – R 1) for the land acquisition issued by the Collector, Kalahandi it is stated that 118 acre of forest land is involved for which the compensatory afforestation will be undertaken. During the pendency of the proposal, for the environmental clearance, neither M/s Vedanta nor the State Government informed the MoEF about the involvement of the forest land in the project.

19. While the proposal was pending with the MoEF for environmental clearance, a proposal for seeking approval under the FC Act for use of 58.943 ha. of forest land for setting up of the alumina refinery was submitted by the project authorities through the State Government to the MoEF on 16.8.2004. Though this proposal was pending with the MoEF, the environmental clearance for the project was accorded by it on 22.9.2004 (refer Annexure – R 4) stating that no forest land is involved for the project. Thus, the Environmental Wing of the MoEF did not appear to know about the pendency of the proposal under the FC Act with the Forestry Wing. The State Government also does not appear to have brought the factual position to the notice of the MoEF. The project authorities also did not disclose in its application filed for environmental clearance about the involvement of the forest land. If cognizance about the involvement of the forest land in the project was taken, the MoEF perhaps could not have allowed the project work to be started pending the FC Act clearance i.e. the environmental clearance would have become effective only after the FC Act clearance for use of forest land was received.

20. The proposal received under the FC Act was referred to the Regional Office of the MoEF at Bhubneshwar for the site inspection. The Regional Office of the MoEF inter alia recommended (refer Annexure – R 12) that a comprehensive proposal involving the mining component should got be prepared as the examination of individual components of the project in isolation is not appropriate.

21. Out of the 28.94 ha. of "Gramya Jungle Jogya" land included in the FC Act proposal, 10.41 acre was found to have been encroached by M/s Vedanta by land breaking and levelling activities. For this encroachment cases were filed by Tehsildar, Lanjigarh and a penalty of Rs. 11471/- was realized. Show-cause notices have been issued by the Forest Department on 5.11.2004, 18.12.2004 and 23.2.2005 for the violation of the Forest laws. The Forest Department has registered forest offence cases and has sent the prosecution case to the Court of S.D.J.M, Bhawanipatna.

22. In the meanwhile, the CEC vide letter dated 2nd March, 2005 (refer Annexure – R 9) sought clarification from the MoEF about the validity of the environmental clearance because forest land was found to be involved. Thereafter, the MoEF vide letter dated 23.3.2005 modified the condition of the environmental clearance and directed the project authorities not to take up any further work on the project till the FC Act clearance for the 58.943 ha. of forest land involved in the project is received.

23. After the MoEF directed M/s Vedanta to stop the work, M/s Vedanta vide letters dated 24.3.2005 and 25.3.2005 informed the MoEF that they have decided to construct the refinery project without involving 58.943 ha. of forest land and that because of the above (refer Annexure – R 14 and R 15) the directions given by the MoEF to stop the work are not applicable to them. The Orissa Industrial Development Corporation (responsible for acquiring the land for the project) recommended vide letter dated 25.3.2005 (refer Annexure – R 16) to the State of Orissa to take an early action for withdrawal of the forestry clearance proposal for the use of 58.947 ha. forest land. The State Government vide letter dated 27.3.2005 addressed to the MoEF (refer Annexure – R 17), which happened to be a Sunday, recommended for the withdrawal of the proposal and the same was agreed to by the MoEF on the next dated i.e. 28.3.2005 (refer Annexure – R 18). Apparently, the relevant issues such as how the project will be implemented without the use of the forest land, if forest land was not required why the proposal was moved at all, how the mineral from the mining site will be transported to the project site (for which forest land was sought) utility of the forest land interspersed with other land acquired by M/s Vedanta spread over 64 village and closed by its boundary wall, linkage of the withdrawal proposal with the environment clearance etc. were not examined.

24. On 28.3.2005 itself the MoEF, also withdrew its letter dated 23.3.2005 by which it was stipulated that the further work on the project shall be undertaken only after obtaining the FC Act clearance (refer Annexure – R 19). It may be mentioned that out of 58.943 ha., 30 ha. reserve forest was sought for the construction of the approach road and the conveyor belt and that in the non-forest land acquired for the project, pillars for the conveyor belt have already been partially constructed. While withdrawing the proposal, M/s Vedanta took a stand that this forest land may be clubbed with the mining lease proposal.

WHETHER THE MINING FROM NIYAMGIRI HILLS IS CRITICAL FOR THE ALUMINA REFINERY PROJECT

25. In the affidavit dated 16.2.2005 filed by M/s Vedanta it has stated that "*project of alumina refinery in Lanjigarh has been planned considering the proximity to the Lanjigarh bauxite deposits. A situation of the Lanjigarh bauxite deposits not being available to the refinery has never been envisaged..... and therefore the suggestion to source bauxite from alternative sources is not apprehendable.....*" (refer internal page 19 of the affidavit at Annexure – R 25).

26. After the CEC pointed out that if the mining project was an integral part of the alumina refinery project, no work could have been allowed till the mining component is cleared under the FC Act. M/s Vedanta in its affidavit dated 28th March, 2005 stated that "*vi. This respondent further states that the concept of the mining project being integral to the alumina refinery project is inaccurate and would also like to clarify that it has not been this respondent's stand, before this Committee, that the mining from the proposed forest area is an integral part of the refinery project without which the refinery project cannot be viable.....this Respondent, therefore, seeks to make clear that even without such mining activities, the alumina refinery would still be functional and this Respondent would, in such an event, obtain bauxite from other sources.....*" (refer Annexure – R 26).

27. The CEC thereafter pointed out that as per the established principles, the proposal is approved under the FC Act only if the use of the forest land is absolutely necessary and no other alternative is feasible. In the present case if the mining project is not absolutely necessary and the mineral can be obtained from other sources, the project probably would not be approved by the MoEF under the FC Act. Thereafter M/s Vedanta in its next affidavit dated 28.4.2005 stated that

"first, with regard to paragraph (vi) of the Affidavit dated 28.3.2005, this Respondent seeks to clarify that while the refinery project is a separate project, the raw material, 'bauxite' is vital to its functioning and, therefore, availability of the raw material would be an important consideration in deciding the location of the refinery and the proximity of mine would be an important factor for the successful functioning of the refinery and the production of aluminium at competitive prices. The mining project, therefore, is necessary for the successful functioning of the refinery. However, what has basically been pointed out in Clause (vi) was that while the mining project was necessary for the successful functioning of the refinery project, should the mining project of OMC not be approved, the effect would be that this Respondent would have to source its bauxite from other sources" (refer para 3, internal page 2 of the affidavit at Annexure – R 27).

28. From the above it is seen that M/s Vedanta has been changing its stand from time to time regarding the necessity of the mining project with reference to the alumina refinery project.

IMPORTANT CORRESPONDENCE IN CHRONOLOGICAL ORDER

29. The important correspondence linked with forestry and environmental clearance for the Alumina Refinery Project and associated mining component are given below in chronological order:

| <u>Date</u> | <u>Particulars</u> |
|--------------------|--|
| 6.6.2002 | Collector, Kalahandi issues notice for acquiring land for the Alumina Refinery Project. The notice shows that 118 acre of village forest land is involved in the project (Annexure-R 1) |
| 19.3.2003 | M/s Sterlite (parent company of M/s Vedanta) applies for environmental clearance to the MoEF. In the application it is stated that no forest land is involved and that within a radius of 10 kms there is no reserve forest (Annexure-R 2) |
| 24.3.2004 | MoEF informs M/s Vedanta that environmental clearance for the Alumina Refinery Project will be dealt with together with that for the mining project at Niyamgiri Hills and Lanjigarh because both are interlinked. |
| 24.3.2004 | M/s Vedanta requests the MoEF to grant environmental clearance for the Alumina Refinery Plant stating that it would take three years to construct the refinery plant whereas mines can be opened up in one year. |
| 16.8.2004 | M/s Vedanta applies for use of 58.943 ha forest land consisting of 28.943 ha village forest and 30 ha reserve forest. However, the application for environmental clearance is not modified and the same is processed on the premise that no forest land is involved. |

- 22.9.2004 Environmental clearance is given for Alumina Refinery Project by the MoEF by delinking it with mining project. In the environmental clearance it is stated that no forest land is involved (**Annexure-R 4**).
- 24.11.2004 State or Orissa informs the Environment Wing in the MoEF about involvement of 58.943 ha land in the project as against "Nil" mentioned in the environmental clearance letter (**Annexure-R 6**).
- 5.8.2004
18.12.2004
and
23.2.2005 Show cause notices issued by Orissa Forest Department to M/s Vedanta for encroachment of 10.41 acre forest land (out of 58.943 ha for which FC clearance proposal was sent) by way of land breaking and levelling.
- 16.2.2005 State of Orissa files affidavit before the CEC stating that 58.943 ha of forest land is an integral part of the project and is required for the Alumina Refinery Complex, approach road and conveyor belt (**Annexure-R 24**).
- 28.2.2003 During the hearing, the CEC raises the issue of validity of environmental clearance granted to the alumina refinery in view of involvement of forest land, whether environmental clearance is being cancelled, etc.
- 2.3.2005 CEC writes formally to the MoEF about validity of environmental clearance, for comments on the report of the Fact Finding Team. MoEF requested not to grant F.C. Act clearance till the entire issue is examined and report is filed before the Hon'ble Supreme Court (**Annexure – R 9**).
- 3.3.2005 For the first time M/s Vedanta informs the Environment Wing that forest land is involved in the project
- 23.3.2005 MoEF issues "stop work" order and directs that further construction of Alumina Refinery Project shall be undertaken only after obtaining F.C. Act clearance.
- 24.3.2005 M/s Vedanta writes to MoEF that they will implement the project without use of 58.943 ha forest land and therefore the "stop work" order is not applicable to them (**Annexure – R 14**).
- 25.3.2005 M/s Vedanta writes to the MoEF giving suo moto clarification on its earlier

letter (**Annexure – R 15**).

- 25.3.2005 Orissa Industrial Development Corporation recommends that the proposal for 58.943 ha sent to the MoEF may be withdrawn (**Annexure – R 16**).
- 27.3.2005 State of Orissa recommends to the MoEF for withdrawal of the forestry clearance proposal (**Annexure - R17**).
(Sunday)
- 28.3.2005 MoEF agrees for withdrawal of the forestry clearance proposal (**Annexure – R 18**).
- 28.3.2005 Environment Wing of the MoEF withdraws the "stop work" order issued on 23.3.1005 (**Annexure – R 19**).
- 4.4.2005 MoEF files affidavit before the CEC stating that the F.C. Act clearance proposal will be decided only after filing of the report by the CEC and direction thereon by the Hon'ble Supreme Court (**Annexure – R 10**).

OBSERVATIONS AND CONCLUSIONS

30. After considering the submissions made by the applicants, M/s Vedanta, the State of Orissa, MoEF, Site Visit report of the MoEF, report of the Fact Finding Team, Site Visit by the CEC from 14-16th June, 2005 and other relevant documents it is seen that:

- (i) M/s Vedanta is constructing a one million ton alumina refinery project at Lanjigarh at an estimated cost of Rs. 4000 crore. The basic raw material 'bauxite' is planned to be obtained from the nearby Niyamgiri Hills;
- (ii) in the notice dated 6.6.2002 issued for the land acquisition for the alumina refinery project by the Collector, Kalahandi (refer Annexure – R 1), it was mentioned that *"lands for compensatory afforestation shall be provided at other places in lieu of 118 Acres of existing village forest coming inside the project area."* Thus, the State Government even at an early date was aware about involvement of forest land in the project;
- (iii) in the application dated 19.3.2003 filed by M/s Sterlite (parent company of M/s Vedanta) for seeking environmental clearance for the project (refer Annexure – R 2) against column number 3 it is stated that "nil" forest land is required for the alumina refinery and that within a radius of 10 km. of the project site there is no reserve forest, which is contrary to the facts on record;
- (iv) subsequently, on 16.8.2004 a proposal for allowing the use of 58.943 ha. forest land, consisting of 28.943 acre of "Gramya Jungle Jogya" land and 30 ha. of reserve forest, was moved under the FC Act through the State Government to the MoEF. Out of the above, 26.123 ha. forest land was required for the refinery, 25.82 ha. for the mine access road and the balance 7.0 ha. was required for the construction of the conveyor belt for the transportation of the mineral from the mine site to the plant.

Thus though forest land was required for the project, the environmental clearance was sought stating that no forest land was required and during the pendency of the application for the environmental clearance, a proposal for the use of the forest land for the same project was submitted for seeking the approval under the FC Act;

- (v) though the proposal for the use of the forest land was pending with the MoEF, the environmental clearance for the alumina refinery was accorded by it on 22.9.2004 (refer Annexure – R 4) stating that *"The project does not involve diversion of forest land"*;
- (vi) after the grant of the environmental clearance the State Government vide letter dated 24.11.2004 (refer Annexure – R 6) informed the environmental wing of the MoEF that *"....This communication refers that area required for the project is 720 ha. and the project does not involve diversion of forest land. ..."*

The proposal for diversion of 58.943 ha. of forest land in Lanjigarh Tahsil in Kalahandi district for setting up of Alumina refinery and 75 MW Captive Power plant by M/s Vedanta Alumina (India) Ltd. has been received. The total project

area is 723.343 ha., which includes 58.943 ha. of forest land with a status of reserved forest and village forest.....The proposal has been recommended in F&E Department letter No. 12328/F&E, dated 16.8.04 to the MoEF, GoI (FC Division). This is for your information and necessary action towards issuing corrigendum if any";

- (vii) however, the environmental clearance stipulations were not modified and the work on the project was allowed to be continued. It may be seen that para 2.3 (iii) of the guidelines laid down by the MoEF (refer Annexure – R 7) states that "..... *For projects requiring clearance from forest as well as environment angles, separate communications of sanction will be issued, and the project would be deemed to be cleared only after clearance from both angles.....*" Thus the environmental clearance granted by the MoEF becomes effective only after the clearance for the use of the forest land under the FC Act is accorded unless and until both i.e. the FC Act clearance as well as the environmental clearance had been obtained. No work on the project could have been started by M/s Vedanta. Had the guidelines issued by the MoEF been followed, or the environmental wing of the MoEF had taken cognizance about the involvement of the forest land in the project or if M/s Vedanta had furnished the correct information in its application for the environmental clearance, the construction work on the alumina refinery would not have been started at all;
- (viii) normally, the environmental clearance is accorded by the MoEF after assessing the environmental issues associated with the linked mining project. In this case also the MoEF vide letter dated 24.3.2004 (refer page 8 of M/s Vedanta affidavit dated 16.2.2005 at Annexure – R 25) earlier took the stand that "*since the functioning of the alumina refinery would be dependent on the proposal for mining it had been decided to consider the two proposals i.e. mining and alumina refinery project together.*" Thereafter, M/s Sterlite vide letter dated 25.3.2004 sought the environmental clearance for the alumina refinery plant on the ground that it would take three years to build the refinery whereas the bauxite mines can be opened (made functional) in one year (refer page 8 of M/s Vedanta affidavit dated 16.2.2005 at Annexure – R 25);
- (ix) though normally in all the big projects varying time periods are required for implementing the different components of the project the MoEF had granted the environmental clearance for the refinery project vide letter dated 22.9.2004, thereby in effect delinking the alumina refinery project from the mining project. Such delinking is objectionable because the alumina refinery project has been located in Lanjigarh because of its proximity to the proposed mining site at Niyamgiri Hills, Lanjigarh. In the event, for the mining component the environmental clearance and / or the forest clearance is rejected, the expenditure of about Rs. 4000 crore being incurred on the project will become infructuous;
- (x) as per para 4.4 of the guidelines laid down by the MoEF (refer Annexure – R 7) states that "*Some projects involve use of forest land as well as non-forest land. State Governments / Project Authorities some times start work on non-forest lands in anticipation of the approval of the Central Government for release of the forest lands required for the projects. Though the provisions of the Act may not have technically been violated by starting of work on non-forest lands, expenditure incurred on works on non-forest lands may prove to be infructuous if*

diversion of forest land involved is not approved. It has, therefore, been decided that if a project involves forest as well as non-forest land, work should not be started on non-forest land till approval of the Central Government for release of forest land under the Act has been given".

The Alumina Refinery construction work has been started and continued in blatant violation of the above said guidelines;

- (xi) during the hearing held on 28.2.2005, the CEC raised the issue such as the validity of the environmental clearance granted to the project, starting of the work in violation of the guidelines issued by the MoEF, whether environmental clearance is being withdrawn, action proposed to be initiated against the project authorities for obtaining the environmental clearance on the basis of misinformation and related issues (dealt with in detail earlier page 43 under the heading "Views of the Ministry of Environment and Forests"). As per the affidavit dated 14.7.2005 filed by the MoEF (refer Annexure – R 11) it is stated "(v) That, it was only on March, 3, 2005, i.e. after the order was passed by the Central Empowered Committee (CEC), that M/s Vedanta Alumina Ltd., the successor company of M/s Sterlite Industries (India) Ltd., had informed the Ministry that the company had as a matter of abundant precaution moved a proposal to the Ministry in August, 2004 for the diversion of 58.943 ha. of forest land..... The applicant company had never brought this fact to the notice of the Impact Assessment Agency prior to the grant of environmental clearance in September, 2004." The MoEF vide notice dated 23.3.2005 directed M/s Vedanta that further construction work on the project shall be undertaken only after getting the requisite clearance under the FC Act;
- (xii) instead of stopping the work, M/s Vedanta vide letter dated 24th March, 2005 informed the MoEF and the State Government that they will implement the refinery project without involving the use of 58.943 ha. of forest land and that since the refinery project does not involve any forest land, the directions issued by the MoEF to stop the work are not applicable (refer Annexure – R 14). The State Government vide letter dated 27th March, 2005 which happened to be a Sunday, recommended (refer Annexure – R 17) that the proposal pending under the FC Act may be allowed to be withdrawn which was accepted by the FC division of the MoEF on 28th March, 2005 (refer Annexure – R 18). On the very same day the environmental wing of the MoEF informed M/s Vedanta that the Ministry's letter dated 23.3.2005 stands withdrawn (refer Annexure – R 19);
- (xiii) the intentional or otherwise concealment of the fact about the involvement of the forest land, grant of environmental clearance by delinking the mining project from the refinery project, no action taken on the State Government's letter dated 24.11.2004, violation of the guidelines issued by the MoEF and later on prompt permission granted to withdraw the FC Act proposal itself enabled M/s Vedanta to take up the project construction work without obtaining the FC Act clearance for the plant / mine site which otherwise would not have been possible;
- (xiv) while permitting the withdrawal of the proposal, the reason for withdrawing the proposal, its effect on environmental clearance, whether the project could be implemented without the use of the forest land, whether the conveyor belt for transporting the bauxite and the approach road could be constructed without the

use of forest land, why the certificate about the absolute necessity of the forest land for the project was given by the concerned officials and whether the withdrawal of the proposal is linked with the stopping of the work by the MoEF and other related issues do not appear to have been examined or analyzed. It was also not ascertained whether the forest land, could be retained as 'forest' when it is interspersed at various locations within the other project land and is enclosed by the compound wall of the alumina refinery plant;

- (xv) after the 'stop work' order was issued by the MoEF on 23.3.2005 the proposal for withdrawal was moved by M/s Vedanta immediately on the following day and then forwarded by the Orissa Industrial Development Corporation, recommended by the State Government (on a Sunday) and the decision to allow the withdrawal of the proposal as well as to withdraw the 'stop work' order was taken by the MoEF on 28.3.2005 all within a period of five days. On the other hand it took months to take cognizance about the involvement of the forest land in the project and to issue 'stop work' order. It may be seen that the MoEF vide affidavit dated 4.4.2005 (refer Annexure - R 10) had confirmed that pending filing of the report by the CEC and directions thereon by the Hon'ble Supreme Court the proposal under the FC Act for the mining project will be kept in abeyance. **If the forestry clearance proposal itself had not been withdrawn by M/s Vedanta and the withdrawal not accepted by the MoEF, the work on the alumina refinery would necessarily have had to be stopped till the entire matter was examined by this Hon'ble Court ;**
- (xvi) in the affidavit dated 16.2.2005 (refer para 5.1 of the affidavit at Annexure – R 24) the State of Orissa had taken an unequivocal stand that *"The 58.94 ha. of forest land (28.94 ha. 'suitable for village forest' + 30 ha. of reserve forest) is an integral part of the Vedanta Alumina Project. This land is required for development of Alumina Refinery complex over 26.12 ha. and construction of service corridor, conveyor belt and approach road over 32.82 ha. Accordingly, the applicant has submitted forest diversion proposal through the State Government to the Ministry of Environment & Forests."* The site inspection report of the Regional office of the MoEF (refer Annexure – R 12) also corroborates this. The pillars for the ropeway have been constructed by M/s Vedanta on the non-forest land acquired for it. 10.41 acre of the said land was found to have been encroached by M/s Vedanta by way of land breaking and levelling activities for which forest offence cases have been registered and show-cause notices have been issued by the Orissa Forest Department (dealt with in this report under the heading "Use of 58.943 ha. of forest land earlier sought for the Alumina Refinery Project" page 56);
- (xvii) inspite of the above, the forestry clearance proposal for 58.943 ha. of forest land has been allowed to be withdrawn and thereafter work on the project allowed to be continued. The withdrawal of the proposal has been justified by M/s Vedanta taking a stand that *"Further since the proposal for diversion of 30 ha. was for mine access road and conveyor corridor and could also be included in the mining proposal VAL withdrew the entire 58.943 ha. forest diversion proposal"* (refer para 7 of M/s Vedanta affidavit dated 22.7.2005 at Annexure – R 28) and that *"With regard to the query as to whether withdrawal of the proposed diversion of 30 hectares of forest land sought for by this Respondent for the mine road and conveyor would not be reactivated at a later stage by this Respondent,*

it is stated that this Respondent would not do so. The mining lessee being OMC it is only such party who would be assessing their requirements for effectual operation of any mining lease" (refer para 6 of M/s Vedanta affidavit dated 28.4.2005 at Annexure – R 27). Apparently, the proposal for obtaining forest clearance has been withdrawn by M/s Vedanta to basically circumvent the 'stop work' order issued by the MoEF (after CEC questioned the validity of the environmental clearance) and not because the use of the forest land was avoidable;

- (xviii) the bauxite mining project involves the use of 672.018 ha. forest land in the Niyamgiri Hills (660.749 ha. forest land for mining and 11.269 ha. for safety zone). The area is rich in wildlife, has dense forest cover and has been proposed to be notified as a Wildlife Sanctuary in the Working Plan of the area duly approved by the MoEF under the FC Act (refer Annexure – R 21). It is also constituted as an Elephant Reserve by the State of Orissa vide order dated 20.8.04. The importance of the area being rich in wildlife has been acknowledged by the State of Orissa ;
- (xix) the CEC had deputed a Fact Finding Team (FFT) to look into the various issues raised about the alumina refinery project and the associated mining project. The findings of the FFT, which are dealt with in this report under the heading "Report of the Fact Finding Team" has made several adverse observations about taking up of the refinery construction work in violation of the FC Act guidelines, issue of show-cause notice by the Orissa Forest Department for encroachment of forest land by way of land breaking and levelling by M/s Vedanta, necessity of environmental clearance for the mining site before the refinery site, the rehabilitation package for the displaced persons not being in the interest of sustainable livelihood of the local communities, Niyamgiri Hill being a rich forest from the bio-diversity point of view and proposed for Wildlife Sanctuary and to be included in elephant reserve, Niyamgiri Hills being origin of Vamsdhara river and other rivulets, likely adverse effect of mining on bio-diversity and availability of water for the local people, agreement entered into by the Orissa Mining Corporation for the allotment of the mineral without first obtaining the clearance under the FC Act being against the spirit of the FC Act etc. The FFT has recommended that the project authorities should explore alternative source of bauxite mineral;
- (xx) the Regional Office of the MoEF has made observations about the commencement of the work in violation of the FC Act guidelines, necessity of submitting a comprehensive proposal for the use of the forest land for the project including for the mining, linkage of the mining project with the refinery project, alternative source of bauxite mineral, importance of the area from the wildlife point of view, likely effect of the proposed mining on water regime etc. and recommended that the FC Act proposal for the refinery should not be examined in isolation. It has also recommended for an in depth study on the following aspects through reputed institutes before taking a view on the project (a) impact on wildlife; (b) impact on water regime; and (c) impact on soil erosion (dealt with in this report earlier under the heading "Site inspection report of the MoEF" page 50);

- (xxi) as per the applicants Niyamgiri Hills forms the source of the Vamsdhara river and a major tributary of the Nagvalli. 36 streams originate from within the mining lease site. Most of these streams are perennial due to springs originating just below the bauxite escarpment. These are used for irrigation as well as a source of drinking water by the people living in the adjoining villages. By mining of bauxite deposits at the top of Niyamgiri the water retention capacity of the bauxite deposit will be destroyed. The mining will lead to the flow of mineral overburden into the streams. In the process it will destroy the unique micro-niches along the streams (refer submissions dated 5.7.2005 by the applicant at Annexure – R 20). On the other hand the State of Orissa and M/s Vedanta have taken the stand that the mining will not have any adverse effect on the water regime in this area;
- (xxii) M/s Vedanta had earlier taken a stand that the bauxite mines at the Niyamgiri Hills are absolutely necessary for the alumina refinery project without which it cannot survive. In fact, the location of the alumina plant was based on the availability of the 'bauxite' from the Niyamgiri Hills. After the issue about the linkage of the project with the mining and the consequent validity of the environmental clearance was raised, M/s Vedanta took a stand that the proposed mines at Niyamgiri Hills are not necessary for the alumina refinery project and that it will make alternative arrangements if the same are not approved. After it was pointed out by the CEC that the use of the forest land for the Niyamgiri Hill mines can be approved under the FC Act only if the use of the forest land is absolutely necessary and no viable alternative is possible, M/s Vedanta again changed its stand and stated that the mines are absolutely necessary (dealt with in this report earlier under the heading "Whether the mining from Niyamgiri Hills is critical for the Alumina Refinery Project" page 60);
- (xxiii) the agreement signed between the Orissa Mining Corporation (OMC) and M/s Vedanta for establishment of a joint venture company for bauxite mining from Niyamgiri Hills, Lanjigarh and another mine provides that though the mining lease will be in the name of the OMC and it will be responsible for securing and complying with all the statutory approvals and legal requirements, M/s Vedanta will be de facto managing the mines and will be the principal beneficiary on payment of development charges, royalty and other statutory dues. Thus, it will be getting all the benefits of a captive mine without being responsible for obtaining onerous statutory clearances (dealt with in detail in this report under the heading "Agreement between Orissa Mining Corporation and M/s Vedanta for mining of bauxite" page 38);
- (xxiv) serious allegations have been made by the applicants about the use of force for evacuating the tribals from their land, non-payment of compensation to the tribals who were traditionally using the Government land for cultivation etc. (by way of encroachment, for which the State Government stands committed to regularize), no land for the settlers, emotional attachment of the tribals with their land etc. This has been refuted by the State Government as well as the project authorities;
- (xxv) Dongaria Kandha tribe resides in Niyamgiri Hills. As per the applicants, they have unique culture, they worship Niyamgiri Hills, are dependent on it for their survival and that undertaking of mining at Niyamgiri Hills will result in extinction of the tribe. In support a publication namely "Adibasi – A Journal of

Anthropological Research" published by the Government of Orissa has been relied upon (refer Annexure – R 22). The project authorities as well as the State Government have taken a stand that project would not have any adverse effect on them;

- (xxvi) initially, about 30,000 cubic metre water per annum for the project was proposed to be drawn from Vamsdhara river after constructing a dam thereon. Now, it has been decided to draw the water from Tel river. Detailed Impact studies for the withdrawal of water from Tel river do not appear to have been done;
- (xxvii) out of 58.943 ha. of the forest land for which the FC Act approval was sought, M/s Vedanta has been found to have encroached 10.41 acre land by way of levelling and breaking of land. For this offences under the relevant Acts have been registered by the Forest Department as well as the Revenue Department. Later on, for this very forest land M/s Vedanta withdrew the proposal earlier filed under the FC Act;
- (xxviii) as per the applicants the location of the pond for the red mud, which is a mix of highly toxic alkaline chemicals and contains a cocktail of heavy metals including radioactive elements and the Ash pond on the Vamsdhara river may cause serious water pollution. The breach of the red mud and the ash pond may cause severe damages downstream. The potential of such an occurrence has not been properly assessed. M/s Vedanta has refuted this; and
- (xxix) the applicant has pleaded that the present project is of a mega dimensions and is expected to continue operations for several decades. Instead of taking a rapid EIA, a detailed EIA study should have been done before considering the project in an eco-sensitive area.

31. The CEC is of the view that though the forest land is required for the alumina refinery project itself and also for the associated mining component, the environmental clearance has been granted on the wrong premise that no forest land is involved and by inappropriately delinking the mining component. Even after the State of Orissa pointed out about the involvement of the forest land in the project no corrective measures were taken. On the contrary in violation of the MoEF guidelines the work was allowed to continue. The 'stop work' order was issued by the MoEF only after the validity of the environmental clearance was questioned by the CEC. Thereafter, instead of stopping the project work, M/s Vedanta sought the withdrawal of the forestry clearance proposal itself which was immediately accepted without examining its effect, propriety, linkage with environmental clearance and 'stop work' order and that use of at least part of the forest land is totally unavoidable for the construction of the approach road and the conveyor belt for the transportation of the bauxite mineral.

The project is based on and is totally dependent on mining of bauxite from Niyamgiri Hills, Lanjigarh, which is an important wildlife habitat, part of elephant corridor, a proposed wildlife sanctuary, having dense and virgin forest, residence of an endangered Dongaria Kandha tribe and source of many rivers/rivulets. But for the grant of environmental clearance on the wrong premise, violation of the FC Act guidelines and the subsequent permission given in haste for the withdrawal of the forestry clearance proposal without proper examination, the alumina refinery construction work could not have been started / continued.

The Regional office of the MoEF has made adverse observations against the splitting of the project in two separate proposals and has recommended in depth study through reputed institutes on effect of the project on wildlife, water regime and on soil erosion before taking a view on the proposal. Though use of 30 ha. of reserved forest is necessary for the project, presently it is neither part of the refinery project nor that of the mining proposal.

The allegations about the improper rehabilitation and the forceful eviction needs to be looked into carefully through an impartial and unbiased agency. The alumina refinery project should have been allowed to be constructed only after carrying out in depth study about the effect of the proposed mining from Niyamgiri Hills on water regime, flora and fauna, soil erosion and on the Dongaria Kandha tribes residing at Niyamgiri Hills and after careful assessment of the economic gains vis-à-vis environmental considerations. By delinking the alumina refinery project from the mining component an undesirable and embarrassing situation has been allowed to happen (by the MoEF) where in the event of Niyamgiri Hills forest not being approved under the FC Act for mining lease, the entire expenditure of about Rs. 4000 crore on the alumina refinery project may become infructuous as the project is unviable in the absence of Niyamgiri Hills mines.

RECOMMENDATIONS

32. The CEC is of the considered view that the use of the forest land in an ecologically sensitive area like the Niyamgiri Hills should not be permitted. The casual approach, the lackadaisical manner and the haste with which the entire issue of forests and environmental

clearance for the alumina refinery project has been dealt with smacks of undue favour/leniency and does not inspire confidence with regard to the willingness and resolve of both the State Government and the MoEF to deal with such matters keeping in view the ultimate goal of national and public interest. In the instant case had a proper study been conducted before embarking on a project of this nature and magnitude involving massive investment, the objections to the project from environmental/ecological/forest angle would have become known in the beginning itself and in all probability the project would have been abandoned at this site.

33. Keeping in view all the facts and circumstances brought out in the preceding paragraphs it is recommended that this Hon'ble Court may consider revoking the environmental clearance dated 22.9.2004 granted by the MoEF for setting up of the Alumina Refinery Plant by M/s Vedanta and directing them to stop further work on the project. This project may only be reconsidered after an alternative bauxite mine site is identified.

This Hon'ble Court may please consider the above report and may please pass appropriate orders in the matter.

(M.K. Jiwrajka)
Member Secretary