IN THE SUPREME COURT OF INDIA CIVIL ORIGINAL JURISDICTION WRIT PETITION (CIVIL) NO. 435 OF 2012

ln	the	matter	of

	Goa Foundation	Petitioners
Union of India & Ors.	Respondent	

REJOINDER AFFIDAVIT ON BEHALF OF THE PETITIONER TO THE COUNTER-AFFIDAVIT FILED BY STATE OF GOA

I, Dr. Claude Alvares, S/o Late Mr. Peter Alvares, Secretary of the Petitioner, having its office at 7, Le Brag Chambers, Mapusa, Goa, (presently in New Delhi) do hereby solemnly affirm and state on oath as under:

- That I am the Secretary of the Petitioner in the aforementioned writ petition and being familiar with the facts and circumstances of the case, I am competent and authorized to swear this Affidavit. I have read the affidavit in reply dated 8th February 2013 filed by the Goa Government in the above writ petition and submit my response as under. The petitioner craves liberty not to give a para-wise reply.
- At the outset, it is submitted that the state government has not seriously disputed any of the facts or data stated in the reports of the Justice Shah Commission of Inquiry and the CEC based on which the Commission and the CEC have arrived at their findings and made their recommendations. Nonetheless, the Goa Govt disputes the findings/conclusions of both the Commission and the CEC that there has been large scale illegal mining and exports in the State of Goa. It argues instead that these are either technical violations which ought to be regularised or that strict compliance of the various provisions of the law is not necessary in the face of modern-day business practice. The petitioner denies and rejects all statements made in regards to the petitioner's secretary (deponent herein). Petitioner's conduct and the causes it has espoused have been appreciated by the Bombay High Court on several occasions. Even the state government is unable to grudge the petitioner its hard work in environment protection through 25 years of public interest litigation. Not a single adverse comment from any Court for 25 years should be seen as certificate enough. Same cannot be said about the state government. The petitioner is zealously and diligently pursuing all non-mining matters including CRZ and forest matters still pending adjudication before the Hon'ble High Court which are not the subject matter of this writ petition.
- In respect of para 5 (b), the averments made therein are denied. Petitioner commenced withdrawal of its mining-related petitions which were pending in the High Court immediately upon filing this petition in this Court and it had already withdrawn 3 petitions before this Court's order dated 5.10.2012 was passed. Appropriate applications or affidavits were individually filed in each pending petition thereafter. The table of petitions on mining with the date of the High Court order permitting withdrawal is at Annexure A (Page). All petitions stand withdrawn; delay in withdrawal is due to recusal orders or where respondents asked for time to consult with their clients and the High Court granted their request.
- Though the Goa Government has now attacked the CEC in the affidavit, this is what the Chief Secretary on behalf of the Goa government, wrote in a letter dated 27 11 2012 to the CEC:
 - "The State government is thankful to Shah Commission for pointing out irregularities and making recommendations and also commends CEC for its valuable inputs, advice and suggestions and is willing to submit its acts for scrutiny by any agency the Honorable Supreme Court may decide to appoint or designate."
- For the State government to now cast aspersions on the work of the Justice Shah Commission and the CEC as is done in this affidavit is simply unacceptable conduct. None of the persons involved in the Justice Shah Commission or the CEC stand to gain in any material way from their reports despite their obvious labours.
- The petitioner strongly objects to the suggestion that just because the CEC has pointed out serious irregularities in the mining industry in Goa, therefore the CEC should be replaced. The Justice Shah Commission was headed by a former judge of this Hon'ble Court. The Commission worked in Goa for over six months, it interacted with officials and visited all mining leases, a feat the officials of the State Government have not be able to do for the past five years. The CEC considered the report of the Commission, inputs from the State Govt departments, the mining federations, the lessees, the petitioner and within 2 months it produced a report, with five volumes of annexures. The State Government, in contrast, has finally filed an affidavit nearly five months after the petition was first filed and copy provided to it but without any report on the results of any of the enquiries it claims to have initiated.
- The State government, in all fairness, should have also indicated that there is a larger section of Goa's population "the mining-affected people" who have faced, without relief and recourse, the adverse and negative consequences of mining and for whom the stoppage of mining has brought tremendous relief. Their water bodies, agricultural lands, fisheries, tanks now have some respite. Streams and rivers are now clean again. State Government has not noticed that there is great happiness with this Court's intervention in the towns of Sanguem, Quepem, Sanvordem and mining villages; that as per several news reports, villagers are happy to return to agricultural operations, that production of coconut and other crops, hitherto greatly diminished due to dust pollution, has again increased in all mining areas. The State Government has not even mentioned the gross environmental damage already suffered due to the collusion between the authorities and the influential, economically powerful miners. These environmental impacts are not unique, but have been a regular occurrence over three decades, documented by scientists and researchers.
- The environment and health consequences resulting from the activities of lease owners are so well-documented and so universally acknowledged that it is not necessary at this stage to go into them in very great detail but the State Government was at least duty bound to concede them. The petitioner is annexing the summaries of 23 scientific research studies, some sponsored by the MOEF itself, others carried out under instruction by the Goa government itself or some, like the NEERI study of the water and agricultural crisis faced by Shirigao village, ordered by the Bombay High Court. Highlights of these studies in summary

SCIENTIFIC STUDIES ON THE ENVIRONMENTAL IMPACTS OF MINING IN GOA

Area Wide Quality Management Plan (AEQM) for the Mining Belt of Goa, submitted to the Directorate of Planning Statistics and Evaluation, Government of Goa, TERI, November 1997

The Area-wide Environmental Quality Management Plan for the mining belt of Goa was done to assess the impacts of large scale mining and related activity on the environmental quality of the area and to structure a set of management strategies to improve it. The study looks at evidence of land, air and water pollution. The study came to very adverse findings. It provided various different cost-based measures for rehabilitation and repair, the lowest at Rs.5 per tonne, the highest at Rs.14 per tonne. Neither mining industry nor Goa responded. Recommendations never implemented.

Effect of Mining Activities on the Clam Fisheries and Bottom Fauna of Goa Estuaries. National Institute of Oceanography (NIO), 1985

A comparison between two clam beds and associated benthic fauna, in the Mandovi and Cumbarjua Canal estuarine system of Goa revealed that this ecosystem has been severely affected by massive inputs of mining rejects in less than 10 years (1972-73 to 1982-83).

The yield of shellfish is estimated at 1000 tonnes per year. The extraction of one tonne of export quality ore generates about 1.5 tonnes of mining rejects. Over 300 million tonnes of mining rejects are thought to have accumulated in the mining belt of Goa. Study estimated 70,000 tonnes entered the river bed every year (@14 million tonnes export in that year. Today the figure would be scaled to 200,000 tonnes.) Study established 70% reduction in clam population. NIO discontinued study after it found no one was listening.

c) Present Status of Groundwater Recharges and Availability in the Mining Watersheds of North Goa. TERI, 2005

Water sheds in mining areas indicated either black (critical) or red (most critical) status due to mining.

d) Assessment of the Depletion of Groundwater Sources and Land Degradation in Sirigaon Village, Goa, and Mitigation Measures, submitted to Honourable High Court of Bombay at Goa, (PIL No. 1/2008, dated 16th June, 2008). National Environmental Engineering Research Institute (NEERI), Under Council of Scientific and Industrial Research, Nagpur, March, 2009

The High Court of Bombay, Goa directed the National Environmental Engineering Research Institute (NEERI) to study water dearth in Sirigao village wells, drying up of springs and the degradation of agricultural land aspects in relation to mining activity in around the village and suggest mitigation measures. Study confirmed destruction of agricultural lands and destruction of ground water aquifer.

e) Distribution of Iron Ore and Manganese, National Institute of Oceanography (NIO)

This study is not linked to directly to the impact of mining on the Mandovi and Zuari estuaries, however it draws conclusions relating to an increased level of iron and manganese particulates in the estuaries, whose obvious source is mining and the transportation of ore.

f) Effect of Mining Rejects on the Nutrient Chemistry of Mandovi Estuary, Goa, Indian Journal of Marine Sciences, Vol. 28, December 1999, pp. 355-359

About 90% of the Goa's mineral ore is transported through the Mandovi and Zuari estuaries from stacking points situated upstream to the Port at Mormugao. The study states that an iron ore beneficiation plant on the bank of the Mandovi estuary uses river water to wash the iron ore and discharges waste water directly into the estuary.

Consequently, this results in reduced biological uptake of nutrients due to high turbidity, increase in estuarine metal content. Mining rejects also act as a source of nitrate to the estuary. Large quantities of (10 tonnes per month) of ammonium nitrate used for rock blasting, are discharged in to the river, and carried both upstream and downstream by tidal currents.

g) Distribution and Seasonal Variation of Trace Metals in Surface Sediments of the Mandovi Estuary, West Coast of India, Chemical Oceanography Department, National Institute of Oceanography (NIO), Goa.

The concentration and distribution of selected trace metals in surface sediments of the Mandovi estuary were studied to determine the extent of anthropogenic inputs from mining activities and to estimate the effects of monsoon on geochemical processes in this tropical estuarine system. An important observation is that, in general the lowest metal concentrations are found in the monsoon.

The elevated values identified for Fe and Mn in the Mandovi estuary indicate that the surface sediments are strongly or moderately contaminated to some extent, as a result of anthropogenic activities and provide a useful means of distinguishing between the natural and anthropogenic sources of metals entering the coastal zone through river inputs.

h) Environmental/Social Performance Indicators (ESPIs) and Sustainability Markers in Minerals Development: Reporting Progress Towards Improved Health and Human Well-being, Phase III, 2006, TERI

This important study (first of its kind) attempts to identify the extent of respiratory illness in the community as result of exposure to particulate matter and to value the cost of ill health as a result of air pollution in the mining regions of Goa.

Collectively the results on exposure levels, self-reported and observed suggest a strong correlation between high levels of exposure to suspended particulate

matter and respiratory ill-health. Total annual cost of ill health due to doctors' visits and wages for the mining region is R. 71,236,788 (US \$ 1,548,626).

i) Dust Pollution at Curchorem due to Mining Activities & Other Related Issues, Report of the Committee constituted by the Government of Goa, 1994,
Chairman – Dominic Fernandes

Dust pollution is caused primarily due to mining activities in Sanguem-Sanvordem area and the allotment of plots at various places for stacking iron ore. In addition, pollution is caused due to ore which is transported by rail/road from Karnataka. The ore movement by trucks to the series of jetties, along the Zuari River in the Sanvordem-Curchorem belt from stack yards and from mining areas, is the major cause of dust pollution in that area.

[Some 25,000 people have had to suffer the dust pollution in this area for something close to 30 years. Only relief has come due to closure of mining in Karnataka.]

Effect of Mining on the Microbial Ecology of Biocholim Taluka – Goa: Possible Restoration Processes in the Region, Submitted to the Ministry of Environment and Forests, New Delhi, November 1995

The study states that among the most destructive repercussions of mining its effect on the biological potential of land is the worst. The mining industry in Goa caused immense ecological damage only due to improper planning. In Assnora and Usgao – Pale villages, rice fields are now one meter higher than they were 20 years ago, filled with mud from mining dumps (Alvares, 1993) and cannot be used for cultivation unless the mud is removed and the fields amended suitably. Studies have indicated that the productivity of rice per hectare in these regions is often less than 600 kg per hectare due to immobilisation of nutrients and toxicity of metals in the mining waste compared with 3000 kgs of rice per hectare in non-mining regions.

The main objective of the study was to analyse the soil physiochemical, enzymological and microbiological characteristics in order to assess the extent of damage. In an attempt to restore the damaged ecosystem indigenous micro organisms responsible for soil fertility were used to improve soil conditions.

Effect of Mining on the Ecosystems of Sanguem, Bicholim, Sattari and Quepem Taluka, Goa, A Technical Report, Department of Biology, Dhempe College of Arts and Science, Panjim, Goa, 1987.

Random samples from mine sites were analysed to find the texture, porosity, fresh moisture and so on. These were compared to values obtained from undisturbed areas and the extent of the damage to the ecosystems was determined. Samples were collected from Bicholim and Sanguem talukas.

I) Distribution and speciation of selected metals in surface sediments, from the tropical Zuari estuary, central west coast of India, Springer Science + Business Media, October 23, 2008.

It is evident from the present study that the surface sediments of the Zuari estuary are largely polluted by Mn, which is then followed by Co and least with the remaining metals in the study. The comparison of data with the SQV indicated that Mn and Co are potentially available to aquatic life/benthic dwelling. The main source of these metals in the estuary in mining and its associated activities – barge building, transportation of ore to the platforms, ore loading.

m) A Foraminiferal Testimony for the Reduced Adverse Effects of Mining in Zuari Estuary, Goa, International Journal of Environmental Studies, Vol. 62, No. 5, October 2005, 579-591, National Institute of Oceanography (NIO); Marine Sciences Department, Goa University

Goa's Mandovi-Zuari estuarine complex is most vulnerable to deterioration caused by the mining industry. The objective of the present study is to estimate the health of the Zuari through foraminiferal distribution in its surface sediments. The foraminiferal data generated was compared with the three-decade-old foraminiferal data collected in 1972 and total suspended matter (TSM) data over the years. Data on TSM and TFN from the Mandovi estuary is also included.

- a) The increase in TFN and TSN within the Zuari estuary indicates that the health of the estuary has perhaps improved. Possible reasons include decrease in demand for manganese mining and inactive mining sites.
- b) The increase in the diversity and numbers of foraminifera within the Zuari river contrasts with the adjoining Mandovi estuary to the north. The major shift in mining activities from north to south seems to explain the simultaneous but opposite situations in the two adjoining estuaries.
- n) Distribution of Sediment Parameters and Depositional Environment of Mudflats of Mandovi Estuary, Goa, India, Journal of Coastal Research, Marine Sciences Department, Goa University, September 2006

The Mandovi river carries drainage from 435 kms of forestland. The state of Goa is known for iron ore mining. About two-thirds of the total mining activities in Goa are within the Mandovi basin. The study states that there are about 27 large mines in the basin area of Mandovi that generate 1500-6000 tons of rejects per day per mine, a substantial portion of which is expected to ultimately end up in the river.

o) Report of the WGEEP, Western Ghats Ecology Expert Panel, 2011, sub-section-17- Mining in Goa, pg. 76

Most mining leases are located in and around Wildlife Sanctuaries (WLS) and forest areas. For example, 31 leases are within 2 km of WLS, of which 7 are working mines; 13 leases are within 1 km of WLS. Evidence of some mines operating illegally within WLS also exists. 2500 ha of forest land were lost to mining in the period between 1988-1997. No studies to assess the loss in forest area have been done since then.

Biodiversity loss associated with the land use and cover change resulting from mining operation in the region is very serious. Recommendations would ensure closure of some 44 mines in ESA determined by the Panel. [NGT has granted stay.]

p) Does Mining Pollution affect Foraminiferal distribution in the Mandovi Estuary, Goa, India? National Institute of Oceanography & Department of Marine Sciences. Goa University. 2002

It is postulated that the decline in fauna is due to a continuously suspended load (2-4mg/l in 1972, 4.5-8 mg/l in 1982 and 6.69-114.49 mg/l in 1990) in the

estuary attributed to mining activity in the catchment area of the Mandovi river. This generates about 1.4 to 5 tonnes of mining rejects, and over the years over I billion metric tonnes of mining rejects is estimated to have accumulated in the mining belt of Goa. The loose mining reject gets eroded due to flooding during the monsoon season and is transported downstream, increasing the suspended load in the river.

q) Spatial and Temporal Distribution of Total Suspended Matter and other Associated Parameters in the Zuari Estuary, Goa, Journal Indian Association of Sedimentologists, Vol II, 1992, pp. 55-69, Marine Science Department, Goa University, Panjim, Goa.

The aim of this study was to understand the various factors and sources controlling the abundance and distribution of metals through the analyses of selected metals (iron, manganese, chromium, copper, zinc and cobalt), sand, silt, clay, organic carbon and the magnetic susceptibility of the surface sediments of Zuari estuary in three different seasons. Total suspended matter (TSM) concentration and salinity of near surface and bottom waters were also measured.

r) Grain Size, geochemistry, magnetic susceptibility: Proxies in identifying sources and factors controlling the distribution of metals in a tropical estuary, India, Estuarine, Coastal and Shelf Science 85, 2009, Department of Marine Sciences, Goa University & Indian Institute of Geomagnetism, Navi Mumhai

The aim of this study is to understand the various factors and sources controlling the abundance and distribution of metals through the analyses of selected metals (iron, manganese, chromium, copper, zinc and cobalt), sand, silt, clay, organic carbon and the magnetic susceptibility of the surface sediments of Zuari estuary in three different seasons. Total suspended matter (TSM) concentration and salinity of near surface and bottom waters were also measured.

s) Comparison and Performance Evaluation of Dispersion Models FDM and ISCST3 for a Gold Mine at Goa

The emphasis of large-scale opencast mining has resulted in widespread concern about the deterioration in environmental quality, specially the increase in concentration of Suspended Particulate Matter (SPM) within and around the mining site. SPM, which is the primary pollutant from the surface mining operations, is emitted due to blasting, excavation, transportation, material transfer, wind erosion of loose soil, overburden dump, etc. Thus, to gain better understanding of the fate and transport of the pollutants and to predict future conditions under various inputs and management action alternatives, the mathematical simulation of the dispersion process is an important exercise. For this, two models; Industrial Source Complex Short-Term (ISCST3) and Fugitive Dust Model. The emission inventory and meteorological data were used as primary inputs.

t) Rare earth elements in suspended and bottom sediments of the Mandovi estuary, central west coast of India: Influence of mining, National Institute of Oceanography, Council of Scientific and Industrial Research (CSIR), National Geophysical Research Institute (CSIR), Estuarine Coastal Shelf Science, vol.94: 355-368: 2011

Rare earth elements in the suspended particulate matter of the Mandovi estuary indicated that the mean total REEs (Σ REE) and light to heavy Σ REE ratios are higher than that of the average suspended sediment in World Rivers and Post- Archaean average Australian shale. SPM increased seaward in the estuary during both monsoon and pre-monsoon, but was consistently low at all stations during the post monsoon. Spatial variations in Σ REE are maximum (64%) during the pre-monsoon. Strong to moderate correlation of Σ REE with AI, Fe and Mn in all seasons indicates adsorption and co-precipitation of REEs with aluminosilicate phases and Fe Mn- oxyhydroxides.

Fe Mn dust is the most dominant source for REEs. However, the seasonal changes in the supply of detrital silicates, Fe-Mn ore dust and particulates resuspended from bottom sediments diluted the overall effect of salinity on fractionation and distribution of REEs in the estuary.

u) Temporal and spatial variability of trace metals in suspended matter of the Mandovi estuary, central west coast of India, National Institute of Oceanography (CSIR), National Geophysical Research Institute (CSIR), Environmental Earth Science., vol.65; 725-739, 2012.

Studies on the suspended particulate matter (SPM) in the Mandovi estuary, western India, indicate that during the monsoon and pre-monsoon, the SPM increases, and the major and trace metals decrease from stations in the upstream to downstream of the estuary.

v) Environmental impact of iron ore mining in Goa through Remote Sensing, Centre of Studies in Resources Engineering, Indian Institute of Technology (IIT), Mumbai. (Paper to be checked for demarcation)

The objective of the study was to assess the impact of open cast iron ore mining in Goa on land and water regimes with the aid of remote sensing data analysis. Satellite remote sensing, due to its capability for repetitive digital multispectral imaging of large areas at low cost may be successfully applied prior to mining, monitoring the distribution and changes in the areas of different activities during mining and the evaluation of restoration success and landscape quality after mining. Findings about vegetation and mining:

The spread of moderate vegetation had marginally improved in the Bicholim block while there was a significant loss of moderate vegetation in the Pale block.

- Change detection maps showed decrease in the vegetation and agricultural zones due to the expansion of mining and built-up lands.
- -.Temporal analysis of visually interpreted land-use/land-cover maps, based on aerial photograph and satellite images, revealed the increase in the spread of mining area and built-up land at the expense of vegetation cover over the past sixteen years.
- Resultant image generated through NDVI differencing showed maximum depletion in vegetation cover were seen in the vicinity of mining areas.

w) Impact of Mining on the Environment in Goa: A Review, Environmental Geochemistry, Vol. 1, No.2, pp. 97-100, 1998, Department of Marine Sciences, Goa University.

Mining inevitably causes disturbance to land and to the soil and plants which clothe it. Mining implies selection, which in turn implies the rejection of waste, and the very process of selection will cause an impact on the environment. It is noticed that the mining industry in Goa caused immense ecological damage only due to improper planning.

The above studies are by researchers unconnected with the mining industry. They can hardly be accused of bias. Also annexed with the studies is a copy of an affidavit filed by William Gomes, a scuba-diver on the destruction of Goa's only coral reefs through mining sediment load through the tidal river system.

- The most up-to-date assessment of the impact of mining in Goa is taken from the report of the Western Ghats Ecology Experts Panel (WGEEP) headed by Prof. Madhav Gadgil, formerly head of the Centre for Ecological Sciences at the Indian Institute of Science, Bangalore. The section of the WGEEP's report that deals explicitly with the problem of mining on the scale permitted in Goa and its implications for the biodiversity of the Western Ghats is annexed in its entirety as **Annexure D** (Page ________). It comes from an expert body appointed by the MOEF, and Prof. Gadgil himself is a recognised authority in the scientific world on the Western Ghats and its flora and fauna. Based on the report, and on an application filed by the present petitioner, the National Green Tribunal has restrained the Ministry of Environment and all State Ecology Authorities of the Western Ghat states from approving any environment clearance without considering the recommendations. Copy of the NGT orders is at **Annexure E** (Page _______).
- The State Government apparently has not applied its mind to the gravity of the situation in its quest to score points and make personal allegations. At the cost of repetition, I am setting out the issues raised in the petition in serial order for the attention of this Hon'ble Court, since the affidavit filed by the Goa government either seeks to bypass them or finds them innocuous:

Primary is the value of the mineral asset the State of Goa has, which at known present volumes and prices. As per IBM data produced in the Shah Commission report, total reserves and resources of iron ore in Goa amount to 927.172 million tonnes. Of this, 350.000 million tonnes have already been extracted, leaving some 577.172 million tonnes in the ground. Estimated value @US 100 per tonne is Rs.3 lakh crores or more precisely, 311580 crores. This huge natural resource which belongs to the State of Goa has been allotted to a handful of individuals by the erstwhile colonial regime but has been illegally cornered by companies from individual lease holders in violation of laws and rules which the state government says are a mere technicality.

Over the period 2005-2011, the total export of ore from Goa has been in the region of 1553.724 lakh tonnes (CEC report page 73). Of this, 395.645 lakh tonnes is illegally exported without payment of even royalty due to the State exchequer. The value of this illegal export alone is \$6.3 billion.

At minimum admitted 50% profit, the amount of windmill gains accumulated by the mining lessees in the year 2010-2011, for instance, was approximately Rs.12,000 crores. The State of Goa's budget, in comparison, is approximately Rs.6,000 crores. The investment made in the mining industry by the lessees (as per the statements made and recorded in the environment clearanc orders) is only around Rs.620 crores.

All this extraction has come from violating several environmental laws and from violating specific provisions of the MMDR Act, 1957. The environmental laws are passed by Parliament to protect the environment; the mining laws are passed by Parliament in the interest of conservation of resources. However, as the Shah Commission has indicated, at present levels of extraction, the asset would stand exhausted in 9 years. The state government's suggestion that mining be phased out in ecologically sensitive areas in 10 years should be altogether rejected in the context of what the Shah Commission has concluded

The environment laws violated are the Forest Conservation Act, 1980; the EIA notification of 1994 and 2006, notified under the Environment Protection Act, 1986; the CRZ notification, 1991/2011; Water and Air Acts, 1974 and 1981, respectively; the Water Cess Act, 1977; the Indian Forest Act, 1927; the Biodiversity Act, 2002. The mining laws violated include the Mines and Minerals Development & Regulation Act, 1957, the Mineral Concession Rules, 1960 and the Mineral Conservation and Development Rules, 1988.

Petitioner has submitted 2 tables (at <u>Annexures P3/P4</u> to the main petition) to indicate the scale of the violations and how each mining lease is guilty of not just two or three violations, but sometimes upto eight counts. It appears that there is not a single legal mine operating in the state, nor is there any mine which is following the law and the orders and directions of this Hon'ble Court.

- The state has averred in its affidavit that the order dated 5.10.2012 is drastic as both legal and illegal mines are all closed down. However, its own order dated 10.9.2012 issued immediately after the release of the Justice Shah Commission Report and 25 days prior to this Court's order does not make any such distinction either. Till today, the State Government is hard pressed to produce a list of so-called legal mines, ten months after it has come to power and five months after this writ petition was filed. No such list can be found in its affidavit in reply either.
- On 27.11.2012, the Chief Secretary of the Goa Government wrote a 68 page letter to the CEC (annexed to the main CEC Report). The first two paragraphs of the letter state:

"Before answering the issues raised, the State government would like to place before the CEC that the previous regime in Goa had failed to discharge its constitutional obligation to regulate mining in the State and ensure sustainable mining that does not compromise the fragile ecology and environment of the State. It had failed to enforce and regulate mining in the state of Goa, inspections were a rarity rather than the norm and record keeping and reconciliation of returns filed were in shambles, records and returns filed by the lease holders were not maintained properly and in most cases hardly any record of transactions carried out was available in the department.

"The newly elected Government has found illegalities and acts of omissions and commission besides active connivance of politicians of the previous political regime and officials in flouting rules to promote and perpetuate illegal mining for personal benefit, the same has been highlighted in the case filed by Goa Foundation, in the report of the PAC, whose Chairman is the present Chief Minister, and to a large extent confirmed by the report of the Shah Commission; but all these irregularities and illegalities were committed in the past."

The same letter of the Chief Secretary concludes with the following words:

"Z. No mining till effective regulatory mechanism is in place

"The State Government is committed not to permit resumption of mining in the State of Goa, even it is approved by the CEC and the Honorable Supreme Court, till such time as the findings of the Public Accounts Committee and in the Justice Shah Committee Report are adequately remedied and dealt with in accordance with law, the report of all the studies and investigations ordered, as mentioned in the paragraphs following are analysed and acted upon and an effective regulatory mechanism as envisaged in the draft mining policy is fully in place."

The affidavit filed by the Goa government however now takes the plea that the Court should vacate its order dated 5.10.2012, as it has initiated various actions since it took charge of the administration. These actions are listed below, together with the petitioner's comments, are listed below:

- 2.4.2012: Decision to frame mining policy Draft mining Policy 2012 has been framed. It is still under consideration.
- 4.4.2012: Order passed to suspend 461 traders licences and scrutinize them for revalidation. 200 traders applied. 47 applicants revalidated. Balance traders involved in illegal mining trade permitted to vanish. No penalties for past violations.
- 10.4.2012: Letter to Port authorities requesting them to explore the possibility of obtaining NOC from Mines Dept prior to loading of ships. No replies or action taken report annexed.
- 12.4.2012 : Letter to mine lease holders / traders to produce for scrutiny and re-validation all unused royalty-paid challans. No report on compliance is annexed.
- 16.4.2012: Letter to mine leaseholders directing that as a temporary measure daily report regarding ore transported is required to be submitted to Mines Department. No compliance report annexed. Rules yet to be framed. RFID or equivalent permanent system yet to be developed.
- 17-8-2012: Letter to Goa Barge Owners Association to install Automatic Identification System for movement of ore. No compliance report.
- 10.9.2012 : Order directing temporary suspension of all mining operations till the state verifies the legality of the mining operations. Verification and clearance committee set up. No report till date.
- 12.9.2012: Letter to all mineral traders to disclose the stock in hand and the location of the ore. No report as yet.
- 13.9.2012: Show cause issued to 42 leases regarding condonation of delay and renewal of lease. All replies filed. Matter is under investigation and pending orders.
- 19.11.2012: Appointment of Justice Khandeparkar Committee notified. Work yet to commence as facilities yet to be provided.
- 20.12.2012: Notification issued authorising senior officers of the Dept of Mines to inspect mining leases thrice a year. All mines are presently closed.
- Stamp Duty Amendment Act, 2012 enacted to levy duty for execution of mining lease from 2007 onwards.

The following actions are "proposed" or "being considered":

- a) Environment audit by NEERI. This was proposed by the petitioner two years earlier to MOEF. <u>CEC has recommended ICFRE because of its expertise in the Karnataka case</u>.
- b) External audit of royalty and other records.
- c) Investigation into carrying capacity of roads. Study yet to be completed.
- d) Show cause to 100 persons/lessees named in the Shah Commission for encroachment outside lease areas. <u>State govt stand however is that OB dumps</u> may be permitted outside the mine lease area.
- e) Mining companies to register their raising contractors with Govt. State Govt stand is that this is a mere technical violation. No action is proposed to be taken for past violations.
- Petitioner submits that the State government's actions till date are hardly commensurate to deal with the scale of the problem faced in the State. At any rate, no reports have been produced pursuant to the enquiries initiated and directions issued, to demonstrate whether there is compliance with these orders and further, the nature of the machinery set up to ensure continuous enforcement. The CEC has made a telling observation on the preparedness of the State Government in terms of monitoring, regulation and control of the mining trade. It bears quoting in full:
 - "83. Unlike the other major iron ore producing States, no such system exists in the State of Goa. There is no system of periodic verification of the iron ore produced in the mining leases, payment of royalty after such verification, issue of permits for transportation of mineral by the Mining Department, issue of transit permits by the Forest Department, reconciliation of the quantity of the mineral stated to have been produced in the mining lease with the quantity of the mineral for which royalty has been paid and transit permits have been issued, verification of the transit permits at the check posts, verification of the quantity of the mineral exported/domestically used vis-à-vis the quantity legally produced. There is absolutely no system / Rules in existence for checking / verification the actual quantity of the iron ore produced and transported from the mining leases. Consequently, illegal mining can easily be undertaken outside the mining lease areas and which can conveniently be shown to have been done legally in the lease area.
 - "84. Under the provisions of the MMDR Act, 1987 and the rules made there under, the lessees are required to file Monthly Returns and Annual Returns (Forms F-1 and H-1) with the IBM with copies to the Mines Department of the State Government. There does not appear to be any effective system in place for verifying the details given in the Annual Returns with the Monthly Returns and the details given in the Annual Returns with the quantities of mineral for which royalty has been paid, transported, exported and other details. In a number of returns the details of the opening balance plus production minus dispatch do not tally with the closing balance. The quantity of ROM mineral used during the month / year does not tally with the production details of the lumps and fines. The closing balance of a month / year does not tally with the opening balance of the next month / year." (Page 71: para 83-84)
- Quite apart from whether the State Government is capable of monitoring, regulating and controlling the mining trade, it is important for this Hon'ble Court examine the main stands taken in the affidavit, since the State government largely disagrees with the reports of both the Justice Shah Commission and the CEC Report on the extent of illegal mining and whether in fact there is illegal mining at all in Goa. Petitioner submits that no enquiry or monitoring by any

government which itself does not accept that the violations and illegalities are serious enough to require drastic remedial measures, can yield any results. For the sake of clarity, the highlights, recommendations and findings of the Shah Commission Report and the Interim Report of the CEC:

FINDINGS OF THE JUSTICE SHAH COMMISSON OF INQUIRY REPORT. ON ILLEGAL MINING IN GOA STATE

- 23. The notification setting up the Shah Commission of Inquiry into Illegal Mining, stated the following list of illegalities that needed to be probed, namely:
 - (a) mining without a licence;
 - (b) mining outside the lease area;
 - (c) undertaking mining in a lease area without taking approval of the concerned State Government for transfer of concession;
 - (d) raising of minerals without lawful authority;
 - (e) raising of minerals without paying royalty in accordance with the quantities and grade;
 - (f) mining in contravention of a mining plan;
 - (g) transportation of raised mineral without lawful authority;
 - (h) mining and transportation of raised mineral in contravention of applicable Central and State Acts and rules thereunder;
 - (i) conducting of multiple trade transactions to obfuscate the origin and source of minerals in order to facilitate their disposal;
 - (j) tampering with land records and obliteration of inter-State boundaries with a view to conceal mining outside lease areas;
 - (k) forging or misusing valid transportation permits and using forged transport permits and other documents to raise, transport, trade and export minerals;
- 24. The conclusion of the Shah Commission in respect of mining in Goa states in relation to the above is unequivocal:

"From the inquiry conducted by this Commission, it is apparent that all modes of illegal mining, as stated in the above Notification, are being committed in the State of Goa."

Major findings:

25. The Shah Commission of Inquiry has come to the following serious findings about the legality of hundreds of leases in the state of Goa. Many of these mines are in operation. Their legality must be reviewed. Ministry of Environment and Forests did not examine the legal validity of these mines when granting them environment permissions:

Mining leases operating within 1 km of wildlife sanctuaries - 33 leases

 $Environment\ clearances\ granted\ prior\ to\ Supreme\ Court's\ order\ dated\ 4.12.2006\ but\ not\ referred\ to\ NBWL-{\bf 49\ leases}$

Mines which are produced in excess of the limits laid down under the environment clearance order – 69 leases

Mines which have been renewed without a prior order under the FCA 1980 – ${\bf 20\ leases}$

Mining leases which have been renewed in violation of Rule 24A (4) (5) of MCR 1960 – 97 leases

Leases deemed rejected on the basis of Rule 24A (2) (4) (5) (6) MCR 1960 - 54 leases

Leases renewed in violation of then Rule 24A (2) of MCR 1960 and Sec. 8 (2) of MMDR 1957 - 10 leases

Leases operating without one renewal of application in violation of then Rule 24 A (2) (4) (5) (6) and Sec. 8 of MMDR - 16 leases

Leases renewed for 10 years operating under deemed extension after 10 years – $\,$ 54 leases

Leases where delay in filing applications for renewal was legally condoned and mines allowed to operate - 42 leases

Leases where applications were filed after 24.11.1988 but rejected – 22 leases

Leases violating Rule 38 of MCR 1960 – 16 leases

26. Other indictments:

Complete lack of government control over the working of mining leases in Goa.

Substantial differences in the details of production of mining leases by various departments.

Illegal mining by way of mining pits, overburden dumps, etc., outside sanctioned mining lease areas. The Commission has quantified illegal mining to the extent of Rs.35,000 crore (p.495).

Extraction of ore in excess of EC limits in majority of mining leases that were in operation.

The Commission has concluded that at present rate of ore extraction, all ore from Goa will be exhausted in 9 years (p.529).

27. Important Extracts from the Shah Commission Report:

I) General picture of mining scenario in Goa

Page 248

"Inaction, delayed action and mild actions have had created fearless atmosphere, abuse of law and regulations in the Goa State. This has paved ways for large scale irregularities, illegalities and corruption. Unwarranted 'legal opinions', seem to be intentional, have further aggravated the matter. In all, the legal opinions, it

is observed, have gone in favour of lessees and not otherwise. The regulatory mechanism has been totally collapsed and irregularities due to maladministration have risen to its peak. In the process, the sole loser is environment, eco-system of the Western Ghats, general public and treasury of Goa State."

Page 93

"If the permission granted for extraction of 66 million tonnes by IBM and MoEF is taken into consideration, then the reserve would last only for 9 years. If 30 million tonnes is taken as average production per year, the iron ore would last for 20 years only."

II. On the failure of the State Govt and the Central Govt:

Page 71:

"...it is observed that there is total collapse of fabric of monitoring and regulatory mechanism in the State."

Page 72

"It is amply clear that the Hon'ble Minister of Mines and Hon'ble Chief Minister were well aware about non- compliance of conditions and other illegalities / irregularities happening in the mining sector. Complaints regarding water pollution, natural streams, rivers, ponds, agriculture destruction and failure of horticulture crops are well known to the entire administration. But no inspection has been carried out resulted into fear-free environment which has caused loss to the ecology, environment, agricultural, ground water, natural streams, ponds, rivers, biodiversity, etc."

Page 75

"It is possible to pose a question as to whether inaction on the part of the officials of IBM and more particularly DMG of State of Goa of not inspecting mines in exercise of powers vested under a statute (Section 24 of MM(DR) Act, 1957) is a case of dereliction of duties or it is a deliberate omission which resulted into illegal mining and huge loss to Government Exchequer. It is observed that in number of occasions complaints have been received by Government of Goa through responsible persons about the illegal mining activity. Despite that, no inspections were carried out. It is clear that to avoid action the duty to inspect mines might have been evaded by DMG for such a long period i.e. more than 5 years."

Page 124;

"It is pertinent to state here that such illegal act can't happen without connivance of the politicians, bureaucrats and lessees. There is a complete collapse of the system."

III. On the Utilisation of Public Resources

Page 79:

"In today's scenario, public auction of lease hold interest is bound to tremendously increase income of the State whereby it can utilize the increased income for remedying the difficulties faced by the public."

Page 247:

"Large scale mining, overexploitation of minerals would result into change of natural eco-system of the area. This will affect the Tourism Industry of State. The impact of mining including illegal mining has already been felt. The IBM and MoEF have increased production without a proper justification purely on commercial grounds ignoring the impact of mining on protected areas, environment and eco-system. Approval of increased production is also in violation of spirit of Rule 10(1) of MC(DR), 1988."

Page 389:

"Minerals in Goa State are not utilized for domestic consumption. It is being exported to various countries, mainly to China. The requirement of this country for having GDP @ 8% to 10% requires large quantity of steel which cannot be met by irrational exploitation and export. The conservation of natural resources should be the prime goal of country. The trust imposed to keep in custody of the natural resources under the Constitution, the State Government including its Ministers, Bureaucrats and Executives, have totally been breached by manipulations, misinterpretation and misuse of law and power. This requires to deal with iron hands."

Page 87:

"In the name of the development or for free trade, let us not forget our legal duty and moral obligation to protect the nature and natural resources. Commercial objectives of a few lease holders to earn more profits at the cost of society and natural resources should not be encouraged so as to have adverse impact on forest, environment and social fabrics of the State and the Country."

IV. On illegal Mining Dumps and Encroachments:

Page 58-60

Directions of the High Court dated18.7.2003 in Writ Petition No.77 of 2001 that:

- (i) No new place for dumping overburden, waste, rejects, etc. will be commenced, worked or started without the permission and approval as required under Chapter III of the Mineral Conservation and Development Rules, 1988;
- (ii) No new mining dump will also be operated without first obtaining clearance under the Goa Irrigation Act, 1973;

 $were \ consistently \ violated \ by \ mining \ companies \ by \ creating \ new \ dumps \ wherever \ they \ chose \ and \ without \ approvals.$

Page 71

"In the years of 2008-09, 2009-10 and 2010-11, there is large quantity of difference between production (despatch) under permitted quantum and actuals. This excess difference has been conveniently shown as "ore retrieved" from old dumps. On careful examination, it is noticed that such excess production claimed to be from old dumps is actually the ore extracted on proxy from the running mines. Actual minerals were removed from mining pits of regular mines but shown as dump handling."

Pages 485-486

On personal visits by the team of this Commission and also after verification with the Google Images, it is apparent that there are large extent of encroachments by various occupants of mining leases. In the accompanying maps / image of this Chapter, area covered by A, B, C, D indicates the extent of unauthorized occupation of the adjoining areas and considered as encroachment. Wherever the extraction of iron ore is observed as encroachment, it is specified in the column of "Encroachment Area as "pit".

Page 488

"The total encroachment so identified is about 2796.24 Ha. Out of this encroached area, about 578.42 Ha. is illegally used for illegal extraction or removal of iron ore."

Page 490

"This is a serious offence and considered as theft of the government property i.e. iron ore which is removed from non leased area."

Page 495

"By taking average export cost @ \$ 60 per MT of Iron Ore from 2006 to 2011 with conversion rate of Rs. 47 Per US Dollar than the total loss to the State comes out as (127257400.00 x 60 x 47) Rs. 34935,9288000=00. For the actual loss to State from each mine and other illegal mining, it should be calculated based on ground realities by a team of experts in the field with latest 3D LASER Measurement Equipments and other factors."

V. On the non-implementation of NBWL Clearance

Page 106

"This can be attributed to the failure on the part of the MoEF having not considered this issue with its seriousness even after a decision of National Board for Wild Life and order of Hon'ble Supreme Court of India.

Page 240:

"All the mining activities should be stopped with immediate effect including transportation for all mining leases where there is no approval or clearance of the Standing Committee of NBWL and are falling within 10 kms. of eco-sensitive buffer zone."

VI. On Environment Clearances and Damage to Environment and Wildlife:

Page 112

"A substantial irreparable damage has already been caused to this eco-sensitive zone in Goa which is one of Hot Spot of Mega Biodiversity on the earth by extracting large quantity of Iron Ore. This could have been avoided, had there been timely action taken in the matter."

Page 239:

"This has caused an irreversible and irreparable damage to bio-diversity, wildlife, environment and ecosystem as a whole in the eco- sensitive zone of the Western Ghats of State of Goa. Immediate action should be taken in this regard wherever necessary and responsibility and accountability should be fixed on the officers concerned."

Page 242

"It is noticed during field visits that the conditions stipulated in the EIA Clearances and also conditions imposed by the Chief Wild Life Warden (Goa) are not implemented and monitored at the field. No conservation wildlife plans have been prepared and implemented. The approvals of CWLW are only for name sake. They are seemed to be 'decorative gems' on paper."

Page 249:

"During the investigation by the Commission, it was observed that the distance of mining leases from the nearest wildlife sanctuary are recorded wrongly in almost all cases."

Page 261

"The spirit of Environmental Clearance system has been substantially wounded, resulting into amassing of wealth by certain individuals/companies at the cost of environmental sustainability and ecosystem. The impact is so high that the environment and ecosystem in the buffer zone have been made vulnerable to withstand."

VII. Environment/Mining Laws Violated:

Page 381: Violation of Rule 24A (10)

"On going through the records, submitted by the Director of Mines Department, State of Goa, it has been observed that by having apparent misinterpretation of Rule 24A (10) (amended on 27.9.1994) illegal and unlawful delay condonations, first renewals have been accorded by condoning the delay in submission of Form J applications and allegedly allowed the leases to operate under deemed extension provision. This is one of the serious illegalities committed by the State."

Page 482: Violation of Rule 24A

"In number of cases, renewal applications were entertained after the expiry date and non-existing leases. Mainly, those renewal applications were filed from the year 1995 onwards. Without any authority and power with the State delay is condoned and renewal applications were entertained. While at the same time, having the same yardsticks, in some cases delay condonation applications are rejected.

"In some cases, renewal is granted in violation of the then Rule 24A (2), (4) (5) and (6) of the MCR, 1960. While in remaining cases, there is no renewal of lease and yet the persons are permitted to occupy mines and are extracting illegally the iron ore. This is in blatant violations of all laws.

"No approval for first renewal of Central Government is obtained in number of cases though the applications are filed in time in 1988. The mines are occupied and running presently in violation of the then Rule 24A, (2), (4), (5) and (6) of the MCR, 1960. In number of other cases, the mines are running on deemed extension at the end of first renewal given for 10 years.

"In some cases, legal opinion is obtained for favouring some lease holders. However, grant of delay condonation application as discussed in the Chapter, is totally against the law."

Pages 476-477: Violation of Rule 38

"The violation of Rule 38 of MCR, 1960 is not a technical breach because the same leads to other illegalities and irregularities prejudicial to the mining activities which are otherwise codified."

"How did 16 lease holders were able to get their mining plan to operate different leasehold areas as one unit and also obtained Environmental Clearance as one unit is a question which needs investigation and needful action thereon.

"For such violation appropriate action, including stopping of mining activities including transportation of minerals should be taken immediately."

VIII. On non-enforcement of law by the Goa State Pollution Control Board

Page 98.

"The Goa State Pollution Control Board ... has allowed the situations at its lowest ebb by permitting the mining units to violate the conditions prescribed under the EC and its own conditions."

Page 246:

"The GSPCB has ignored or defied the provisions of the Acts and taken a soft stand availing a long period which has facilitated illegal mining in the State at large. No action has been taken in the claims of "waste dump" handling in the eco-sensitive zone. It is a major illegality taken place in Goa State causing huge loss to Govt. exchequer and environment."

IX. On Investigations and Penalty

Page 120:

"It is noted here that the Director of Mines, the Secretaries of Mines and Environment, the Scientists of the Regional Office, Bangalore, MoEF New Delhi, the Chief Conservator of Forest, in the MoEF Regional office, Bangalore, the Member Secretary and Chairman of Pollution Control Board were/are responsible for non-compliance of the conditions and loss to the State. Action should be initiated against them after having identification by name."

Page 124:

"Further, the mines which are running without approval is required to be stopped and the money should be recovered at the rate of export price or market price whichever is applicable. Other consequential action should also be taken.

Page 269

"There should be further enquiry/investigation on certain specific violations committed by lessees and involvement of officers/officials/politicians in the subject matter by a competent agency."

Page 383

"The iron ore extracted and dispatched from these mining leases [delay condoned] should be considered as illegal / irregular and unlawful and amount at market / export rate thereof should be recovered. Penal action should be initiated against all responsible in this act of hatching conspiracy for approval of leases. There is criminal misconduct on the part of officials, officers and ministers, who were part of processing the cases illegally and their approval of delay condonation, renewal, etc. and allowed in certain cases to operate the mine even before reaching finality of approvals."

X. On Mine lessees / mine operators:

Page 99:

"Allowing to continue and non initiation of prosecution against the violators (lessees) has caused fear free atmosphere and ways for illegalities."

Page 79

"This Commission has observed that natural resource namely iron ore has made only few persons billionaires who are holding leasehold interest in mining of iron ore and tribals/villagers from where the minerals are transported / exported are suffering adverse environmental effects, their drinking water remains polluted and roads remains badly damaged/congested. Nobody has bothered for remedying their difficulties on the ground of alleged lack of funds."

FINDINGS OF THE CEC:

- 28. Pursuant to the order of this Court, the CEC has filed its Report based on site visit to Goa and information provided by the Ministry of Environment, the State of Goa, the associations of mining industries, lease-holders and the petitioners and examination of the Shah Commission report.
- 29. The CEC has identified the following important issues for the consideration of the Court (para 30 and paras 112-120):

Environment clearances have been granted to leases with the wildlife sanctuaries – 19.

Environment clearances to mining leases within one km – 23

Environment clearances to mines within 10 km without permission of NBWL held - 120

CEC has examined several cases of violation of Rule 37 of MCR 1960.

Complete lack of control on production and transportation of ore from mining leases, illegal mining, overburden dumps outside lease areas etc.

Illegal mining (mining pits and overburden dumps) outside the sanctioned lease areas.

Production of iron ore beyond permissible limits laid down in the environment clearance.

Infrastructure is inadequate for the present level of mining.

There is need to prescribe a CAP on the maximum permissible annual production from all mining leases in Goa.

There are large number of leases where extraction of ore below ground water table is being undertaken. The CEC has said that most mining leases which have gone below the water table should be halted except in very exceptional cases.

Erroneous environmental clearances - e.g., status of land is mentioned as non-forest whereas lease area comprises partly/wholly forest

Some leases located in catchment area of Selaulim dam which meets the drinking water of south Goa.

Renewal applications made after due date and delay have been condoned by State Government.

The CEC has determined that within 2006-2007 to 2010-2011 illegal exports were to the tune of 395.645 lakhs tons (p.73)

The CEC has concluded that mineral extraction from dumps cannot be accepted not only because they must have environment clearance (and this view supported by the MoEF) but also because there are no rules on the ground for controlling not just extraction from dumps but extraction from the ground itself (page 98).

30. Important Extracts from the CEC Report:

General Findings:

Page 98; Para 121: "...The mining operations in Goa have violated with impunity the relevant Acts, Rules and Regulations and orders of this Hon'ble Court."

Page 92; Para 112. "As per the environment clearances granted by the MoEF to the 183 mining leases the total permitted production would work out to around 65 Million MT per annum. In addition, there are a number of other mining leases for which the terms of reference have been approved by the MoEF and the public hearings are in progress or have concluded. The existing infrastructure facilities, the proven and probable mineral reserves and the area available for overburden

dumps will under no circumstances permit such a level of mining in an environmentally sustainable basis, There is therefore a real need to prescribe a cap on the maximum permissible annual production from all the mining leases located in each of the four talukas."

On the failure of the State authorities:

Page 71: paras 83-84

Para 83. "Unlike the other major iron ore producing States, no such system exists in the State of Goa. There is no system of periodic verification of the iron ore produced in the mining leases, payment of royalty after such verification, issue of permits for transportation of mineral by the Mining Department, issue of transit permits by the Forest Department, reconciliation of the quantity of the mineral stated to have been produced in the mining lease with the quantity of the mineral for which royalty has been paid and transit permits have been issued, verification of the transit permits at the check posts, verification of the quantity of the mineral exported/domestically used vis-à-vis the quantity legally produced. There is absolutely no system / Rules in existence for checking / verification the actual quantity of the iron ore produced and transported from the mining leases. Consequently, illegal mining can easily be undertaken outside the mining lease areas and which can conveniently be shown to have been done legally in the lease area."

Para 84. "Under the provisions of the MMDR Act, 1987 and the rules made there under, the lessees are required to file Monthly Returns and Annual Returns (Forms F-1 and H-1) with the IBM with copies to the Mines Department of the State Government. There does not appear to be any effective system in place for verifying the details given in the Annual Returns with the Monthly Returns and the details given in the Annual Returns with the quantities of mineral for which royalty has been paid, transported, exported and other details. In a number of returns the details of the opening balance plus production minus dispatch do not tally with the closing balance. The quantity of ROM mineral used during the month / year does not tally with the production details of the lumps and fines. The closing balance of a month / year does not tally with the opening balance of the next month / year."

On Environment Clearances:

Page 94; Paras 116 - 117

Para 116. "In a number of environmental clearances the status of the land is mentioned as non-forest whereas the lease area comprises partly / wholly of forest land. The Additional PCCF, Southern Region Office of the MoEF may be asked to verify all the environmental clearances and wherever the lease is found to contain forest land (but in the environmental clearance / application for the environmental clearance the status is mentioned as non-forest land) the environmental clearances should be kept in abeyance and appropriate action against the concerned lessee and others should be taken."

Para 117. "The environmental clearances for the mining leases containing forest land should become effective only after the grant of approval under the Forest (Conservation) Act, 1980 for the non-forestry use of the forest land."

On Mining Operations and Water Sources

Page 94; Para 118. "During the site visit the CEC visited three mining leases located in the forest areas falling in the catchments area of Selaulim Dam and which meets the drinking water requirement of South Goa. During the site visit a number of representations were received by the CEC stating that the mining leases including the above three have been contaminating the water supply in the reservoir thereby adversely affecting the quality of potable water in the Dam."

Page 93; Para 114. "There are a large number of mining leases wherein the extraction of mineral below the ground water table has been permitted / is being undertaken. During the site visit the CEC received a number of representations that the mining below the ground level is adversely affecting the water availability in the nearby areas and such mining is damaging the aquifers and consequently the charging of the ground water is adversely affected. It has also been represented that such mining is resulting in increased salinity of the ground water and that the silt deposition from the mining overburden has degraded the soil fertility in the adjoining agricultural fields. Almost all the dug wells have dried up."

On Exporting Mining dumps:

Page 97; Para 123. "During the last two years more than 20 Million MT of iron ore is stated to have been produced from the overburden dumps located outside the mining lease areas without environmental clearance, approved mining plan and / or approval of competent authorities. There was no system of verifying the actual quantity of mineral produced from such overburden dumps."

Page 78; Para 94. "The CEC is of the considered view that in view of (a) the complete absence of an effective system of checks and balances regarding the actual quantities of mineral produced and transported from the mining leases and verification of the mineral during transit, (b) lack of reliable details of the legal and illegal overburden dumps lying within the lease and outside the lease and (c) in the absence of the reliable data regarding sub-grade mineral available in each of the overburden dumps within the lease and outside the lease and also (d) in the absence of any effective mechanism to regulate the working of the overburden dumps, particularly lying outside the lease area, the production details of the mineral stated to have been extracted from the overburden dumps cannot be accepted."

On Mining Law Violations

Page 97; Para 124. "A very large number of mining leases were being operated by persons other than the lessees and in flagrant violation of the provisions of the MCR, 1960 and in all probability with the tacit approval of the State Government. Based on the unregistered and dubious General Power of Attorneys and other documents, the mining lease have been allowed to be operated by persons having clout by treating the leases granted to individual persons as those granted to partnership firms and the inclusion of such persons as partners in the firms (and retirement of the genuine lease holders). Two of such leases were being operated by the subsidiaries of a company registered outside India."

CEC Recommendations for directions from Supreme Court of India:

31. The CEC has made several significant recommendations for directions from this Hon'ble Court:

Pages 101-09, Para 134:

The environmental clearances granted by the Ministry of Environment & Forests, Government of India (MoEF) for the 19 mining leases located within the Wildlife Sanctuaries and for another 23 mining leases located within a distance of upto 1 km from the boundaries of nearby National Parks / Sanctuaries (and in other similarly placed cases), being in violation of this Hon'ble Court's orders dated 14th February, 2000 and 4th August, 2006 and subsequent orders, may be revoked by this Hon'ble Court. ... The mining operations in such mining leases may be prohibited. [Page 101, No.I]

The MoEF, may be directed, in compliance of this Hon'ble Court's order dated 4th December, 2006, to place the environmental clearances granted for 120 mining

- leases located within a distance of upto 10 kms of the National Parks / Sanctuaries (excluding those dealt with at sub-para I above) before the Standing Committee of the National Board for Wildlife (NBWL) for its consideration (and other similarly placed cases). [Page 101, No.II]
- The Additional Principal Chief Conservator of Forests, Regional Office, MoEF, Southern Region, Bangalore may be directed to verify ... that (a) the mining operations will not have adverse impact on the flora, fauna or Wildlife habitat and (b) the distance of the National Parks / Wildlife Sanctuaries and the status of the forest areas have correctly been stated in the environmental clearances / applications for seeking environmental clearances. [Page 102, No.III]
- This Hon'ble Court may consider taking a decision regarding validity of such environmental clearances after considering the recommendations of the Standing Committee of the NBWL, the Report of the Additional Principal Chief Conservator of Forests, Regional Office, MoEF, Bangalore and other information / details. Till then the such environmental clearances may be directed to be held in abeyance. [Page 102, No.IV]
- The environmental clearances granted for the mining leases comprising of wholly / partly forest land may be directed to become operative only after the approvals under the Forest (Conservation) Act, 1980 for non-forestry use of the forest lands included in the mining leases are granted and that till then all such environmental clearances should be held in abeyance and the mining operations may not be permitted to be resumed. [Page 103, No.V]
- The State of Goa may be directed to constitute a Committee under the Chairmanship of the Chief Secretary, Goa with (a) the Principal Secretary, Mines, Government of Goa, (b) Additional Principal Chief Conservator of Forests, Regional Office, MoEF, Southern Zone, Bangalore and (c) an officer not below the rank of Joint Secretary, to be nominated by the Secretary, Ministry of Mines, Government of India as its Members...to ascertain...the details of the mining leases which have been operated by persons other than the lease holders and in violation of the Rule 37 (1) of the Mineral Concession Rules, 1960. ... The mining leases which are prima facie found to have been involved in violation of Rule 37 (1) Mineral Concession Rule, 1960 may not be permitted to resume mining operations. The State of Goa may be directed to take immediate action for determination of the mining leases found to have been operating in violation of Rule 37 (1) of the Mineral Concession Rule, 1960 in accordance with Rule 37 (3), Mineral Concession Rule, 1960. [Page 103-104, Nos.VI-VIII)].
- The State of Goa may be directed to ascertain the lease wise details of the iron ore legally produced by the lease holders from the year 2005-2006 onwards ... qua the consignor wise details of the iron ore of Goan origin exported and used domestically and based thereon quantify the illegal iron ore exported by the consignors. [Page 105, Nos.X].
- The State of Goa may be directed that the extraction of mineral from the overburden dumps located outside the approved mining lease areas should not be permitted till an environmentally sustainable Scheme of Mining for the removal of mineral from overburden dumps is prepared along with the relevant information regarding the ownership of the dumps, realistic assessment regarding mineral available (grade wise) in such dumps and approved by the statutory authorities and permitted by this Hon'ble Court. [Page 106, No.XI].
- The Indian Council for Forestry Research and Education (ICFRE), Dehradun may be directed to carry out Macro Level EIA Studies regarding the impact of mining in the State of Goa and to suggest Taluka-wise ceiling on production from all the mining leases. [Page 107, No.XIII].
- The State of Goa may be directed to engage reputed agency such as the Indian Council for Forest Research and Education, Dehradun for preparation of the lease-wise R&R Plans. The "guidelines for preparation of the R&R Plans" approved by the this Hon'ble Court by order dated 13th April, 2012 for the purpose of preparation of the R&R Plans for the mining leases in Districts, Bellary, Chitradurga and Tumkur in the State of Karnataka may be directed to be followed with appropriate modifications as considered necessary and with the approval of this Hon'ble Court. [Page 107, Nos.XIV].
- In conclusion, the mining operation may be allowed to be resumed in the State of Goa by the mining leases not found to be involved in any illegalities only after
 (a) the Macro Level EIA study Report of the ICFRE is received by this Hon'ble Court and a decision regarding the Taluka wise ceiling on permissible annual production from all the mining leases is taken (b) the survey and demarcation of the mining leases by the team constituted by this Hon'ble Court is completed and (c) the R&R Plans are prepared and lease wise permissible annual production are fixed after considering the mineral availability, area available for over burden dump and available infrastructure facilities particularly the carrying capacity of the existing roads. The resumption of mining operations by the mining leases found to be involved in illegalities including the violation of Rule 37 (1), MCR, 1960 and working beyond the sanctioned mining lease boundaries may not be permitted till a decision regarding compensation payable by such lease holders is taken and complied with and the preparation and implementation of the R&R Plans is completed. [Page 108-109 No.XVI.]

Public Accounts Committee (PAC) Report

32. Though the State Government has relied upon the Public Accounts Committee report, copy of it has not been produced. As the affidavit itself discloses, many of these issues from the PAC were also taken up by the Shah Commission (the claim in fact is made that the Shah Commission relied heavily on the PAC Report). Petitioner is therefore bringing on record the relevant portions of the PAC Report in order to show that the present government, headed by the very same person who was also the Chairperson of the PAC at the time, now denies the veracity or validity of the issues raised by Justice Shah Commission or the CEC. Relevant portions of the PAC Report are annexed at Annexure G (Page_________).

PUBLIC ACCOUNTS COMMITTEE REPORT (EXTRACTS)

From the Introduction:

- Pg. 41: There is a complete breakdown of all machineries provided by the Statute which are required to ensure that mining is undertaken and carried out in a legally permissible manner. The term "irregular mining" is nothing but illegal mining. Mining has to be done in terms of the Mineral Conservation and Development Rules 1988 and other Rules and Regulations including the Mining Plan in force and as approved by the IBM.
- Pg. 44: The Committee came to conclusion that the illegal mining has resulted in strain on the Infrastructure, Ecology, Agriculture and threatens to destroy the water security of the state, if not curbed immediately. Further, the overburden of the illegal mining is damaging the prospects of legal mining that has been going on in the state prior to Liberation. If illegalities are not curbed immediately the legal mining also may face closure, resulting into financial crisis in the interior districts of the state.

Chapter I: Condonation of delays for filing "J" form beyond stipulated date

Pa. 48 - Recommendations:

All such condonations be reviewed and pending review production suspended immediately.

All such condonation of delays be investigated for criminal breach of trust and responsibility fixed.

Chapter II: Ore extracted from leases that have not complied with essential conditions listed in the Environment Clearance certificate in regards to FCA and wildlife permissions

Pg. 49 - Recommendations:

Immediate stoppage of all extraction and transportation of ore in violating the F.C.A. and Wild Life Act.

Detailed inquiries to be carried out to know how the lapses have occurred and responsibility to be fixed on erring officials of the Forest Department.

Punitive action of exemplary nature be initiated against defaulting extractors.

Chapter III: Iron Ore Extracted from Dumps without approvals

Pg. 51: Production Reports for year 2009-10 and 2010-11 indicates that during year 2009-10, dumps working to the extent of 932,73,718 tonnes and 657060 tonnes of tailing has been extracted. Similarly for year 2010-11 the quantum for dump working has increased to 15217805 tonnes and the quantum of tailings have been 230463 tonnes. Thus during two years itself the volume of dump working and tailing that has been extracted is 2,53,79,046 tonnes i.e. 27.2% of the total Extraction. There are no permissions or any directions issued by DMG in matter of working on dumps. If quantum of dumps are taken into account along with production as enclosed in the annexure there is clear violation of the limits fixed under the Environment Clearance Certificate.

It may be actually beneficial to state in terms of revenues and environmental impact if dumps are worked in controlled and regulated format. Dump working should not be permitted unless cleared and approved in advance by DMG and GSPCB. Further dumps from forest should be auctioned to generate revenue for the state. It is most important that mining particularly working on dumps should not be permitted unless the assessment of capacity of roads to handle the transportation is worked out in consultation with the local population impacted by the same. In fact the present situation of uncontrolled traffic chaos is due to uncontrolled, illegal extractions of dumps, well beyond EC limits specifically in areas such as Rivone, Cavrem Pirla, Usgao etc.

Pg. 51 - Recommendations:

Until proper regulatory mechanism is worked out, and subject to legal provisions all working on dumps be subjected to approval by Goa Pollution Control Board and DMG before start of season of extraction, on annual basis. All such working be made to submit details on monthly basis. Pending such approvals adhoc working on dumps and tailing should be stopped immediately.

All dumps be notified for quantity as also indicating the location such as lease area, non lease area and forest area.

Regulation for working on dumps and quantum be fixed in consultation with locals and before any permission is granted by taking into account the cluster of mining and transport problem posed to local population.

No storage/stocking point should be permitted unless the same is specifically approved by DMG, Commercial tax Department and Goa Pollution Control Board. All traders and exporters of Goan Ore to register compulsorily with DMG. Strict action should be initiated against those who are not registered or do not file details returns regularly as required by making appropriate amendments to various provisions in the Act.

Chapter IV: Report on an individual mining lease

Chapter V: Excess Export over Production

Pg. 57: The above data makes it clear, that the export of Goan origin ore, through Mormugao and Panaji Port totalled to 4,68,463,83 which is marginally less by 15,32,797 Tonnes than the extracted ore, as reported in its Final Data by the DMG (4,83,79,180 tonnes). However, the major surprise is export of huge quantities of unclassified ore by exporters, whose whereabouts and sources in most of the cases are not known to DMG. The Directorate of Mines has been unable to explain the details. As Karnataka has banned export, the residual Karnataka origin ore, that was exported, was meagre quantities of 3,89,219 tonnes. Thus the quantity of 56,56,450 tonnes of ore exported does not have any explanation.

Pg. 59 - Recommendations:

Refer the issue of illegal mining to an independent Investigating Agency such as C.B.I./Lokayukta as the illegality is being carried out in active connivance of local politicians, bureaucrats of the Mines and Forest Departments and the Police Force at the local level. Total export for last ten years needs to be

investigated to identify the source of illegal mining exported and the money trail to identify the culprits involved.

Carry out transfers of most of existing officials in Forest and Police department in the talukas of Sanguem, Quepem, Bicholim and Sattari, with a view of breaking the nexus that exists. All the activities on mining front ought to be monitored by Seniors Officials from Forest and Police department besides DMG.

Transport, is to be carried out, only through Regulation which is to be strictly implemented. Let every truck that moves with Ore be recorded, along with Quantum of Ore it carries.

All export, to be carried out by MPT or Panaji Port should be done only on certificate to be issued by DMG indicating the details of Ore, and royalty paid.

Chapter VI: Irregularities causing large scale damage to Environment

Pg. 60: The Environment Clearance Certificates that are issued by MoEF are issued without proper documentation & verifications. In fact it appears that issuance of Environment Clearance Certificate by the MoEF has become an additional farce that is being carried out to display compliance with the directions of the apex court without any serious examination of the ground. The realities Environment Clearance Certificate are issued based on the EIA reports that on number of occasion have been found to be manipulated or at the best lacking in proper data or erroneous & outdated data.

In fact, granting of Environment Clearance Certificate has become routine to such an extent that more than 150 Environment Clearance Certificates were granted in four talukas of the state, during four years while only two rejected, before a blanket suspension for issual of Environment Clearance Certificate was granted by Minister (Mines) Government of India. However Environment Clearance Certificate issued already were adequate to cause major damage to the state environment as they were based on incorrect EIA and had not taken into account the local conditions. The cluster impact of these clearances is devastating. The impact on Agriculture, Education, Water Supply, conditions for decent survival is very serious. Trucks plying with excess ore, driven by drivers without licenses and speeding beyond acceptable speed, devastated villages of Rivona, Cavrem-Pirla, Surla, Pale, Usgao, Savordem and many more besides urban areas of Curchorem, Quepem, Sankhali, Sanguem as also villages located enroute. All people in these areas have suffered an irreversible damage to their Health, Agriculture, Education of children and social life. The casual attitude of MoEF is reflected in its issuance of certificates in name of Power of Attorney holder rather than the lease holder or its Legal Heir.

Pg. 61 - Recommendations:

State Government should cap the total quantities of ore that the local area can take, by clustering the leases based on their Geographical locations and available transport network. The powers to do so are available to the State Government.

EIA of all the cases where the EC is granted to be evaluated under the guidance of experts and report submitted to MoEF for review of Environment Clearance Certificate wherever required. Further the MoEF should be informed that they should not grant or renew any EC unless impact of EC due to clusters of mines and local transport infrastructure is taken into consideration.

Direct the MoEF that EC without proper description of TC numbers & survey numbers of Forest area/wildlife area will not be accepted by DMG. Non inclusion of the TC number & survey numbers has resulted in misuse of Environment Clearance Certificate.

Environment Clearance Certificate should be issued only in the name of lease holder or legal heir and not to or in name of Power of Attorney holder as is the case in many Environment Clearance Certificates.

No additional diversion of forest land be permitted for mining activities.

34. The Goa government's stand on the above, as stated in the affidavit in reply, is the following:

The illegalities reported in the Shah Commission Report all relate to the period of the previous Congress government. The present government is determined to ensure that illegal mining is completely eliminated from the State.

Nonetheless, the Goa government disagrees with the Justice Shah Commission / CEC on most of the issues wherein the Commission / CEC have found that there is illegal mining in the state of Goa.

On excess mining. the Goa government submits that ore that is stacked in dumps and exported therefrom is to be excluded from the permissible limits imposed by the environment clearance since the EC limits refer to the quantum of ore which may be won, whereas the dumps comprise stored material. Therefore, in effect there is very little illegal mining in the state of Goa as substantial quantities of ore that was exported were from dumps. The government also submits that handling of dumps falls exclusively within the purview of the State and is not to be regulated by the central authorities. However, the Goa government does not refer to the Shah Commission's findings that the "dumps" were in reality excess ore removed from the mines and passed off as dumps.

On stacking of overburden ore outside lease area – The state government stand is that as per Environment Clearance / mining law, overburden has to be stacked separately. This requirement permits storing the overburden outside the lease There is no harm caused to anyone if the overburden is stacked on property belonging to lease owner or any private property, hence no illegality is involved. Removal of overburden is to be controlled by State

On the NBWL clearance for mines within 10 km of Wildlife Sanctuaries / National Parks – the state government is of the view that this issue is clearly misunderstood by one and all. The government's stand is that the question of safety zones/buffer zones from WLS is still under consideration by the Supreme Court and unless a notification regarding buffer zones as eco-sensitive areas is issued by the MoEF, there is no such ESA that has been demarcated and for which NBWL clearance is required.

On violation of Sec. 37 (i.e mining by persons other than the lessees / Raising Contractors) – The State government submits that basically this is a technical violation which can easily be regularised as it does not matter whether A, B, C or D operates the mines as long as the mining is carried out as per the norms.

On violation of Sec. 38, which requires amalgamation of mining leases being worked together. - This is also a technical violation as per the State Government

On violation of Forest Conservation Act – While admitting that as on account of the deeming clause, mines which have forest on the lease have continued to operate even if their applications for forest clearance is pending, the affidavit merely states that this creates difficulty for the mine owners and this is a matter for the authorities to resolve. The government does not state that it will ensure that a lease requiring forest clearance will not be permitted to continue mining operations unless forest clearance is obtained.

On working of mines below ground water table – State Government says that there is no prohibition on mines from working below ground water table as long as the Central Ground Water Board or any similar authority does not place any restriction. In any case Goa receives high rainfall, the ground water table is quite high and mining is bound to occur below the ground water table. If mining below ground water table is halted, it is tantamount to halting mining activities altogether.

On condonation of delay in filing applications for renewal of mining leases – Here the state government agrees with the Shah Commission and CEC. It reiterates that these condonations are a legacy of the previous government and it has issued show cause to the 42 mines whose delay in filing application was condoned and leases renewed. But it has not yet taken any decision in the matter, although the show cause notices were issued many months ago. So one does not know the outcome of the enquiry.

- 35. Therefore, in substance, the Goa government holds that practically all the violations pointed out by the Shah Commission and the CEC are indeed not violations at all, but mere technicalities which can be regularized. It is in fact condoning all the mining illegalities which the previous government did not take action on. Hence it is a contradiction for the state government to, on the one hand say that the illegalities occurred during the previous regime and, on the other hand, condone those very illegalities by not considering them to be serious at all and terming them mere technical violations or by not agreeing that there is an illegality in the first place. Most of the major violations of law pointed out in the Justice Shah Commission report and the CEC Report will be regularised and will continue if the interim order passed in this petition is vacated and the state government takes charge of enquiry and monitoring.
- 36. Petitioner is now rebutting some of the stands the Goa government has taken in its affidavit, notably on four important issues:

On Dump Mining / Dumps Located outside lease area

- 37. The state government claims that dump mining or extraction of mineral from dumps is not covered under the provisions of the Environment Protection Act and therefore cannot be prevented as the EP Act and the environment clearance order are both silent on extraction of minerals from existing dumps. The state government also claims that all charges of mineral ore having been mined in excess of the limits imposed under the Environment Protection Act vanish if one considers that all the excess mining has been extraction of ore from dumps. Therefore no illegalities are committed in this respect by the mining companies.
- 38. The stand of the state government on the issue of what it calls dump mining (a new category invented in the state of Goa) can be broken down into two points:
 - a) That ore from dumps can be extracted and sold under supervision of the state government alone and without reference to the limits imposed in the environment clearance.
 - b) That dumps can be located outside the lease areas and this is not an illegality either.
- 39. Petitioner submits that both these positions are incorrect as they do not meet the test of existing statutes and further, they are not in public interest. Mineral ore extracted from dumps is liable for royalty and royalty has been paid, since it is not mud that is exported but ore. Both the extraction and transport of ore are covered by the provisions of the MMDR Act and Rules.
- 40. Extraction and transport of ore are also covered by the Environment Protection Act. All ore that is stored in dumps has been extracted from the mine at one time or another. It therefore must fall within production limits imposed on the mine by the EC whenever the lessee pays the royalty for the sale of ore. All EC orders state that the environment clearance order does not permit any change in mining technology or scope without prior consent of the MoEF. This is also the position taken by the Ministry of Environment & Forests in its affidavit.
- 41. The Environment Clearance sets limits on the ore production per mine so as to limit the impact of mining on the environment and the people of the State. If additional quantities of ore are also permitted to be produced / transported over and above the production limits of ore set out in the EC, this would impact the State's infrastructure negatively and the people living in mining areas, as it has done especially in the past 5 6 years. Ceilings and caps on production levels become meaningless if unaccounted sources of ore are permitted to enter the market without reference to the limits imposed. (It is important to mention here that according to the State Government, some 750 million tonnes of dump material is lying all across the mining areas.)
- 42. The State Government has not responded at all to the serious charge made by the Shah Commission, after inspection of sites, that the dumps were actually nothing more than stacks of ore removed from the ground in excess of environment norms:

"In the years of 2008-09, 2009-10 and 2010-11, there is large quantity of difference between production (dispatch) under permitted quantum and actual. This excess difference has been conveniently shown as "ore retrieved" from old dumps. On careful examination, it is noticed that such excess production claimed to be from old dumps is actually the ore extracted on proxy from the running mines. Actual minerals were removed from mining pits of regular mines but shown as dump handling. This could not have happened had the State Government, Director of Mines were vigilant enough to monitor and regulate through frequent field inspection. Actual loss in this regard would be submitted in Second Report."

- 43. The state government till today is unable to produce a survey report which shows location of top soil, over burden, sub-grade or reject materials separately stored in different locations. The general experience in the last several years is that top soil is buried under the over burden, which is buried under the low grade ore. Thus the occurrence of the materials in the ground has been simply reversed above the ground.
- 44. The stand of the State government that ore from dumps should not be part of production limits would in fact encourage mining in excess of production limits as excess production in any year would only need to be stored in a dump for a while to escape being assessed in the production limits of that particular year. Thereafter it escapes being assessed altogether on the ground that it is stored material and not excavation. This is being done in several mining leases which have only operated for 2-3 years but still insist that the charge of excess mining done by them is incorrect as the ore was actually from dump material within or outside the lease.
- 45. One additional argument against dump mining is that it conflicts and makes redundant the conditions in the environment clearance related to the rehabilitation of the mines. The environment clearance orders require concurrent back filling of mining pits. Material for backfilling comes from the overburden dumps, which are therefore required to be stored separately. OB quantities are recorded in the EC. Backfilling and eventual rehabilitation of the mine cannot happen if all materials excavated are put up for sale by unscrupulous operators in league with miners. In the past couple of years miners have exported good ore, low quality ore, overburden, tailings and anything for which they can gain a price. Such material once exported can never be replaced. The WGEEP Report has also questioned this practice since it makes rehabilitation of the mine a distant dream. Export of material from dumps without reference to the EC is therefore not in accordance with law.
- 46. As regards location of dumps outside lease and the state government's stand that there can be no objection to any persons dumping mining reject material, over burden or top soil outside the lease, petitioner submits that this is contrary to the law. The Indian Bureau of Mines has taken a firm stand that mining plans approved by it are only valid for those areas within the lease. Even if a mining plan shows dumping outside the lease area, the IBM categorically limits its approval only to the lease area. No location of dumps or waste material or reject material outside the mining lease has been approved by the IBM nor can it be approved by the IBM. What cannot be done in law cannot be regularized or justified.
- 47. The state of Goa is covered by the provisions of the Town and Country Planning Act which does not permit non-conforming use of land or use of land which is contrary to the notified land use as provided in the statutory Regional Plan. The Act came into force in 1974 and the Regional Plan was notified in 1986. The statutory Regional Plan 2001 is still in operation. All dumps created in the last 5 years violate the provisions of the Regional Plan as ore is dumped without reference to the land use permitted in the Plan. The Regional Plan is designed explicitly to ensure protection of ecological assets including rivers etc. Dumps set up outside mine areas are not regulated by the IBM and are invariable set up in haphazard conditions with no consideration given to their environmental impact on the rivers and nullahs, on paddy fields and village settlements. In Goa, the High Court has constantly been approached by people living in the vicinity of huge mine dumps, owing to the damage caused to their fields and water sources. The High Court has had occasion to pass orders prohibiting dumps from being located close to water sources. Such directions are required as dumps located outside the mine lease are not controlled by the IBM under the approved mine plan.
- 48. Several dumps have come up on revenue lands owned by government and forest lands. No mining of such dumps can be permitted at this stage since they are yet to be confiscated by the government.

On Buffer Zones / Mining without NOC from NBWL:

- 49. The petitioner agrees with the State government that, till date, the buffer zone issue is pending resolution before the Hon'ble Supreme Court in another petition filed by the Goa Foundation. Therefore, the issue is not whether mining is banned in the 10 km stretch or not, but the following: a) whether or not the Supreme Court by it's order dated 4-12-2006 required the environment clearances granted by the Ministry of Environment to be placed before the Standing Committee of the NBWL for its NOC; and b) whether or not mines which are located in the 10 km zone ought to obtain the NOC of the Standing Committee of the National Board of Wildlife in order to continue their activities.
- 50. Petitioner's response to a) above, is as follows: The Court's Order dated 4-12-2006 clearly directs the Ministry of Environment to place all the environment clearances issued it before the Standing Committee of the NBWL. The order contains no ambiguity, but is crystal clear. This direction was issued because the Supreme Court was distressed that despite the lapse of several years, the State governments has not yet presented their proposals for establishing ecosensitive areas, as they were required to do, in pursuance of the decisions of the Indian Board of Wildlife and its successor body, the National Board of Wildlife. Four weeks' time was therefore given as a final opportunity to the State governments to comply with this requirement.
- 51. The Ministry has correctly interpreted the Supreme Court's order to mean that until the ESA proposals are received and approved by the NBWL, the NOC of the NBWL is required for mining activities in the 10 km zone. Therefore, not only were the ECs issued prior to the said order to be sent for NOC to the NBWL, but even the ECs issued subsequently needed to be sent to the NBWL, until the buffer zone issue is settled by this Hon'ble Court.
- 52. In its affidavit, the Ministry does not deny that it did not refer the environment clearances to the Standing Committee. Instead, it offers an explanation, namely, that it formulated a system of separate clearances to be obtained by the project proponent for Environment, Forest and Wildlife. The Ministry's failing is two-fold: neither did it place the ECs before the NBWL itself, nor did it ensure that the system that it set up of separate clearances to be obtained from the project proponents for Environment, Forest and Wildlife guaranteed that no mine would operate in the 10 km zone without the NOC of the NBWL, in violation of the Supreme Court's order.
- 53. The State Government has also grossly erred. Firstly, it incorrectly interpreted the condition in the EC that the "clearance is subject to the approval of the competent authority" to mean the approval of the Chief Wildlife Warden. As per the Wildlife Protection Act, the CWW has no jurisdiction outside the limits of the wildlife sanctuary and therefore cannot grant NOC in the buffer zone. Only the NBWL has such authority. Secondly, it refused to cooperate with the Ministry to implement the Supreme Court's order. The Ministry, albeit somewhat late in the day (2009 onwards), issued circulars and letters to the State government to halt the mining operations of mines which had not secured the NOC from the NBWL as per the conditions of its EC. In the years 2011 and 2012, it specifically named the mines whose operations had to be halted. Despite receiving these directions, the State Government refused to ensure that the Apex court's order was implemented in its true spirit and for the purpose for which it was passed namely, to ensure that the flora and fauna in wildlife sanctuaries and National Parks is not adversely affected by the operation of highly polluting industries like mining in their immediate vicinity. In the unseemly blame game which has now ensued between the Ministry of Environment and the State government, it is not these authorities, but the wildlife ecology, which the Supreme Court through its various directions has been is at great pains to protect and nurture, which has been adversely affected.
- 54. Petitioner's response to the above is that it is necessary that mines which are located in the 10 km zone obtain the NOC of the Standing Committee of the National Board of Wildlife in order to continue their activities. There are several reasons for this. Firstly, industrial activity in areas bordering and surrounding a wildlife sanctuary must be in harmony with the requirements of a WLS, if the latter is to survive. Due precaution must be exercised in the case of a Red

Category Industry such as mining, that its impact is not overtly deleterious on the WLS and that necessary measures and restrictions are imposed to curtail its negative impacts. Therefore until and unless the ESA in the buffer zone is approved by the NBWL, mine operations must obtain the NOC of the NBWL.

- 55. Secondly, during the hearing of the W.P No. 460/2004 (wherein Order dated 4.12.0006 was passed) the petitioner had highlighted to the court that some of the environment clearances issued by the Ministry required the project proponent to procure a wildlife clearance from the Chief Wildlife Warden who had no competence to issue certificates for any areas outside the boundaries of the wildlife sanctuaries. Further, since the Chief Wildlife Warden is a state government officer, clearances were being issued on instructions of the state government and often by senior officers overruling the objections of the forest officials on the ground. It was in these circumstances that this Hon'ble Court passed the order directing that only the competent authority empowered in S. 5 of the Wildlife Protection Act, which is the National Board of Wildlife, would be required to issue NOC in respect of activities in vicinity of wildlife sanctuaries and National Parks.
- 56. Thirdly, the State government's ESA proposal was a zero-buffer zone around the wildlife sanctuaries where mines are operating. This was clearly unacceptable and hence the order dated 4-12-2006 records that Goa government may send additional proposal. The ESA for Goa is not yet finalized and until this is done, mine operations in the buffer zone must be approved by the NBWL.
- 57. Fourthly, it is pertinent to note that in the 6 cases of ECs for mines that were referred to the NBWL for its NOC, the NBWL approved mining but restricted the operations to the broken up areas only. It is another matter that the mines were not permitted to be operated by the Forest Advisory Committee as the leases had forest on them. It is amply clear therefore that the NBWL has not outright rejected mining activity in the buffer zone, but it was exercising due control over mining operations, depending on the distance of the mine from the WLS, the nature of the operations and other relevant factors. Such control is required to be maintained till the buffer zone issue is decided vis-à-vis each State.
- 58. Finally, because of non-compliance by the Ministry, the State government and the mining companies with the Supreme Court's order to obtain NOC from the NBWL, extensive damage has undoubtedly already been caused to the wildlife sanctuaries. For, in this interim period, mining leases have operated throughout the 10 km, some within one km, some even sharing a common boundary with the wildlife sanctuary. Excess mining has occurred in practically all these leases. Many of the lessees were conscious that they were violating the directions of this Hon'ble Court and therefore at any moment there might be change of circumstances. Hence the intent was to excavate as much ore in as short a time as possible. In fact in the year 2012, after it became known that the Shah Commission report has been filed, mining leases adjoining the wildlife sanctuaries continued mining operations till July 31, 2012 whereas the prevailing practice is for mining to be halted latest by the middle of May, because of the advancing monsoon and the necessity to prepare the lease in terms of necessary monsoon measures.
- 59. Most of the mining pits adjoining the sanctuary areas have gone below the water table. The sanctuaries are on higher ground. This would mean that the water would migrate from the sanctuary into the mining pits, thus altering the very habitat of those areas of the sanctuary that are closest to the mining pit. The decline in the availability of ground water would also alter the vegetation, once the diversion reaches critical proportions. The Wildlife Act explicitly prohibits diverting water from sanctuary areas.

On Raising Contractors:

- 60. With respect to the raising contractors the state government holds the view that raising contractors and contracts can be regularized. It states that Sec. 37 is an anomaly in the age of liberalization and so long as someone is doing mining following all the rules and regulations and doing it in the best possible way there is no need to follow this rule which is in the rule book, despite the fact that, as the CEC has shown, the state government itself in the past has cancelled leases which violated Rule Sec. 37. Obviously some parties have more influence than others.
- 61. It needs to be recalled that most of the mining leases in the state of Goa were granted to individuals for manual mining on a very low scale. None of these individuals, as could be expected, were able to marshal the administrative apparatus and technological equipment required to operate mine on mechanised scale. As the case of Badruddin Mavani has shown, eventually powerful actors make deals with the owners in which 95% of the income of the mine proceeds will be with the raising contractors or usurpers of the lease while 5% is given to the original lease owners. If the lease owner is unable to mine the lease, it must be returned to the state government which can then auction it to realise its true value. The original concessions were granted to individuals on a pittance. Almost all the raising contractor are large companies like Sesa Goa (Vedanta) or Fomento or Chowgules which are able thus, through a raising contract, given access to a lease illegitimately and almost without any cost. This is a perversion of the law and a wholesale subversion of the MMDR Act, completely unconstitutional and contrary to the objectives of the MMDR Act and the Abolition Act of 1987. On this sole ground and in view of the judgment on the 2G scam which has been passed in almost identical circumstances raising contracts are a complete aberration and are outside the framework of law today. The CEC has therefore asked for a detailed inquiry including production of income records and balance sheets of the individuals who have signed the raising contracts but claim they are operating the lease in question.
- 62. In addition to the above, it is to be remembered that these leases are subject to implementation of various conditions laid down under various environmental laws. Further, the lease must be rehabilitated to the fullest possible extent. Despite the best of intentions, leases are still not being rehabilitated. A number of exhausted mines lie abandoned. Large number of leases, for example in the Netravalli Wildlife Sanctuary, remain rehabilitated from the year 2003 when the mining on them was stopped by the Hon'ble Court. The raising contractor who operates any lease is bound to move out of the lease when the ore is exhausted. The individual lease owner is bound to express helplessness to rehabilitate the lease. In some of the leases in fact the ore will be exhausted much before the period of the lease because raising contractors want to dispose off as much ore as possible.

On Mining below Ground Water Table:

- 63. Mining in Goa has been taking place in the catchments of reservoirs, rivers, tanks and lakes. The Goa government does not have an estimate of the total quantity of water that is removed as a result of mining in the State. Petitioner has done some research and if one goes by these figures (see Annexure H, Page ______), no mining should be allowed in the State for the harm being done to a sustainable resource by an unsustainable extractive industry. Petitioner states that the total water requirements of the population of Goa (including industry but excluding mining) is 90 billion litres per annum. There is gross shortfall and several sections of the population do not get regular water even today.
- 64. Compared with the above, the rainwater that falls on mining leases is to the tune of 350 billion litres per annum. Of this, as per figures provided by the Pollution Control Board, 26 billion litres are used by beneficiation plants alone. Most of the water is contaminated by such use (it becomes highly acidic). Water from mining pits is pumped out into nullahs to enable mining activity to continue. People living in the villages adjacent to the mines are compelled to make do with this recycled water for agriculture as the ponds, springs and rivulets in their villages from which they once drew clean water for domestic

consumption have run dry. Ground water aquifers are destroyed permanently, as in Pissurlem and Shirgao villages, where there is absence of water in the wells (in other words, drought) even during the month of July, a period of heaviest rainfall.

- 65. The destruction of the ground water aquifer of Shirgao is documented by a research study prepared by NEERI on the directions of the Bombay High Court, pursuant to a PIL filed by the villagers of Shirgao. In regard to its investigations on water depletion in Shirgao village (which is enveloped by three large mining leases, NEERI reports:
 - "The groundwater scenario was worse in December 2008, when almost all the dug wells in Sirigaon village had dried up. However, the wells from neighbouring villages had water column even in the month of December 2008.
 - The mine pit water levels for all the three mines is below -20m (amsl). The flow direction is indicative of water flow from the aquifer to the mine pit. Water seepage to the pit from the mine wall on the village side is also noticed during the field visits. Schematic diagram of ground water profile in the Sirigaon and mine are is presented in the Figure.
 - The deepening of the mines has led to loss of recharge area for the dug wells seated at the foot hills of the plateau. Hence, the water scarcity in the village dug wells is attributed to the loss of recharge areas well as the deepening of the mine."
 - Petitioner is annexing to this affidavit at **Annexure I**, Page ______) a copy of the NEERI study.
- 66. Petitioner is therefore pleading that this Hon'ble Court should accept the CEC's recommendation that no mining pit that intersects the ground water will be permitted to operate in future. Petitioner further submits that while some studies have been done in villages, pursuant to peoples' complaints and they have established that mining below the ground water table affects the water table in the vicinity, as is seen from the depletion of water in wells, tanks, ponds and rivulets, no such studies have been conducted in wildlife sanctuaries where undoubtedly the same water depletion is occurring. Flora and fauna do not complain. They simply fade away and die.

"Gifting of Natural Resources"

67. Petitioner is also especially concerned about the contents of para 90 of the affidavit, wherein the State Government has denied the allegation made in the report of the Justice Shah Commission, that by permitting mining activities to continue without executing lease deed agreements, the State has "gifted" property worth thousands of crores to private companies/firms/individuals. The government instead points to the amended Stamp Duty Act which, it avers, will enable the State to collect far more revenue under the new dispensation than if it had hurriedly chosen to renew the leases (as per the earlier provisions). The petitioner therefore submits as under:

Iron ore resource is a public asset. In the act of mining, the said resource is depleted for profits which accrue to the private party to whom the asset is leased. The Goa government is only the custodian of that asset and therefore duty bound to ensure that the public asset is leased to private parties at the highest possible price as per article 14 of the Constitution. For this purpose it is duty bound to first value such assets and then follow transparent and competitive methods for allotting/renewing the said assets.

Government's follies in the past were: (1) It handed over the public assets namely iron ore resource to private parties without charging any price for the asset; (2) It did not sign and register any lease deed while handing over.

As per its affidavit, the present government is planning to remedy only the second expensive error by signing and registering the lease deed even while it plans to continue with the more expensive and larger illegality of giving the public mineral asset to private parties for free and thereby inflicting huge loss to the public exchequer. One can therefore surmise who is responsible for the various averments made in the affidavit and who is controlling the Goa government's mining policies.

In the affidavit, the government tries to project the stamp duty for the lease deed as the price for the mineral asset. The stamp duty is not the price of the said asset. Stamp duty is merely the payment for registering the lease agreement.

To make things explicit, let's consider, by way of an example the case of Sesa Goa's operations in the State of Goa since it is one of the largest companies whose account details are in public domain. During 2010-11, Sesa Goa exported 18.1 MT iron ore (Pg 3 of Sesa Annual Report) and declared a pre-tax profit of Rs 5559.69 cr (Page 109). During 2011-12, it exported 16 MT (Pg 3) and declared a pre-tax profit of Rs 3129.15 cr (Page 109). Thus in the last two years it made a profit of Rs 8688.84 cr exporting 27.6 MT.

The Annual report at Pg 17 mentions that 98% of these profits came from iron ore, 1.5% from Pig Iron and 0.5% from met coke. Annual report at Pg 20 also states that of this 34.1 MT, almost 81 % or 27.6 MT was of Goa origin, 14% or 4.8 MT from Karnataka and 5% or 1.7 MT from Orissa.

Thus it can be fairly estimated that in the last two years, Rs 6800 crore was earned by just one company, Sesa Goa, from Goa iron ore assets leased to them "free of cost" by Goa government. While this level of profit was earned when benchmark FOB price was \$100/ton, the same has further increased to \$150/ton, amply evident from the realization of Rs 136.5/ton in case of the shipment by Prime Minerals in January 2013, thereby increasing the prospect of significant 50% jump in profit. Once mining starts, Sesa Goa may be seen profiting Rs 4000 crore from the iron ore assets leased to them for free by Goa government.

Annual report also states fixed capital investment at Rs 1390.14 cr (Pg 122). Of this only half or around Rs.700 crore is attributable to mining and balance is attributable to Steel/Pig Iron Plant and Coke Oven Battery. Mining and export is a simple dig and haul business and therefore the efforts in this business are much lower than any other industry. The demand for iron ore has far outpaced supply in the last decade making the price to sky rocket from \$ 15/ton in 2003 to \$ 150/ton now. A Sellers' market has ensured that business is almost risk free.

Normally a 14% return on investment is considered as good profit for an effortless and risk free business. A profit of Rs 100 crores/year would be commensurate with the investment of Sesa Goa in Goa's iron ore mining. Thus a profit of Rs 6800 cr earned in the last two years was a "windfall" and was earned only because the leases were given free of cost. Had there been an auction, Sesa Goa would have definitely needed to pay a high price for the iron ore leases. The price discovery in an auction process tends to reduce the profit of private party to a market determined return on investment. This in turn ensures maximization of

revenues for the government and gives an opportunity to similarly situated persons to participate, thus ensuring fair competition and complying with the mandate of Article 14 of the Constitution.

Thus on account of "free of cost" leasing iron ore mines to Sesa Goa, the Goa government is estimated to have lost over Rs 6000 cr in the last two years. Since the lease is for 20-years, the loss to Goa government could well cross Rs 60,000 crore. This is without considering that the price of scarce iron ore has continuously risen over last decade and is still rising.

The subject of this argument is the actions of the Goa government, the custodian of public mineral assets. This issue is highlighted merely to bring to the notice of this Hon'ble Court the degree of significance that the "Price of the leased iron ore asset" has compared to the Rs 800 crore "Stamp Duty" that Goa government will get from registering 336 lease deeds. In the guise of remedying Shah Commission strictures for not signing and registering lease deeds, Goa government is conveniently renewing the leases without fixing and charging a "Price" for the iron ore asset.

From the State of Goa's perspective therefore, the "Price of the iron ore asset leased to other lessees" definitely needs to be taken into account. The annual iron ore production/ exports in the state of Goa is thrice that of Sesa Goa. While Sesa works 27 Deemed Leases, there were 336 working and non-working deemed leases in Goa. The price of the iron ore leases that Goa government can get at the time of renewal could well be few lakh crores. We have already shown in para 12 (a) of this affidavit that the natural asset in the ground amounts to 577.172 million tonnes. Estimated value @US 100 per tonne is Rs.3 lakh crores or more precisely, Rs.311580 crores.

Goa mining situation is worse than that of Bellary

68. Petitioner disagrees with the State Government's denial of the charge made by the CEC that the condition in Goa was worse than Bellary. The facts and figures in the table below amply demonstrate that Goa has suffered more intensively at the hands of the mining activity than even Bellary and hence this Hon'ble Court's intervention is most urgently needed for Goa State.

Features	Bellary District	Goa State
Status	District of Karnataka	State of India
Area	8,447 sq km	3,702 sq km
Population (Census 2011)	25,32,383	14,57,723
UNESCO World Heritage Sites	Hampi	Old Goa
Forest area	970 sq km (11.9%)	1,424 sq km (38.5%)
Forest type	Thorn and Scrub	Estuarine, Strand vegetation, Plateau vegetation and Semi-evergreen and evergreen
Wild Life Sanctuaries / National Parks	1 (Daroji Sloth Bear Sanctuary)	6 (Mhadei, Bhagwan Mahaveer/Mollem, Netravali, Cotigao, Bondla, Dr. Salim Ali/Chorao)
Area under WLS/NP	55.87 sq km (0.66%)	755.31 (20.4%)
Rare, Endangered and Threatened (RET) species	39 of fauna, 9 of flora	Numerous, across all categories (avian, flora, fauna, etc). New species being discovered regularly.
Rainfall	575 mm per annum	3,005 mm per annum
Rivers	5 rivers flowing	11 rivers are flowing across the leases with 42 tributaries. All leases in catchment areas
Springs	3	Countless
Reservoirs	Tungabhadra Reservoir, upstream of mining areas	Selaulim Reservoir supplies drinking water to 55% of population now contaminated with manganese above permission limits. Khandepar river supplying water to North Goa also polluted by mining.
Ground water impact	Mining is confined to the top hillocks and the water recharge pattern in the study area has not been altered. However, if mining is continued to deeper levels and the pit level goes below the groundwater level, the sources are likely to be affected (ICFRE)	

Mining area	3 talukas (Sandur, Hospet & Bellary) out of 7.	5 talukas (Bicholim, Sattari, Dharbandora, Sanguem, Quepem) out of 12. Also a few mines in Pernem, Ponda, Bardez talukas.
Number of operational mines	90 mines under operation	90-114 mines under operation and 94 more have completed Public Hearing (Total 199 leases have completed PH)
Lessees and market	60% mining with PSUs, where blind profit making does not occur & 40% with Pvt parties. 50% of the output is used in domestic steel production	
Forest land for mining	Around 8,000 hectares	Around 11,000 hectares
Period during which CEC investigated illegal mining.	2003 – 2010 (7 years)	2006 – 2011 (5 years)
Illegal exports	304.91 lakh metric tonnes of iron ore have been exported without valid permits	Excess exports were to the tune of 395.645 lakhs metric tons
Illegal exports in latest comparable year (2009-10)	71.28 Lakh MT	akh MT

69. As can be seen from the table above, the conclusion is clear. Goa has been battered by mining. Petitioner submits that mining therefore ought not to be permitted in Goa any more, unless stringent monitoring of mining activity is available and the mining activity itself is within the limits of the carrying capacity of the taluka and its infrastructure. For this reason, the petition has been filed.

Prosecution of persons involved in illegal mining

70. Both the Commission and the CEC have found collusion between State Officials and the Mining Mafia. However, only some six junior officers have been suspended, together with the Director of Mines and Geology. No charge-sheets have been filed even in these cases. That there was large-scale illegal mining there is no doubt. However, since the State is small and allegiances are constantly shifting, it is doubtful if anyone will be punished by the present regime. Petitioner requests this Hon'ble Court to order an independent investigation as sought by both the Shah Commission and the CEC into the criminal acts that led to defrauding the exchequer of crores of rupees. It must also intervene to ensure that the valuable asset of mineral ore, which belongs to the people of Goa and this country, is not handed out to the same people who created the mining scam: the mining lessees primarily, with support from politicians and bureaucrats.

The factual position of the mines in Goa today is as under:

- a) All environment clearances without which no mining can commence are held in abeyance and as per affidavit of MOEF, have been referred to a separate Expert Appraisal Committee for examination of documents from project proponents and also compliance with EC conditions. Goa government has been asked to submit precise information on distances from wildlife sanctuaries. After the report of the EAC is submitted, MOEF will take appropriate decision on revocation of suspension.
- b) State of Goa has ordered closure of all mines in the State on 10.9.2012 and has filed in its affidavit statement that "as of today," it does not contemplate resumption of extraction of mineral ore in the State (para 15-16) but will seek to allow only export of dumped material.
- c) National Green Tribunal (NGT) has restrained 56 mines from operating without its consent as validity of environment clearances granted to these mines has expired. Copy of NGT order is at Annexure J, Page
- c) Validity period of all leases operating in Goa (except 8) have expired on 21.11.2007 and have not been renewed. No renewal orders should be passed without a competitive auction as recommended by the Justice Shah Commission.

DEPONENT

VERIFICATION

I, the above named Deponent, do hereby verify that the contents of the above Affidavit are true and correct to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at New Delhi on this 25th day of February 2013.

DEPONENT