

SITE INSPECTION REPORT

OF

1. 2x660 MW (Phase I) Super Critical Coal Based Thermal Power Plant in Sompeta Mandal, in Srikakulam District in Andhra Pradesh.
2. 2640 MW Bhavanapadu Thermal Power Project near Kakrapalli village, Srikakulam District, Andhra Pradesh by M/s. East Coast Energy Pvt. Limited.
3. Alumina Refinery (1.4 MTPA) and Co-generation Plant (90 MW) at Srungavarapukota, Vizianagaram, Andhra Pradesh by M/s. JSW Aluminium Limited
4. Alumina Refinery (1.5 MTPA), Smelter Plant (2,50,000 TPA) alongwith Captive Power Plant (90 MW) at Mandal Makavarapallem, District Visakhapatnam, Andhra Pradesh by M/s. Anrak Aluminium Limited.

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PERIOD OF INSPECTION

17TH JULY, 2010 TO 19TH JULY, 2010

SITE INSPECTION REPORT
OF THERMAL PLANTS OF SRIKAKULAM DISTRICT AND
ALUMINIUM REFINERY PROJECT IN VIZIANAGARAM AND
VISHAKAPATNAM DISTRICTS

Nagarjuna Construction Company Limited – Thermal Power Plant:

NCC applied for an environmental clearance for setting up coal based thermal power plant of 2640 MW (4x660 MW) at Gollagandi and Baruva villages, Sompeta Mandal, Srikakulam District, Andhra Pradesh in an area of 2423.599 acres on 28.08.2008.

<u>Land Classification</u>	<u>Area in acres</u>
Cultivation	412.481
Waste land grass	1673.467
Water logged area	85.906
Mixed plantation	252.113
Total area surveyed	2423.599

Presentation was made to the EAC for prescribing TOR on 14.10.2008. The committee observed that the proposed site is a marshy land and have mud flats, partly in CRZ and has significant ecological value. In view of the same the committee asked the proponent to identify an alternate site away from the mud flats and conforming to CRZ regulation. The committee did not prescribe TOR for the proposed site at this stage. Application was re-submitted to MoEF on 12.02.2009 for a revised area of 1890 acres of land along with new scientific and technical studies with reference to the observations by EAC during the TOR presentation. A presentation for issue of TOR was made to EAC on 13.03.2009. The EAC constituted a sub-committee to visit the site for a factual verification of the site conditions. The sub-committee visited the site on 7.4. 2009. The MoEF issued a TOR on 14.4.2009 with the suggestion that 400 acres of land including 86 acres of water logged area on the eastern side of the project site shall be left out from the project area and a revised layout plan should be worked out. The plant layout was modified after leaving 400 acres. of area as identified by

committee including 86 ac. of water logged in the north east corner of the project. REIA report was prepared as per the general format of EIA Notification of 2006 on the basis of one pre-monsoon data collection and was submitted to A.P. PCB. Public hearing was conducted on 18.8.2009 after due notification on 15.7.2009. Nearly 3500 people attended the meeting. On 14.10.2009 a comprehensive presentation for issuance of EC was made before the EAC and the committee recommended only 2x660 MW (Phase I) with certain conditions. The EAC in its next meeting on 10.11.2009 made some amendments in condition I and condition VIII of the recommendations of the previous meeting. Environment clearance was granted vide Ir. No J-13012/119/2008-IA.II (T) dated 9.12.2009. An appeal was filed in Environmental Appellate Tribunal. NGOs & Public agitated against Thermal Power Projects and Aluminium refineries coming up in the region before the Hon'ble Minister on 5th July, 2010 at Visakhapatnam during Green India Mission Consultative Meeting. The Hon'ble Minister instructed that the Regional Chief Conservator of Forests, Bangalore to visit the sites with a team and submit a factual report on the issues raised by the NGO's/public. The project authorities were informed on 13th July of the visit from 17th July 2010. On 14th July, 2010 public agitated against the attempt of NCC to carry out some work in the site. Two people were reportedly killed and several people including policemen and media persons were injured. On the same day environmental clearance was cancelled by the National Environmental Appellate Authority. On 15th of July, 2010 MoEF also kept in abeyance/suspended the environmental clearance and instructed the RCCF, Bangalore to submit a report. There is a High Court case pending presently in the matter.

On 18th July, 2010 the team met the District Collector, Srikakulam and held discussions with him regarding the situation and the project and subsequently undertook the site inspection. The team visited the NCC site along with some NGO's and local people near SompetaRDO Tekkali, DSP (Intelligence) were also present. The local people not only showed the project site but also showed various streams feeding the project site and also streams providing irrigation to the agricultural fields and ultimately ending in the proposed project site "beela". The team subsequently interacted with some people of Benkali, Jinkabhadra and other villages.

The plea of most of the local people and NGOs is to stop the proposed establishment of a 2640 MW coal based power plant by Nagarjuna Construction Company Limited (NCC). As per the interaction the team had with the local people and NGOs, and as per the representations received. The project is being opposed on the following grounds.

1. If the thermal plant comes up it will devastate the lives of thousands of farmers and fisher-folk, in two towns and over 30 villages, as well as destroy an area which has significant ecological value. Setting up of thermal power plant will cause irreversible damage to an eco-system of great value that needs to be preserved for future generations.

2. The NCC thermal plant is proposed to be constructed in an extremely precious water-body known locally as "beela". This "beela" ("peddha beela") is a low-lying swamp area with a unique habitat, serving as a rich biological wetland with high ecological importance. The "peddha beela" wetland is linked to two other wetlands -- the "chinna beela" and the "tampara" near Idduvanipalem where it finally joins the sea. The thermal plant will surely destroy the bio-diversity of the swamp. This wetland occupies over 4000 acres stretching from Baruva in Sompeta mandal to Kapaasuguddi in Kaviti mandal, a length of about 20 km. Of the 1882 acres (762 hectares) handed over to the NCC, the "beela" is of extent about 1200 acres. It is wetland required to be conserved under Central Government's Policies and as per the CCLA's instructions to protect water bodies as well as in pursuance of several international treaties to protect the same.

3. The whole area is abundantly fertile. The area around the proposed plant has a population of about 1.5 lakh consisting principally of agriculturists and fisher-folk. The vegetables grown in the area are well-known. It is largely because of the "beela" that the groundwater table in the region is high.. Significantly, water from the "beela" is the lifeline for a two-crop paddy in an extent of not less than 5000 acres in the area. Three lift irrigation schemes from the "beela" sanctioned by the present government are also functioning.

4. For many of the fisher-folk, belonging to Manikyapuram village of Kanchili mandal, the "beela" is the only source of livelihood as they do exclusively inland fishing. Fisher-folk from Kaviti mandal are also leased out fishing rights by the fisheries department every year. The kandra and agnikulakshatriya fisher-folk communities will have their livelihood robbed if their access to the "beela" is taken away.

5. The "beela" also serves as a huge grazing area for sheep and cattle. Apart from this, hundreds of families eke out a living making mats from the grass obtained in the "beela". It is also used as roof-top material and animal fodder. The "beela" and the area surrounding it is also home to rare medicinal plants like "*aswagandhi*", "*sarpagandi*" and "*eclipta alpa*".

6. Moreover, the "beela" is a bird habitat for about 120 species. Every year, in the month of October, thousands of birds from Australia and Siberia, known locally as "kondamkodi and nathagotta", visit the area for about six months. They use the "beela" as a nesting and feeding habitat. This is an important migratory route and passage migrant place. The area is also home to several wild animal species known locally as "*varudu* and *peddhanakka*". The "*pamula metta*" in the "beela" contains many varieties of snakes.

7. The coast here is home to a vibrant and hard-working fisher-folk community living in over 20 villages. If the thermal plant comes up in the area, it will severely undermine marine catch and make life miserable for them.

8. Baruva, Sompeta, Kaviti and Kanchili are places of religious importance.

9. The environmental public hearing for the NCC thermal plant that was held at Gollagandi village on 18-8-2009 witnessed an overwhelming majority of people strongly opposing the proposal. Cutting across community, class, occupation and political party' lines, people of the three mandals have been organising countless rallies, dharnas, postcard and other peaceful campaigns against the thermal plant proposal since several months. In fact, a totally voluntary bandh was observed in Sompeta, the mandal

headquarters on August 21. No meaningful public consultation in decision making process. A coal-based power plant, whatever be the precautions taken, will pollute land, water (surface, ground and sea waters) and air in the area.

10. Ecologically sensitive public lands have been given to a profit making private firm at throw away price ignoring the rights of the local farming and fishing communities.

11. Sompeta has been a sad story of misrepresentation of facts from the district administration to the State and the State Government to MoEF. There is a writ petition pending before the Hon'ble High Court of Andhra Pradesh on the same subject.

12. The helpless small D patta land holders had no other option than to part with their lands for ready money offered by the company.

13. The project will employ not more than 750 persons on a continuing basis, that too, with fairly difficult qualifications. At best, the local people may be employed on a menial basis.

14. The land (classified in revenue record as "tampara" and referred to as a "swamp" in the Go issued by the government transferring the land to NCC) comes within the category of 'wet lands" as defined by the Central Government. Both the Central and State Governments are fully committed to conserve wet lands both under the assurance given by the Centre under the Ramsar International Treaty on Wet Lands and as per the Policy approved by the Union Cabinet for conserving wet lands.

15. A coal based power plant will spew ash into the surroundings and pollute the land, the water (ground and surface) and the air. Ash is known to contain toxic chemicals such as sulfur, cadmium, mercury and even radioactive impurities that could affect generations of people. It is

impossible to reduce ash, sulfur, cadmium, mercury and other toxic pollutants beyond a limit.

16. These facts points to a serious infringement of human rights in and around the project site. Right to live under Article 21 and the Directive Principle under Article 48A have been infringed.

17. It has been repeatedly pointed out to the Central and State Governments not to permit NCC to set up any power project at the proposed site since it is located within a wet land where no industrial activity can be permitted under the Environment (Protection) Act, 1986 and the various rules and regulations issued there under.

18. The site is a lush green, fertile agricultural land should not be diverted for industrial use.

19. As the land in question is a swamp, the local fishing rights have been franchised in favour of Bikiri Bhara Parishramika Co-operative Society. The franchise is renewed year after year. The present tenure of the franchise extends till 2010. The society has approached the Hon'ble High Court of A.P. in W.P.No. 12220/2008 and the court has ordered the District authorities not to dispossess the petitioners till their claim to fish in the are is properly investigated. The District authorities are yet to act on this order. In a way, allowing NCC's power project to come up will contravene the Court order.

Although some people were in favour of the project and said that the setting up of the project will result in development of the area and create employment for the local people. But their number was very less.

The representatives of NCC Limited have explained their version in favour of the project. The company mainly depended on certain records and reports in favour of the project to say that the area presently approved is not a wetland in strict sense nor the land comes under CRZ category and explained the measures proposed to be taken by them to mitigate the

anticipated adverse environmental impact of the project. The main points mentioned by them are given below:

1) None of the official studies mention Sompeta Site as a "wet land".

- Land Use and land cover study by AP State Remote Sensing Application Center, Govt. of AP which interpreted the satellite imagery followed by physical inspection and found only 86 acres of land is water logged.

- Topographic survey conducted by Survey of India also found nearly 86 acres of land is water logged.

- National Institute of Oceanography, Goa, after a study, found that this land is outside the CRZ and not a wet land.

- MoEF Sub Committee visited the site on 7th April, 2009 and they recommended the project to be executed at the proposed site with the specific condition that against 86 acres of waterlogged area, 200 acres of land should be excluded from the proposed project area.

- In the EAC meeting of MoEF, NCC was directed to leave 400 acres of land out of the proposed project site and accordingly, the Plant layout was also modified.

- 1082 acres of Govt. land was given by APIIC, Govt. of Andhra Pradesh which was meant for industrial purpose. The nature of land as per the Revenue Records is "Government Poramboke" (Wasteland).

2. The *Government land* proposed for Power Plant is not a prime agricultural land as per the report of the Collector, Srikakulam. As far as the land use pattern *in respect of private land* for the purpose of power plant is concerned, the same land use details were based on the District Primary Census 2000-01 data. 58 farmers, who were given D Patta land (78.9 acres) by Govt. of AP, requested the Collector, Srikakulam to alienate their land in favour of NCC, as their land was not giving economic returns. Accordingly,

Govt. of AP allowed alienation of such lands. NCC utilized the services of *Survey of India (Govt. of India Organization)* and *A P State Remote Sensing Application Center, Govt. of Andhra Pradesh* to determine the land use pattern in the proposed land for the Power Project.

3. An efficient area drainage system will be implemented. This will ensure that the ground water table does not deplete, lift irrigation schemes would not suffer and flooding of villages will not take place.

4. Creation and maintenance of 200 acres of Eco-Conservation Pond will ensure availability of water and water balance in the area. NCC uses Sea Water and, therefore, the seasonal rain water will be diverted to Eco Conservation Pond and the downstream beela (Manikyapuram beela) through the Anicut. Appropriate rain water harvesting system will be established for recharging the ground water table.

5. Most people visited NTPC, Simhadri, Parawada, Visakhapatnam and apprehended that Ash Pond of NCC will also result in leaching and contamination of ground water while in the NCC latest technology will be used to minimize the pollution aspects.

6. 168 fishermen families of Manikyapuram, Kaviti Mandal are the only inland fishermen dependant on the beela of the project site for fishing, who were enjoying fishing rights by way of lease and have been given alternate land by the District Collector, Srikakulam. These inland fishermen were satisfied with alternate means of livelihood. As part of R & R Policy, an amount of Rs.50,000/-has been deposited to each of these fishermen (Rs 84 lakhs) towards construction of houses with Collector, Srikakulam and an area of 4.6 acres is also provided to locate the houses of these 168 families at Manikyapuram, Kaviti mandal, Srikakulam district. Rs.62 lakhs has been deposited towards deepening of the alternate area, which would be done by Fisheries Dept. NCC has also offered to equip these inland fishermen with employable skills.

7. The activities of the project are not going to affect the Manikyapuram beela. Thus there is no scope or possibility of affecting the fish breeding in Manikyapuram beela.

8. The fishermen of 24 villages in Sompeta Mandal, Kaviti Mandal, Mandasa Mandal were shown the Sea area close to Pharma City, where allegedly untreated effluents are discharged. This adversely affected their minds. The jetty design and cooling water discharge will be in such a way that it will not affect fish breeding and movement of trawlers. Out of nearly 1,00,000 acres of sea area adjacent to Sompeta, Kaviti and Mandasa Mandals, the impact area due to sea water intake/outfall would be 110 acres and the impact area due to Jetty and intake/outfall would be about 285 acres which is about 0.003% .

9. Use of latest technology, dust suppression and extraction systems, acoustic enclosures and development of green belt in 350 acres will keep the air, noise and dust pollution within the prescribed limits.

10. Diseases, as apprehended by locals, will not emerge due to establishment of coal based thermal power plant. There are no evidences of such occurrences in the power plants so far established.

11. As part of Green belt development, it is proposed to develop green cover by planting nearly 3 lakhs trees in 350 acres and, as a result, the day temperatures are not expected to increase. Therefore, productivity of agriculture is not likely to be affected nor will lead to displacement of people

12. About 3500 persons including about 2000 persons from the land owners' families attended the public hearing. *Out of 47 speakers, 21 speakers including MLA, district CPM party leaders, 6 sarpanches and 10 individuals supported the project stating that it will add prosperity to the area. Only about 26 people opposed the establishment of the project. 670 families have sold nearly 589 acres of*

private land to NCC. Baruva, Gollagandi, Rushikudda and Benkili Panchayats supported alienation of Govt. land for establishment of this Power Project. 174 unemployed youth, who voluntarily came for Training have been imparted technical training by NCC and NAC/DRDA, Srikakulam. Another batch of 152 persons is getting ready.

13. NCC got several studies conducted which revealed that the proposed site was not ecologically sensitive, nor a marshy land/mudflat. MoEF Sub Committee also visited the site and found the site suitable for a power plant and accordingly, EC was granted, asking NCC to leave out 400 acres out of the proposed lay out including 200 acres of area to be maintained as an Eco Conservation Pond.

14. As per the Certificate issued by M R O, Sompeta Mandal, the site at Sompeta was not included in the Prohibitory Order Book. Thus, there is no bar to set up a Power Plant on this site.

15. a. Bio Diversity Report by University of Hyderabad and Kakatiya University reveals that there are no threatened categories of plants and animal species in the Red Data Lists (IUCN categories).

b. Forest Dept., Govt. of Andhra Pradesh has given the certificate corroborating that there are no endangered species in the site.

c. As per the report of District Collector to State Human Rights Commission no migratory birds visit this site either from Australia or Siberia.

16. Sompeta Site does not figure as Important Bird Area (IBA) in the survey carried out by BNHS .

Based on the site visit, interaction with the local people, NGO's, project authorities, local officials and perusal of representations and available relevant records, the observations of the committee are as follows:

1. Project site :

i. Government lands

The project has been approved in an area of 1890 acres. Of this 756.69 acres is part of 972.69 acres of beela land (pedda beela) originally allotted for the project by the Government through APIIC. The balance 216 acres of pedda beela land is proposed to be used for developing an eco pond. 78.95 acres of D patta land has been transferred to the company, 31.35 acres of encroached land, 15.61 acres of endowment land and 4.56 acres of forest land, 28.38 acres of canals/tanks land transfer is under consideration/progress. Balance 974.57 acres is private land of which 595.41 acres has already been acquired and acquisition is in progress for the balance land.

The main issue is regarding the nature of 756.69 acres of beela land transferred to NCC.

At the time of inspection it was informed that out of the 756.69 acres a raised part called Pamulametta of about 25 acres never submerges and is wooded. About 86 acres remains submerged through out the year. Remaining area as shown and seen from an adjoining hillock appeared as a grass land where some cattle were seen. As per the information gathered the grass land area where the cattle were seen gets submerged during intense/prolonged rains and the water recedes slowly. The main controversy is whether this portion of beela land is a wet land or waste land and if it is a wet land whether a thermal power plant can be set up disturbing such a wet land. The NGO's say that this Government land is wet land. Depending on the season of the visit there is a possibility of this land being construed by some people as a waste land from the view point of agriculture/horticulture. The Survey of India topo-sheet indicates that this land is a kind of a wet land. Project authorities say that the status of land shown in the map pertains to situation prevailed long time ago and does not depict the present situation. Even though the project authorities have heavily depended upon some of the

surveys done by some organizations to state that the area is not a wet land but broadly those reports only indicate this area as waste land. They really do not essentially say that they are not wet lands. The current status of the land can be ascertained by preparing a revised map of the area during monsoon and post monsoon period. Satellite data pertaining to the same period can also be made use of to know the situation in different years. It does not appear that such an attempt has been made. As per the condition of the land on the ground, i.e., lack of tree growth, types of grasses present and presence of ipomea, the altitude of around 2 mts. above MSL of the area, the presence of water logged area in and around, over all topography, the type of land as per the Survey of India map and the information gathered from the local people, the committee is of the opinion that this land (except the Pamulabetta upland) has all the features to be considered as a wet land.

The EIA report indicates that the land identified for the proposed power plant is mostly barren land and partly single crop agricultural land. The revenue authorities have treated it as a waste land. On the other hand the allotted government land is locally referred to as "Beela" which in the local parlance is said to be a kind of wet land. Perhaps the problem seems to be in perceiving a seasonally water logged area as a wet land. Most people can carry the impression that such land is a waste land depending on the time of visit of the year and the rains during the previous year. *It is to be noted that EIA was carried out in the months of March to May in which months the area can be generally dry.* Several waste lands do serve as grazing lands and some grazing lands are also referred to as waste lands in common parlance. This particular piece of land has been serving as grazing land also. The area also does not appear to be fit for agriculture/horticulture. So there is a possibility of mistaking the land for a waste land. Waste land does not necessarily mean that it is not a wet land. Even a waste land needs to be examined from the view point of wet land to really know if that is wet land or not. The beela coming under the project (pedda beela) is linked by a canal to another beela (Manikyapuram beela) in downstream. There is an anicut in between. The height of the anicut 0.843 mts. where as the bottom of the shutter is 0.343 mts. It has a one way gate system which only allows water to flow from pedda beela to Manikyapuram beela which has prevented the intrusion of salt water into pedda beela. Extensive irrigated agriculture around pedda Beela perhaps reduced the period of submergence of the beela.

ii. Private lands :

The NGO's say that private lands are good agricultural lands some with double cropping where as the project proponent has claimed that it is waste land or a single crop land. As per the information gathered significant portion of the private land appears to be double cropped fertile land. As per the information gathered from the local people and the situation of the adjoining areas/agricultural fields seen during the visit the contention of the NGO's/people seems to be correct.

2. The adverse environmental impacts of the proposed project :

People and NGOs have apprehension of adverse impact on Ground water recharge, Grazing, Air Pollution, Water Pollution, Agriculture, migratory birds, Bio-diversity etc. The project authorities say that the apprehensions are because of impressions carried from visits to other thermal plants. They are going to use latest technology and the adverse impact is going to be minimum. For ground water recharge, drainage, employment generation etc., they have made provision in the project. The committee is of the opinion that the project is bound to have some impact on the eco-system and no mitigative measures are likely to undo or compensate fully the change of the overall eco-system as the change of land use will practically be irreversible. The project authorities say and a few local people also expressed that despite some adverse impact of the project, the area will develop and employment will be generated.

3. Impact on Fishing :

i. Inland Fishing

During the field visit/interaction, it was informed that although there are 168 families of fishing community registered in the Inland Fishermen Co-operative Society. But number of people depending on fishing in the beela of the project site is said to be about 700. The Dy. Director (Fisheries) had informed that about 250 acres of area in the pedda beela used to be given on

lease to these people every year. The fishermen are poor people. Most of the fishing takes place from July to February. Per acre estimated fish yield is about 350 kg/year and this works out to about Rs. 10,000 to 20,000 annual income per family. He also stated that there is a proposal to develop a fish pond in about 250 acres near Manikyapuram beela which is down stream close by and closer to the habitation of the fishermen in lieu of the fishing area allotted to the project. The project authorities have already deposited Rs.68 lakhs for development of the fish pond. For a project of this magnitude ensuring lively hood of the affected fishermen through fishing itself may be possible, with enough safeguards. Although the income levels may be maintained or even raised but the change will be from traditional fishing to non traditional fishing including type of fish.

ii. Marine Fishing

It is apprehended by the fishermen/NGO'S that the construction of jetty and discharge of water and pollution, the fish availability and production may be affected. The project authorities say that the discharge and pollution will be in permissible limits and the construction of jetty will also not affect the fishing.

4. Public opinion :

It appears that large percentage of local population for various reasons are opposed to setting up of the proposed project going by the various representations and interactions the team had during the visit, although some youth seem to be hoping to get employment. The NGO's say that the project is likely to generate about 700 jobs. The project authorities say that ancillary units/activities will generate additional employment. The project authorities also say that they will develop skills of the local people which will equip them for self employment or to get better employment.

The fundamental issue is whether a wet land or even a seasonally water logged area needs to be preserved in the interest of the ecology and economy of the area or can be converted into a non-wet land or non water logged area even seasonally irreversibly for the purpose of setting up of a

thermal power plant. Even if it is decided to convert a wet land or even a seasonally water logged area into a non water logged area, whether from the pollution point of view a thermal power plant should be allowed to come up in such an agriculturally rich area even with enough environmental safeguards and mitigative measures. If in case the project has to be set up in the area the people of the area need to be educated about the net benefits of the project to the local people. The misgivings of the people need to be removed first and there is need to take them into confidence. Ecological damage cannot be really quantified in financial terms but imposition of prohibitively high ecological/environmental cost in addition to the usual rates collected will compel the project authorities look for alternative sites.

Most of the government land gets seasonally submerged and the seasonally submerged land must be playing a major/significant role in the ecosystem of the area. The sheer size of the land at one location that too with the Government and possible lack of recognition of the ecological importance of a land of this type has probably resulted in proposing the project in this area. Unless no alternative site is available, a project should not be set up in ecologically important sites. The area should not be treated like normal waste land because of multi and special functions the area is performing. A due note of these aspects needs to be taken into account before arriving at any decision which results in the practically irreversible overall ecological change due to change of land use. Economic adverse impact of the change of land use perhaps can be compensated through the income of the proposed project like creating alternate fish ponds, skill development etc. Similarly, ground water recharge may be ensured by alternate drainage system. It may not be really possible to undo practically irreversible over all ecological change.

East Coast Energy Private Limited Bhavanapadu Thermal Power Plant :

East Coast Energy (P) Limited (ECEPL) applied for environmental clearance for setting up coal based Bhavanapadu thermal power plant of 2640 MW (4x660 MW) near Kakarapalli village Santhabommali mandal , Srikakulam district of Andhra Pradesh in an area of 2450 acres on 26.04.2007.

Ministry of Environment & Forest (MoEF), Government of India has accorded Environmental Clearance for setting up of the project in an area of 1995 acres vide letter No.1-13011/36/2008-IA.11 (T) dated 9th April, 2009. Consent for establishment was issued by APPCB on 15.6.2009. Clearance under CRZ is yet to be given. It is learnt that there is an appeal No. 17 of 2009 pending with NEAA against the Environmental clearance.

As per the environmental clearance letter, the project is proposed to be set up in 1995 acres of land out of which 1800 acres will be used for the plant site. Outside plant site 35 acres is proposed for establishing a township and 160 acres for establishing coal conveyor/sea water pipelines/railway siding etc. In addition 250 acres has also been acquired by the project authorities through APIIC for formation of drainage system in a length of 14 kms. As per the revenue records this 2050 acres of land(1800+250) is part of 3091.62 acres of Sy.No.550 of Kakarapalli village classified in revenue records as Kakarapalli swamp lands. As per the Tahsildar's report this land is seasonally water logged and is neither suitable for cultivation nor for any commercial plantation.

During the visit on 18th July, 2010 the team met the District Collector, Srikakulam and held discussions with him regarding the situation at the project site and subsequently undertook site inspection. The team interacted with the villagers of Santhabommali village, Vaddithandra, en-route to the project site and also other villagers present near the project site. Chief Conservator of Forests, Divisional Forest Officer and other forest officials were also present. Revenue Divisional Officer Tekkali, DSP (Intelligence) were also present. The local fishermen vehemently opposed the project. Several farmers also opposed the project on the ground that setting up the project may affect their fields both due to inundation during rains and

shortage of water during other periods. They also expressed apprehension that with the new drain constructed saline water may intrude affecting the quality of irrigation, productivity and the quality of the land. As per the information gathered water remains in the project site for about six months, for about 3 months the area is wet and remaining three months part of the area is used as grazing land and collecting thatch also. The diversion of land will affect grazing and availability of thatch. They also informed that the area is visited by migratory birds during November- December.

The team visited the project site. Various construction works were in progress. The part of the land has been found to be raised by bringing earth from outside for construction buildings and formation of roads. The remaining land at the time of visit was wet. The grasses present are indicative of wet land nature of the site. The average altitude of the land above MSL is about 2 mts. The project authorities explained the steps taken, being taken/proposed to be taken by them as part of mitigative measures. While returning a few local people met and expressed that the project will help creating employment in the area and will lead to development of the area. The team returned through Telineelapuram where the bird nesting place was shown from a distance.

The Government land was allotted to the project through APIIC. Most of the area allotted for the project site it appears was earlier used for salt pans. Being uneconomical the work was given up during 1970's.

The main points / issues raised by the local people and NGOs during the visit and in their representations opposing the project are the following:

1. The land allotted by the Government for the project is a wet land rich in biodiversity and is near ecologically fragile Naupada swamps Bhavanapadu wetland characterized by marshes, swamps and bogs and visited by migratory birds.
2. The wetland generally called Naupada swamps is unique fragile ecosystem with marshy, fresh water, creek, mud and salt meadows. Largest

of this type is in East Coast. According to the Revenue authorities it is about 7414 acres (about 30 sq k.m) in area and provides livelihood to nearly 30 villages from generations to generations. This wet land is a transitional zone between the land and the sea. Number of streams drain water into the swamp. The water is discharged into the sea through the creek which is also subject to tidal action through the Bhavanapadu creek. This is a passage place for migrant birds and also very good habitat for foraging and wintering to migratory birds. Major forage ground to Pelicans and painted storks.

3. Within a 10-kilometre radius from the proposed project are the Naupada Swamps, and the Telineelapuram important bird area, where rare migratory birds nest and feed. Besides ecological values, this wetland is livelihood to all the surrounding villages with fishing, paddy, other crops, pig rearing, grazing ground for thousands of cattle and sheep, thatching material and support for economy, collection of shells, saltpans etc. It supports a variety of plant and animal life, biologically one of the most productive eco systems.
4. Filling and raising of marshland in the project area is changing the character of the Naupada swamps and causing irreversible ecological damage. Bombay Natural History Society (BNHS) and Birdlife International recognize Telineelapuram bird sanctuary as a globally Important Bird Area (IBA).
5. The Andhra Pradesh Wetlands (Conservation) Rules obligates the Government to protect the Wet Lands including the Project Lands and as per the Schedule, Naupada Swamp is one of the identified Wetlands. The Expert Appraisal committee on Thermal power plants during their 36th meeting December 15-16, 2008 recommended to the east Coast Energy Pvt ltd to shift their site upland sufficiently away from the marshy land stating that Naupada swamps is the only remaining remnant of the marshy area on the east coast and the proposed site is ecological entity with incomparable

value requiring conservation and protection. Also sought clarification on certain points with particular reference to the existence of the Ecologically Sensitive Area in the proximity of the plant site, drainage plan etc.

6. CRZ (coastal regulation zone) demarcation report submitted by AP's Special Chief Secretary (Environment, Forests, Science and Technology) in February 2009 and Dept of E&F, Govt of AP, in its letter dated 9-2-2009NOC from the AP government to the Union ministry of forests and environment has ignored reports on the ecological value of low lying area of well recognized Naupada Swamps wetland and migratory bird breeding in Telineelapuram. The NOC submitted by the state government's environment department doesn't mention the adverse impact it will have on people's livelihoods and rich biodiversity. This amounts to suppression/distortion of facts, based on which EAC recommended and MoEF, G.O.I accorded Environmental Clearance for the Project, which may have to be reviewed taking the facts and the ground realities into consideration.

7. Once the project is fully operational, a normal rainfall in the area, can cause flooding in 30,000 acres of farmland because of the altered water routes.

8. The Naupada swamps attract 123 species of migratory birds. In a report submitted to the standing committee of the National Board for Wildlife in December 2009, Dr Asad R. Rahmani of BNHS and Prof Asha Rajvanshi of the Wildlife Institute of India called the East Coast project's EIA report inaccurate and misleading. "The EIA," the duo pointed out, "was conducted in summer (March-May) when water is at its lowest in the swamps and migratory birds are not seen. The report says there are no migratory routes or endangered animal species within 10 km of the site, which is again false.". "Ideally, East Coast Energy Pvt Ltd should vacate this ecologically important wetland which should be declared as a conservation reserve in its entirety," they concluded.

9. India became a party to three international Conventions, namely, the **Convention on Wetlands (Ramsar, 1971)** in 1982, the **Convention on Migratory Species (Bonn, 1979)** in 1983 and the **Convention on Biological Diversity (Rio, 1992)** in 1994.

10. They also refer to the following studies reports/ document in support of their contention.

- Study Report on "Integrated Protective Area System (IPAS)" by the "**Wildlife Institute of India**" Dehradun highlighted the importance of Naupada Lagoon .
- The Study on "**Eco Restoration of Bhavanapadu Mangroves**" carried out by Andhra University from March 2005 to April 2008, as part of the major research project sponsored by MoEF, G.O.I, highlighted the rich Flora and Fauna of the area.
- The Study Report of "**Bombay Natural History Society**" (BNHS) titled "Of Pelicans and Power Plants" highlighted that Telineelapuram is designated as an "Important Bird Area (IBA)" by Birdlife International, in recognition of its global importance of avifauna. Also highlighted the importance of near by Naupada Swamps, rich in fish and other nutrients essential for breeding and survival of the visiting Pelicans and Storks.
- **State of Environment Report of AP** has listed Naupada swamp as a wetland system to be conserved.
- The draft **Wetland (Management & Conservation) Rules 2008** prepared by the Department of Forests, for constitution of "Wetland Authority of AP", identified 7 Wetlands and "Naupada & Telineelapuram" is one of them.

- AP Forest Department purchased some land in Telineelapuram village and constructed **Bird Observatory House and Watch Tower** in 1986 which is a testimony to the importance of Telineelapuram.
- Vide Rc No 11815/2008/M11 dt 29-4-2009, the Chief Conservator of forests Visakhapatnam states Naupada swamps are home to some of the richest, most diverse and fragile eco systems.
- SACON identified the Telineelapuram and Naupada swamps as a prioritised wetland.

Some people, sarpanches and public representatives also gave representations that the project should come up in the overall interest of the development and creation of employment opportunities to the local youth.

The project authorities have represented that

1. MoEF has given the clearance after following the requisite procedures laid down under the EIA Notification
2. MOEF has also considered the following documents before grant of EC
 - A Topography map of the Project and its Vicinity which clearly indicates that the Subject Lands are classified as mud.
 - The Plant layout along with the CRZ demarcation along the open sea and the creek as per CZMP Maps of Government of Andhra Pradesh.
 - Study by the National Institute of Oceanography (NIO) wherein it was certified that the entire Project Land is outside CRZ both for open sea and Creek. The Report also certifies that the Project site is not a Tidal Flat. However, seasonal flooding occurs during rainy season from the upper catchments area which is a penny-plane with narrow width between Eastern Ghats and the sea. The Study also certifies that the site does not contain the environmentally sensitive areas like Mangroves, Coral or Coral Reefs.

- A Report issued by Dr.M.R.Madhav (Former Professor,IIT, Kanpur), Professor Emeritus, JNT University, Hyderabad wherein it was stated that *"the Plant Site is not a Swamp in the strict sense.*
- Principal Chief Conservator of Forests, Government of Andhra Pradesh reported that "there are no National Parks, Sanctuaries, Elephant/Tiger/Migratory path as well as proposed) etc., within 10 Kms radius of the proposed Project Site.
- **GoAP has clarified/certified to various authorities that** the area is neither declared as a sanctuary under Wildlife (Protection) Act, 1972 nor wetland of international importance under RAMSAR Convention or swamps under any statutory law or at least as a Protected Area.

Therefore the Project Lands are not ecologically sensitive area.

3. As per the records maintained by the Government of Andhra Pradesh, (GOAP), the Project Lands are being put to Industrial use from 1975. At one point of time, the Social Forestry Department, GOAP ventured to bring-in plantation in the Project Land, but the efforts were in vein, accordingly they returned the subject lands to the Government holding that the Project Lands neither are suitable for cultivation nor commercial plantation.

4. As per the Sworn Affidavit filed by the Chief Secretary, Government of Andhra Pradesh, before the High Court of Andhra Pradesh, the Project Site is not a part of Naupada Swamps. The Project site is situated about 3.25 Kms distance from Naupada Swamp and 3.8 to 4.0 Kms from Telineelapuram Bird Habitat, besides confirming that the Project Site is neither Swamp nor ecologically sensitive area. As per the latest Annual Report of the Ministry of Environment & Forests, New Delhi, except Kolleru Lake, no other lands are notified as Wet Lands in Andhra Pradesh. Also Naupada Swamps are not notified as wetlands in the list published by Ramsar Convention. Telineelapuram is not a notified Bird Site or Sanctuary

5. The Migratory birds visit Telineelapuram during the winter months. As per the wind rose of the area, the wind direction is towards the sea during the migration period and any possible impact due to the emissions from the Project is ruled out and does not effect the movement of birds (if any). As per the EIA studies also there is no impact on Telineelapuram due to the Project.

6. The Fishermen have been carrying out fishing activity near Tekkali creek and also in some part of land on southern and south eastern side of APIIC's land. The Fishermen were never dependent for fishing on the portion of land allotted to ECEPL. However, the ECEPL had allocated a sum of Rs.1.10 Crores for improvement of Living Conditions of local fishermen and the same was reduced into writing by way of Instrument of Understanding dt.13th July, 2009 executed between M/s Jagannath Inland Fishermen Co-operative Society, Vaddithandra and RDO, Tekkali. Further, it is understood that the Thasildar, Santhabommali Mandal, vide Proceedings No.127/2010/A/dt.30th June, 2010 granted Fishing Lease in Pitarigattu and Lingudugattu to M/s Jagannath Inland Fishermen Co-operative Society, Vaddithandra, for a period of 3 Years as embodied in the said Proceeding.

7. Apart from the above, ECEPL has undertaken an obligation to provide employment to local people which includes Fishermen also. The Project was originally allocated a land to an extent of Ac.2450.00 out of which, an extent of 455 Acres have been deleted from the Project Site as per the directions issued by the MOEF to the effect that "Project Site shall be shifted sufficiently away from the Marshy Land. In addition to deletion of 455 acres, ECEPL also given an undertaking that it shall leave another 425 acres untouched as per the advice of Sub-Committee of Expert Appraisal Committee thereby the Green Belt Area of the Project is substantially reduced to 150 acres.

8. In accordance to the Environment Clearance issued for the Project, ECEPL had obtained Consent for Establishment (CFE) from the APPCB vide letter No.161/PCB/CFE/RO-VZM/HO/2009 dated 15th June, 2009.

9. The Land under reference is neither a wet land nor a Swamp, nor part of Naupada Swamp. A portion of the APIIC's Land is seasonally water logged area and land that is being put to use for establishment of the Project does not consist any water logging area. The reasons for water logging is due to the man-made obstructions to the storm water flow from the Gareebula Gedda and Desigedda drains and improper designing of the cause way at Rajapuram, which is also aggravated by manmade obstacles.

10. The Andhra Pradesh Pollution Control Board, (APPCB) had conducted the Public Hearing for the Project on 23rd April, 2008 and more than 800 people attended the said Meeting. There was no opposition for the construction of the Project in the proposed Site and in fact there was an overwhelming support from the Local People, who understood the importance and benefits arising out of the proposed Project. Their demands during public hearing were the following;

- Providing Drainage System
- Employment for Locals
- Implementation of Pollution control measures
- Livelihood of the Fishermen to be safeguarded

11. As per the public demand the ECEPL had undertaken to streamline the existing drains at a cost of 67 crore rupees and expenses for smooth flow of the storm water in order to save the surrounding 5000 Acres of Paddy Lands from inundation.

12. The Co ordinates of Telineelapuram indicated in the Bird Life IBA, Fact sheet as 84° 41' East, 19° 07' North actually belong to Telikunchi, near Icchapuram, which is located more than 70 KM north of Teelineelapuram. Incidentally Telikunchi attracts large no. of Migratory birds.

13. 'Dali Cheruvu' is one of the major Irrigation tank near Telineelapuram with an area of about 300 acres and is a foraging ground for resident birds and migratory birds. Majority of birds visit this tank during winter month for foraging.

14. Resident as well as migratory species mostly uses the Tekkali Creek and various large as well as small tanks available around Telineelapuram for foraging purpose in study area.

15. As directed by MOEF, the ECEPL has earmarked a budget of Rs.10.00 Crores towards CSR Activities during construction phase of the Project and Rs.2.50 Crores every year on recurring basis. Infact ECEPL has initiated the CSR activities well before commencement of Construction of the Project and have incurred about Rs.1.0 Crore till date.

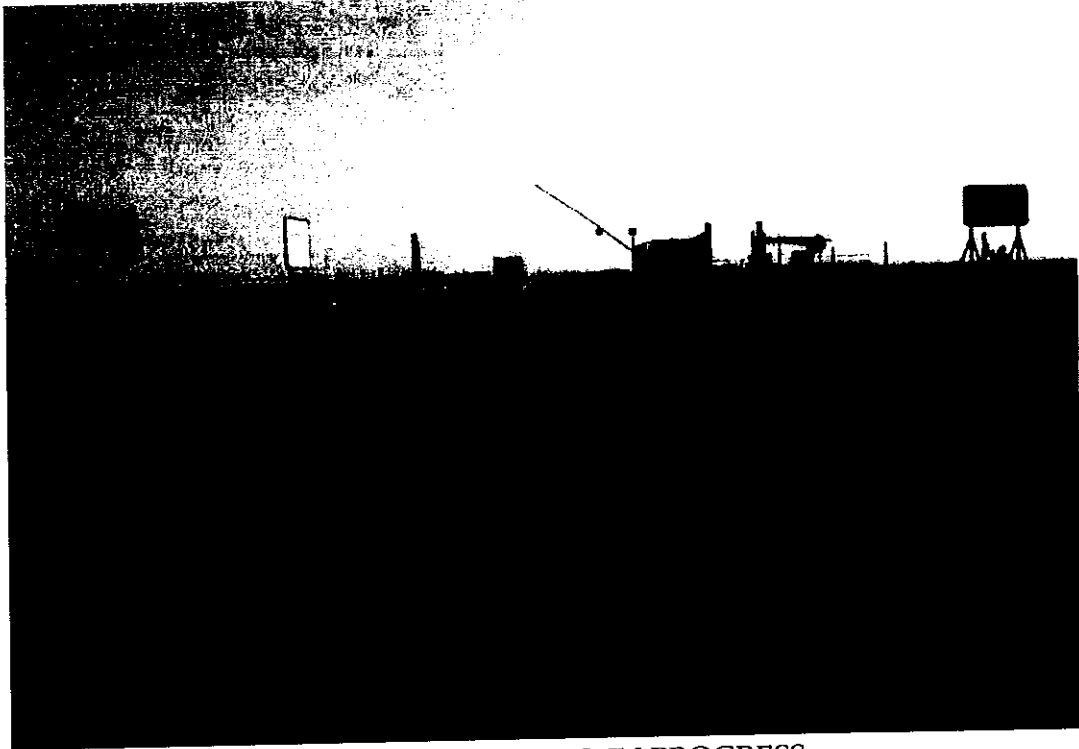
OBSERVATIONS OF THE COMMITTEE

Nature of land :

The land as reported by the Tahsildar, "Kakarapalli is swamp not fit for agriculture". The Survey of India map shows the area as mud. Mud connotes wet land. As per the information gathered during the site visit, the area is seasonally water logged area and is a transitional zone. The plants/grasses seen during the visit in the site are also indicative of wet land. The altitude of the land is reported to be about 2 mts. above MSL. Based on these aspects and as per the description of wetlands MoEF publication date 2.2.07 on Conservation of Wetlands in India – *"the wetlands encompass diverse and heterogeneous assemblage of habitats ranging from lakes, estuaries, river flood plains, mangroves, coral reef and other related ecosystems. Abundance of water at least for a part of the year is a single dominant factor"* seasonally water logged area of the project site can be considered as a wet land.

Whether the project site is part of Naupada swamps wetland or not, it is important for the over all Naupada swamps wetland eco-system. Various studies do recognize the importance of Telineelapuram for

nesting of migratory birds and Naupada swamp eco-system and the need for their conservation. The site is within 4 kms. of both these important sites.



PROJECT WORK OF ECEPL IN PROGRESS

Fishing:

There is bound to be some impact on fish production due to the project. For the fishermen affected the government is reported to have allotted alternative area for fishing. The project authorities have stated that they have kept a provision of Rs. 1.1 Crore to improve the living conditions of fishermen and to establish fishing tanks.

Impact on agriculture:

The project authorities stated that the drainage system created by them will help the irrigation. Some local people say that the new drain constructed may result in saline water intrusion and affect quality of irrigation. The project authorities vehemently denied that the new drainage is resulting in intrusion of salt water. The impact of the new

drain and the extent of submergence area due to raising of land in the project site needs to be ascertained by a special study.

Construction activity before the clearance:

The project authorities stated that the construction of drain was started prior to Environmental Clearance on the demand raised during the public hearing by the local people and the same was informed to EAC before the clearance itself. No construction activity of the project was started before EC.

Migratory birds/routes and Telineelapuram :

The project authorities state that wind movement is towards the sea during migratory season and the project will not affect Telineelapuram bird nesting site which is towards north. This needs to be monitored.

Grazing:

Only small portion may be available for grazing during the summer period. The project does impact grazing and availability of thatch. The extent does not appear to be high.

Suppression and distortion of facts:

Wetlands and Wetland ecosystems are ecologically important areas. So far full identification/ notification of such areas does not appear to have been done. The ecological importance of transitional zones seems to be recognized even lesser. There is need to recognize wetland ecosystem right from the creek to up to the transitional zone as whole. As per the existing records it is very much possible that the project site or its surroundings may not be falling in ecologically sensitive areas. There is need for identification of all ecologically sensitive wetlands from the wetland & biodiversity conservation point of view.

Impact on the dependent swamp area needs to be fully assessed while diverting a wetland or seasonally waterlogged area because such diversion may lead to practically irreversible ecological change. The concern of the NGO's is the overall conservation of the ecologically important/sensitive coastal wet lands.

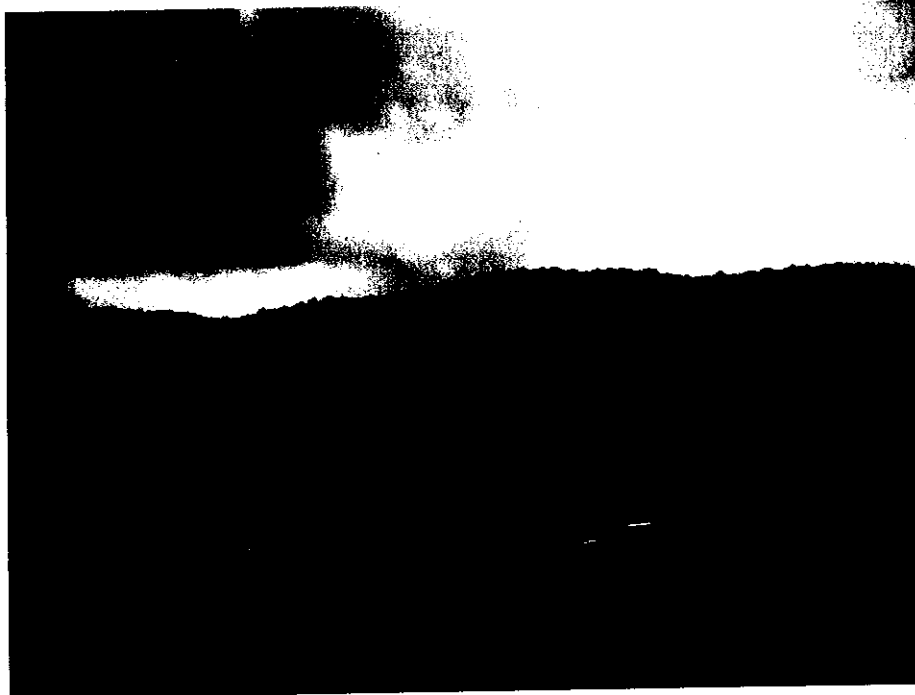
JINDAL STEEL WORKS (JSW) ALUMINIUM REFINERY :

The team visited JSW Aluminium Refinery site and the affected villages on 17th July, 2010. The Chief Conservator of Forests, Visakhapatnam circle, DFO, Visakhapatnam, DFO Vizianagaram and local PCB officials were also present.

Project site

The project is proposed in an area of 1231 acres although environmental clearance is for 1350 acres in S.Kota Mandal of Vizianagaram District in Andhra Pradesh. . A hill is situated close to the site on the western side and hills are also situated on the northern and southern sides at some distance. Practically, the site is in a valley. A Navodaya school is situated adjacent to the project site. All around the site there are coconut gardens, sugarcane and paddy fields, banana crops and mango orchards, cashew plantations etc. The entire area is rich agricultural tract. Out of the proposed land for project 80% of the land is Government assigned land and remaining 20% is private land which is adjacent to the Government land. As per information gathered 80% of the assigned land was under cashew plantation, 10% under coconut gardens, sugarcane and paddy fields, banana crops, mango orchards etc. before its acquisition. Remaining 10% was uncultivated. It was informed that the site falls in agency/tribal area. The lands were assigned to tribals. Under earlier scheme of the Government the cashew nut orchards were raised in these lands in the past. The cashew growers perhaps were getting about Rs.5000 to 30,000 per acre per year depending on the yield in the year. Some of these assignees were the people who were displaced due to Tadipudi reservoir and were assigned lands in 1960s.

The people are also unhappy that the revenue records indicate their lands as waste/barren lands which is not factually correct. The NGO's say that this amounts to misrepresentation of facts. Looking to the crop condition in the adjoining agricultural fields the proposed site also appears to be quite suitable for paddy/sugarcane cultivation if irrigation is provided, otherwise it is suitable for any other plantation/forestry species.



HILL TO THE WEST OF THE JSW PROJECT SITE



PROJECT SITE, SITE OFFICE OF JSW AND HILL BEHIND



PROJECT SITE OF JSW

Displacement of already rehabilitated people

Out of 60 families loosing land about 25 families are those who have been resettled earlier here due to construction of Tadipudi reservoir.

Residue and Ash Disposal area

The site identified for red mud disposal as well as ash is situated in a green valley portion through which Chilakalagadda stream passes and joins Gosthani river on which Tadipudi dam has been built. Out of 400 acres identified for this purpose, about 300 acres belongs to private farmers, 50 acres is assigned land and 50 acres is government waste land. Of this about 200 acres is under cashew cultivation, about 100 acres is used for manufacture of charcoal and remaining portion is waste land. The dumping site of the red mud and fly ash is not at all suitable for the purpose.



VIEW OF THE SITE SELECTED FOR RESIDUE (RED MUD) AND ASH POND

Township area

About 50 acres has been identified for development of township. Large portion of this is a hill portion close to forest area and Ammapalem village. The residential area proposed is also adjacent to the forest area which may have biotic pressure on forests.

Public opinion

About a 1000 people participated in Public Hearing and 40 people spoke. Out of them except four all other people opposed setting up of the project. During the team visit except for the residents of Ammapalem village most of the people of all other affected villages opposed the project. The Ammapalem villagers expressed that the project will help to generate employment to the local people. Some people of Kotha Addathiga village expressed that they are getting harassed by going to courts for protesting against the project. It is learnt that after struggling for about six months the locals gave in for Government pressure. In general, they refused to accept that the land is a barren land but contended that it has been made

barren. Their contentions appear to ^{be} ~~the~~ true. Majority of the people appear to be opposed to the project.



INTERACTION WITH VILLAGERS OF AMMAPALEM



DISCUSSIONS WITH PROJECT AFFECTED VILLAGERS

Water usage

Local people and NGO's say that if the water proposed to be supplied to industry from Eluru canal , is given to Visakhapatnam and if water of Tadipudi reservoir being supplied is diverted to agriculture the entire project site and some additional area of another 4500 acres also can be irrigated. GVMC has put up a proposal to the industry that they are committed to provide 8 MGD but out of this the industry must take 80% treated water of GVMC and 20% from the Eluru canal water supply which is not^{yet} agreed by the project authorities. VIWSCO is the Nodal agency to supply water to industry. The Chairman, VIWSCO informed that they are expecting sufficiently large quantity of water to meet the industrial as well as domestic requirements of the area after the completion of Polavaram project.



TADIPUDI RESERVOIR NEAR JSW PLANT SITE

Bauxite mining and FC clearance

The project is also being opposed on the count that the project authorities have not obtained the forest clearance. They are also opposing the forest clearance saying bauxite mining may result in depletion of water in present perennial streams feeding the reservoir and the area.

Skill upgradation

Few people have already been given training and are expecting to get employment opportunities if project comes up. Some of the affected families are also being paid some amount monthly.

Looking to the rich agricultural potential of the area and vehement opposition of the people, the pollution likely to be caused due to residual mud disposal etc. the clearance accorded needs to be re-looked into. The issues raised by the public and the NGO's pertaining to bauxite mining also need to be looked into at the time of Forest (Conservation) clearance. As far as the water allocation is concerned, it is a policy matter of the State Government.

AN RAK ALUMINIUM LIMITED

The project site was visited on 17.7.2010 and the affected villages on 19.7.2010. The CCF, Visakhapatnam, the DFO, Narsipatnam, DFO, Vizag, local PCB Official, were also present during the visits. Rachapalli, Kothapalayam and G. Venkatapura villages were covered during the visit.

Project site

The project site is situated in Rachapalli village of Makavarapalli Mandal of Narasipatnam ^{First Division} in Visakhapatnam District. A hill is situated to the South of the project site. The project is proposed to be set up in an area of 1925.36 acres consisting of 266.46 acres of government land and 1658.9 acres of patta land. It was informed that most of this area was under casuarina plantation. Remaining area was under paddy, sugarcane, mango, chilies etc. Only about 200 acres area was under irrigated cultivation. Remaining all was rain fed. Some of the villagers expressed that ground water may be depleted because of the deepening of site for project purpose. The ground water depth was reported to be 200 feet while the depth of the dug up area was about 30-40 feet.



SITE VIEW OF AN RAK PROJECT



PROJECT SITE OF AN RAK PROJECT

Water usage.

One of the main objections against this project is that it is going to take away 10 MGD of water meant for Vizag city. Vizag people are having shortage of water. Hence the priority should be to given water to Vizag people. In case the water can be spared by the city preference should be given to agriculture not to the industry. Team met the Chairman of VIWSCO (Visakhapatnam Industrial Water Supply Co.,) in this regard. He did agree that there is a shortage of water for Vizag city but they are committed to give water to the industry from Polavaram Canal Project because the canal was constructed by VIWSCO by funds received from APIIC. However, for the time being they are giving to the industry only half of the committed water. Balance water they will be providing after Polavaram project is commissioned or a new world bank aided project of a close pipeline is laid which is under consideration. Taking views of the Chairman, GVMN into consideration, the apprehension of the NGO's that the water meant for drinking water is being diverted for industrial purpose does not appears to be correct. VIWSCO is the Nodal agency to supply water to industry. The Chairman, VIWSCO informed that they are expecting sufficiently large quantity of water to meet the industrial as well as domestic requirements of the area after the completion of Polavaram project.

Bauxite mining and FC clearance

Another objection is that the bauxite raw material is supposed to come from Jarilla block of Narasipatnam Forest Division. For mining stage II clearance is yet to be obtained. The local people and NGO's apprehend that if the mining is permitted in the Jarilla block it may adversely affect the perennial streams originating from the region. The mining may also affect the lives of the tribal people in the area. Transport of ore from the mine will result in traffic congestion and pollution. Being a captive project without F C for mining, project work has started. Project authorities have stated that the APMDC has entered into an agreement with them and also the mining has already got stage I clearance. The project authorities have stated that each year they will be covering only 30 ha. of land. The depth of ore usually ranges from 5 to 12 mts. and each in the subsequent year the area will be back filled and thereafter afforestation will be carried out. Special measures will also be taken up for ground water recharge. For transport they said that the bye pass roads and road widening are proposed. From the mining site ore will be transported by conveyor up to some distance avoiding formation of additional roads in the hills.

Drainage system

To drain the water of the upper catchment a canal has been dug out in the periphery of the project site. They also propose to enlarge a left out portion of the tank to compensate for the tank submerged. The project authorities also stated that they are going to have a reservoir in the project site to meet the partial needs. This, they said, will meet their requirement for about 3 months.

Rehabilitation

One village by name Kothapalyam has come within the project site. All the villagers are proposed to be rehabilitated. During the interaction regarding compensation people did not have much of grievances. Some action is proposed for ground water recharging. Regarding red mud and fly ash storage the project authorities have stated that their sister company owns a cement plant ~~only~~ in which ^{the fly ash} ~~it~~ will be

used. They will also try to make bricks out of the red mud. They will function has a zero discharge industry.

Dairy :

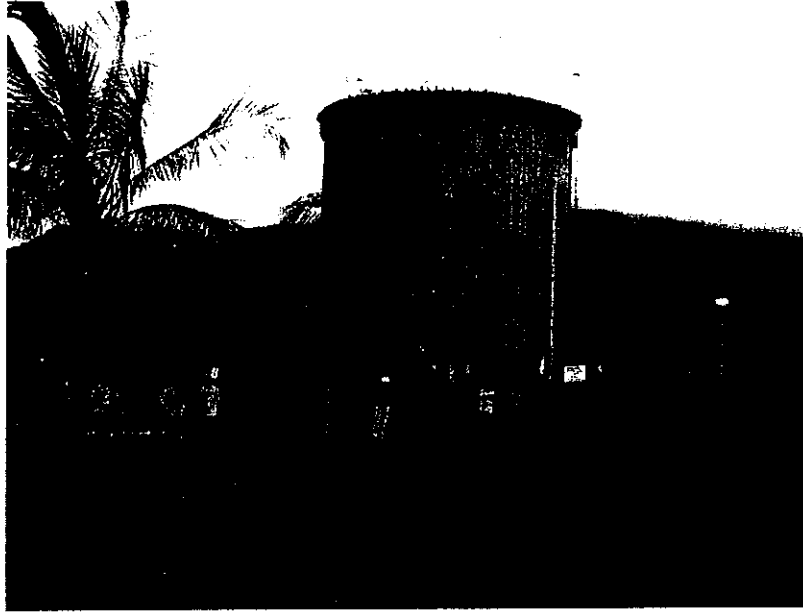
Project authorities stated that they will be taking care of the dairy dependent people.



INTERACTION WITH VILLAGERS OF KOTHAPALEM

Status of the project :

The project construction has already commenced and sufficiently progressed.




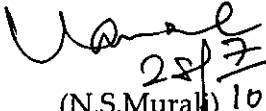
ALUMINA PLANT OF AN RAK PROJECT WORK IN PROGRESS


Present Status of works :

The objections of the people^{are} that tanks and water bodies have come in the project area affecting the irrigation and ground water recharge in the area. The project authorities state that most of the command area of these water bodies is within the area acquired for the project. Only one tank's command area has not come under project site. That tank is coming in the project area and to compensate for this the project authorities are not disturbing part of the tank and also are widening the tanks.

The affected people of the area are in general not opposed to the project. However, the NGO's are opposing the project mainly due to industrial use of water instead of drinking water/irrigation purpose and because of their opposition to bauxite mining. The water allocation is a policy matter of the State Government. Regarding mining, the issues raised by them need to be looked into.


(Dr. C.Kalivaperumal)
Scientist 'E'


(N.S.Murali) 10
Dy. Conservator of Forests (C)


(K.S.Reddy) 28/7/2010
Chief Conservator of Forests (C)