Proceedings of the expert committee meeting constituted for Udupi Power Corporation Ltd. held on 26th September 2011 at Office of the Deputy Commissioner, Udupi.

Dr. M.T. Reju, Deputy Commissioner, Udupi welcomed the all the members of the committee and the representatives of M/s UPCL for the meeting and briefed about the objective of the meeting. He requested the UPCL representatives to give presentations about the action taken on the issues raised in the interim report of committee. Sri. Ravindran, CEO & Sri. Murali Plant In charge of UPCL have presented the progress made on the recommendations made in the interim report of the Expert Committee.

- Fly ash management: ACC is putting its full efforts to establish blending plant by March-2012 in first phase and to acquire land for second phase to setup grinding unit. Presently ACC is lifting fly ash to their cement unit located at Chikkaballapur and already lifted about 18000 Tonnes i.e. about 60% of produced. Further Vintech has established 1000 TPM fly ash bagging plant nearby ash pond area and discussions are in progress with Sharcstar Ventures to put up fly ash bagging plant of 5000 TPM capacity.
- Setting up of continuos ambient air quality management system (CAAQMS): CAAQMS unit is commenced near ash pond.
- **Gypsum Management:** Mangalore Chemicals & Fertilizer Ltd and Vintech are regularly lifting the gypsum on continuos basis.
- Research on utilisation of bottom ash: Contacted MIT and CPRI Bangalore.
- Green belt development: About 110000 saplings are planted for entire plant including around ash pond & corridor leading to ash pond.
- Storm Water Management: Garland drains around ash pond been provided for storm water management.
- **Ground water monitoring**: regularly collecting specified ground water & submitting reports to KSPCB.
- Speed up civil works like roads, stormwater drains, etc: more than 95% of work completed.
- To conduct awareness programmes & support organisations working for environment protection: Agreed & informed that local public are visiting the plant.
- Conduct studies to demarcate impact zone of ground water & soil contamination due to accidental leaks in pipeline: proposed to submit the report by end of September-2011.
- Take action to restore the salt water affected area: already dewatering & cleaning of wells have made.
- **Providing of test bore wells at pipeline**: 5 test bore wells completed in pipe line corridor.
- Detection of pipeline leakage: Approached Taisei International, Secundarabad.

Further informed that, they have commissioned new MS pipeline in May 2011 to draw sea water and no leakage detected till date. As regards to drift from the cooling tower placed the purchase order for installation of drift eliminator for cooling tower-I & expected to be commissioned before 31-12-2011.

Prof. Sriniketan explained the main issues with which the expert committee looked in namely (i) fly ash and bottom ash handling, management & final disposal (ii) salt water pipeline leakage and (iii) salt deposition due to drift from the cooling tower. Further he suggested the UPCL to conduct following studies & work:

- Keep records for Tracking of fly ash movement from generation to the final disposal point.
- Health impact studies in the area.
- Scientific assessment of zone of impact along the corridor.
- Impact on soil from discharge of salt water, coal yard effluent, etc by the Agriculture University at Brahmmavar.
- Establish a committee comprising of local public, NGOs, gram panchayath members & zilla panchayath members & UPCL officials to address the social concerns of local.

Responding to the queries and apprehensions raised by the committee members Sri. Ravindran, CEO of UPCL has submitted as follows:

- ACC is establishing blending plant by March-2012 & also acquiring land to setup grinding unit nearby. Presently ACC is lifting fly ash from Feb-11 onwards to their cement unit located at Chikkaballapur. Vintech has established 1000 TPM fly ash bagging plant & discussions are in progress with Sharcstar Ventures to set up bagging plant of 5000 TPM capacity.
- They have contacted Ultra Tech at NMPT, Mangalore to blend fly ash with cement. Also they are planning to set up bagging plant to export the flay ash to Dubai as an alternative.
- They regularly conducting ground water and ambient air quality monitoring & submitting reports to KSPCB.
- They placed the purchase order for installation of drift eliminator for cooling tower-I & will be installed before 31-12-2011.
- They have established continuos monitoring equipment for the parameters like PH, TDS, Temperature & DO at guard pond out let to sea and they are not discharging hot water in to sea. They received feedback from fishermen that, fish growth & catch is increased in the discharging area.
- They have established Environmental Cell & monitoring the ambient air quality in 10 Km radius & submitting the reports. Also the results are available on UPCL Website.

- It is an accepted fact that some of the machineries failed & accidental discharge of sea water & coal bearing water discharge happened in transition period & they have taken remedial measures immediately.
- Revenue Dept has assessed the loss & they paid the compensation for the damage.
- They will constitute a local committee as suggested to address the local issues immediately.

They further assured the committee that, they will take the responsibility for any damages and will take remedial measures besides compensation.

Shri. T. Balachandra, Regional Director (Environment) asked details about the quantity of fly ash generated & disposes since inception and also the details of "bagging" unit proposed by VINTECH along with documents. The representatives of M/s UPCL have agreed to provide full details of ash management immediately.

The Chief Executive Officer, Zilla Panchayath, Udupi informed that, ZP members & Gram Panchayath members have visited the site & prepared the report mainly comprising of expenditure incurred on maintenance of street light, corroding of metal sheets, roof top etc due to fly ash & cooling tower salt vapour drift in the area. The report will be submitted shortly to the District Administration.

Shri. C.D. Kumar, Senior Environmental Officer, KSPCB briefed about the issues mentioned in the written complaints received by the DC from the public residing around the industry. The issues are shown below,

- The blasting activity at ash pond is causing vibration & dust nuisance.
- The fast corrosion of MS sheets, insulators & electrical cables in the area.
- Fishing is affected due to hot water discharge in to sea.
- Increase in Health related problems in the area due to fly ash nuisance.

Also informed that due to non-compliances to the conditions of consent KSPCB has not permitted M/s UPCL to commission the second unit. Recently the KSPCB has received oral complaints from Hon'ble MP, Hon'ble MLA and members of ZP, Udupi and from public due to the discharge of the black colour waste water into nearby streams and agricultural fields. This incident happened due storage of huge quantity of coal without providing adequate protection. Due to storage of coal in heaps of substantial height complaints received alleging about dust nuisance during wind breeze from the residential establishments located on the southern side of plant. Further he informed that recently consolidated Environmental Clearance has been issued by MoEF relaxing ash content of the coal from 4.75% to 12% an average basis as a result the quantity of ash generation will increase.

The Deputy Commissioner, Udupi opined that, setting up of cement grinding & bagging plant by ACC is doubt and instructed the UPCL to identify alternatives for fly ash management. He requested KSPCB to monitor ambient air quality & ground water around the area. He further informed that, UPCL is not taking proactive steps in rapid manner to the local problems considering health & livelihood of local public. He instructed M/sUPCL to set up a local committee immediately comprising of local public, NGOs, GP & ZP members to address the local issues like fly ash, pipeline leakage & salt drift from cooling tower.

Sri. Y.B Ramakrishna briefed about the effects of thermal power plants as well as fly ash on the surrounding environment including health of the people residing around. The concern enforcing agencies should ensure strict compliance to the environmental norms. He opined that the committee should also address the social issues viz effect on agriculture, damage to flora & fauna, health of the people etc. Further he stated that there is a need for short term and long term actions to address the issues raised by the public.

Dr. T V Ramachandra opined that the approaches to mitigate the impacts or management of the environment are rather "ad-hoc" or "reactionary", evident from the measures taken by the company in controlling the leakage, etc. and also from the presentation and justification given by the company representatives to the queries posed by the committee members. The preliminary investigations conducted in this region during the first week of August 2011 (high monsoon period) show that water, soil, land environment are contaminated due to mismanagement of the environment by the company. He emphasised the need for the company to demonstrate the compliance of environment norms as per EIA 2006 (and subsequent amendments), GOI. In this regard, Dr. Ramachandra suggested the closure of the company operation due to non-compliance of the environment norms, stipulated by the Ministry of Environment and Forests, Government of India while according the environment clearance.

Deliberating further, he advocated for a stern action against the company for polluting the environment as per "Polluter Pays Principle" water (prevention and control of pollution) act, 1974, <u>The Air (Prevention and Control of Pollution) Act 1981, amended 1987</u>, The Environment (Protection) Act, 1986, amended 1991, etc.. Major impacts in the region due to environment mismanagement by the company are:

1. Contamination of drinking water sources (analysis of chemical parameters, indicate that the water in the wells within 1 km radius is contaminated evident from high TDS, etc. Even the wells in 2-3 km also show signs of contamination, even during monsoon period.

- Reduction in crop productivity/yield evident from reduced productions in areca, coconut plantations and also agriculture. This is mainly due to contamination of soil and also due to phyto-toxicants which affect the phenology of the plants
- 3. Corrosion of fixtures, even though the company claims as common "Coastal Phenomenon", but not noticed in other coastal districts and hence mainly due to contamination of air environment
- 4. Inappropriate storage of coal and mismanagement of fly ash have aggravated the situation.
- 5. Quality of the coal seems poor as there are heavy metal contaminations in the soil and water environment. It is surprising to see the company has not done either proximate, ultimate, calorific value and were unable to provide the data in this regard. Poor quality of fuel and inappropriate machineries apart from mishandling of coal and wastes (fly ash, etc.) are the principal causes of pollution in the region.
- 6. Absence of "Environment Management Cell" as per EIA 2006 and Environment Act in the industry for regular monitoring of environmental parameters
- 7. Insensitive to the problems encountered by the local people (health, livelihood reduction in crop yield, fish productivity, etc.). The company need to compensate all local inhabitants whose livelihood is affected (fishermen, agriculture and horticulture land owners).
- 8. The company has been arrogant and ruthless while handling local people problems.
- 9. The company has not done the afforestation in the region for removing trees while setting up the industry. The Industry has come up in "sacred groves" or "Devara Kadu". This emphasises the company's indifferent attitude towards local environment and also local biotic community including humans.

Considering all these aspects, UPCL needs to be penalised for the violations of air, water and environment acts. Consent for continued operation be kept in abeyance till the company fulfils all criteria for protecting the environment.

He also highlighted the need to strengthen local regulatory authority considering the number of industries that are come up in the district, through adequate qualified staff for regular monitoring and to ensure environment safeguards. He also suggested to constitute the post project monitoring task force / committee (involving all local stakeholders) to aid in managing the environment.

Further he opined that M/s UPCL is ignoring the nearby public to compensate suitably for the damages and not taking holistic approach to the problems in the area. The industry should be penalised as per GOI 1974 environment pollution prevention act - Polluters pay principle. He requested the Deputy Commissioner to take stern action against UPCL to stop production until

the company implements environment safeguards, compensation of the affected local people, verification of the compliance of environment safeguards by the committee

Dr. Y.B Ramakrishna of committee informed that

- Public in the area are suffering. Presence of methyl mercury due to coal burning will create lung problem and nervous disorder.
- UPCL should anticipate the problems and to take suitable preventive and remedial measures immediately.
- Thermal power plants emit radioactive nuclei emissions like uranium, thorium, etc more than nuclear power plants.
- UPCL is lethargic in responding to the issues raised by the public of the area.

Both Dr. Y.B.Ramakrishna and Dr. T.V. Ramachandra expressed their intention for surprise visit to the plant for which the M/s UPCL representatives have agreed.

Responding to the above the Deputy Commissioner, Udupi informed that, regular complaints from the local public shows that, there are lacunas in implementation of environmental laws by UPCL and company is very slow in taking remedial measures. He assured that suggestions and recommendations of the committee will be communicated to the State Government to take further appropriate action.

The Committee advised the Deputy Commissioner to conduct public consultation with the local public including Ryta Sangh, Nandikur Environment Association, etc. The proposed public consultation is scheduled for 17th October 2011. It was suggested to give wide publicity through appropriately worded announcement in the local press highlighting the brief background and purpose of the meeting. This would help in eliciting the problems faced by the stakeholders. It was also suggested to do the digital recording (video) of the public consultation meeting proceedings. This would further help the Deputy Commissioner in formulating appropriate strategies to address the environmental problems apart from communicating to the State government.

The meeting was concluded with vote of thanks by the Deputy Commissioner, Udupi.