



EFL Files Sampur Case

Environmental Foundation (Guarantee) Limited, filed a Fundamental Rights application in the Supreme Court (SC (Ref) 179/16 - pending support) objecting to the use of coal as a source of energy generation and in particular, the proposed Sampur Coal Power Plant, on the 31st of May 2016. The respondents for the case include, among others, the Ceylon Electricity Board, Central Environmental Authority, Ministry of Power and Renewable Energy. The grievances highlighted in the petition include the discrepancies in the EIA as well as the long term environmental and health impacts that a coal power plant will invariably cause. Further to this, the petition also notes that this move is contrary to the long term power generation plan of the GoSL.

The legal team for the Petitioner (EFL), led by President's Counsel Mr. K. Kanag-Isvaran and dedicated environmental lawyer Ms. Wardani Karunaratne AAL, will be supporting this matter on the 21st of June 2016 in Supreme Court focusing on, *inter alia*, the unsuitability of coal in terms of health, highlighting the impacts already felt in Norochcholai, and economic benefit when compared with LNG.



Figure 1: Lakvijaya Coal Power Plant

Coal as a means of power generation is not only a major driver of global change but also causes myriad of detrimental impacts which is why many countries are phasing out coal power plants and switching to renewable energy sources. The emissions from coal combustion produce alarming quantities of harmful compounds,

including among others, sulphur dioxide, nitrogen oxides, hydrocarbons, carbon monoxide. While trace

levels of uranium and thorium naturally occur in coal, the burning of coal to fly ash leaves these radioactive elements at concentrations of 10 times the original level. Fly ash is dispersed across a wide area and the uranium can leach into soil and waterways, affecting crops and exposing populations within hundreds of kilometers of the power plant to adverse risks, depending on wind speed and direction. Heavy metals such as mercury, arsenic, lead, cadmium found in fly ash contaminate rivers and agricultural land, leading to accumulation of toxic metals in the ecosystem. Exposure to heavy metals severely affects the health of surrounding communities, leading to strokes, cardiovascular ailments and birth defects. Sulphur oxides emitted from coal power plants cause acid rain, while the smog and



Figure 2: Coal stacks at Lakvijaya Coal Power Plant

air pollutants cause respiratory diseases. The disposal of sludge from power plants can leach into groundwater, affecting adjacent populations for generations.

The Sampur Coal Power Plant was proposed as a joint venture between the Ceylon Electricity Board (CEB) and National thermal Power Corporation Limited (NTPC) of India and a Memorandum of Agreement was signed between the Government of Sri Lanka (GoSL), CEB & NTPC on the 29th of December 2006. Subsequently, a company was formed between the CEB and NTPC named Trincomalee Power Company on the 26th of September 2011 in equal partnership to produce and sell power generated by pulverized coal fired technology to the CEB. The Trincomalee Power Company Limited was to establish two coal based power plants with a total capacity of 500MW, covering 505 acres of land in Sampur, Trincomalee. The coal would be imported by Lanka Coal Company through sea routes from countries such as Indonesia, India and Australia.

On February 2nd 2016, the Environmental Impact Assessment Report for this project was granted approval by the Central Environmental Authority. This is despite the fact that the Supreme Court revoked the Gazette of 17th May 2012, which declared a Special Zone for Heavy Industries in Sampur in (S.C. F.R. No. 309/2012) and that the project site had drastically changed as internally displaced people had begun to be resettled in their original lands in Sampur.

In response to this, Environmental Foundation Limited, together with energy experts, economists and concerned citizens began to actively campaign against the Sampur Coal Power Plant and the reinforcement of coal power into Sri Lanka's energy strategy. While the Sampur Coal Power Plant has been mischaracterized as the only solution to cater to rising energy demand, Sri Lanka has abundant indigenous energy resources that could meet this demand in a cost effective and environmentally sound way, particularly through the use of solar, wind and biomass energy. Switching from coal power to a natural gas operated power plant is another alternative, as Liquefied Natural Gas does not result in the release of heavy metals and other air pollutants into the atmosphere, and has significantly less carbon dioxide emitted during power generation. Contrary to claims by the CEB, LNG is more cost effective than coal power with the total cost of generation of a unit of electricity from NG estimated at Rs. 9.02 per unit, which is far less than that from coal. Further, the cost of externalities for an NG plant would be only Rs. 1.07 per unit, which makes the cost with externalities to be Rs. 10.09, compared to Rs. 21.70 for a coal plant.

In addition, there is the idea that Sampur is essential to deal with growing demand that is outstripping capacity. However, peak demand can be managed through energy efficient practices and encouraging consumers to generate their own energy through increasingly affordable solar power technology. Such a strategy would ensure that demand was met without affecting the lifestyles of the population or burdening them with the disastrous externalities of coal power. Given these viable and effective alternatives it is made clear that the Sampur Coal Power Plant is not imperative in preventing power shortages and blackouts.

EFL conducted a site visit to Sampur on the 15th of March in order to assess the potential impacts of the power plant, and observed that the CEB had begun fencing the project site. As part of its advocacy campaign, EFL organized a visit for community members in Sampur to Norochcholai, to give the residents of Sampur a firsthand account of the adverse impacts of the Lakvijaya Coal Power Plant (commonly known as Norochcholai CPP) on the health and livelihoods of the local population. The Norochcholai



Figure 3: Fencing at the Sampur Project Site

CPP, being the only example of a coal power plant in Sri Lanka, has been plagued with issues since its inception. Attention was drawn to the detrimental effects of the operations of Norochcholai CPP on the villages of Narakkalli and Ilanthadiya which are live case studies of the impacts of coal power on the

health, safety and livelihoods of helpless communities living proximate to coal power plants. The residents of Narakkalli and Ilanthadiya are exposed to hazardous ash and dust which covers their homes, wells, crops and bodies. The men, women and children of these villages are forced to inhale toxic dust and ash on a daily basis and are unable to protect themselves from respiratory ailments. The plight of the residents of these villagers remains ignored and unaddressed by authorities.

The Sampur Coal Power plant would have similar, if not exact, consequences, adversely affecting the health and livelihoods of communities as already visible in Norochcholai. Agriculture and fishing activities, in particular paddy cultivation and shrimp farming which are practiced in this region, would be affected by air pollutants dispersed over vast differences. The residents of Sampur would also expose to a myriad of health risks, including respiratory diseases and cardiovascular problems due to the proximity of the Sampur coal power plant.

Sea water from Koddigar Bay will be drawn for the cooling of the boilers and Flue Gas Desulphurization (FGD), a process used for the absorption by the sea water of Sulphur Dioxide SO_2 which emanates from coal fired process. The total water requirement for the Project is estimated to be equivalent to the capacity of Randenigala Hydro project, if it continues for 365 days. This heated water will again be discharged into Shell Bay, wreaking destruction on marine ecosystems, including 56 varieties of hard corals which house 156



Figure 4: Sampur Site

species of reef fish. Sampur has a rich array of natural habitats including tropical dry mixed evergreen forests, tropical thorn pockets, rock outcrop associated forests, swamps, tanks, ponds, mangroves and abandoned paddy fields. These habitats contain diverse flora and fauna that enrich ecosystem services for the people of Sampur, with 272 faunal species found in the region, out of which 14 are endemic and 2 critically endangered as per the IUCN National Red List. Fly ash dispersed from coal power generation smothers plants and leads to the debilitation of forests and mangroves, while the bio-accumulation of heavy metals along the food chain would cause population decline in many larger animals.

The Environmental Impact Assessment Report of the Sampur Coal Power Plant, prepared by Mantec Consultants (Pvt) Limited was found to misrepresent and underplay the impacts of the coal power plant on the ecology of the region, failing to capture these sensitive areas of impact. Excluding pertinent impact causing activities such as the coal unloading bay, the EIA also fails to account for the 911 families recently resettled in Sampur. Not only does the EIA fail to mention mitigating technologies such as closed loop cooling systems and superior acid and dust suppression methodologies, it effectively ignores the deposition of heavy metals such as mercury that results from coal power and underestimates zone of impact of air pollutants. Characterized by inaccuracies, omissions and insufficient analysis, the EIA Report cannot be considered legally valid environmental clearance as set forth in the National Environmental Act No.47 of 1980 (as amended).

The Sampur Coal Power Plant would also violate the **Right to Equal Protection of Law**, as specified in Article 12 of the Constitution (the right to clean and healthy environment is often interpreted within this right), of the people of Sampur, causing detrimental impacts to the socio-economic, health and safety as well as the ecology of Sampur.

EFL notes that this project contradicts the strategies of renewable energy that the Government of Sri Lanka intends to implement and that Liquefied Natural Gas would be a cleaner, cost effective alternative that would meet growing energy requirements without compromising Sri Lanka's natural environments and affecting the health and livelihoods of its citizens.

Over the past 35 years, the Environmental Foundation (Guarantee) Limited has played a significant role in the revolution of public interest litigation in Sri Lanka, with its first legal case in the Supreme Court against the Director General of Wildlife during the Gal Oya National Park Encroachment Case in 1984. This was followed by more than 200 cases with significant victories, such as the Eppawala Phosphate Case, the Kandalama Hotel Case and Galle Face Green Case, which has worked to reinforce the determination of the EFL as well as other environmental organizations to work towards the conservation of Sri Lanka's natural environment for the benefit of our biological and cultural heritage and the well-being of the people.