



මගේ අංකය  
எனது இல.  
My No.

ඔබේ අංකය  
உங்கன் இல.  
Your No.

PEA/PKT/EPL/  
CH/H/149/2015



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மாகாண சுற்றாடல் அதிகாரசபை (வ.பி.மா.)  
PROVINCIAL ENVIRONMENTAL AUTHORITY  
(NORTH WESTERN PROVINCE)

මලිගාව, කුරුනෑගල.  
மாளிகாவ, குருநாகல்.  
Maligawa, Kurunegala, Sri Lanka.



30 /06/2016

The General Manager,  
Ceylon Electricity Board,  
Sir Chittampalam A Gardiner Mawatha,  
P.O. Box 540,  
Colombo 2. .

### ISSUE OF ENVIRONMENTAL PROTECTION LICENCE (EPL).

#### 900 MW COAL FIRED THERMAL POWER PLANT IN KALPITIYA PENINSULA; NOROCHCHOLE - NWP.

This refers to the application submitted by you, to the Provincial Environmental Authority of the North Western Province on the above subject.

The Environmental Protection Licence, numbered **3536/2016 R1** and dated **30/06/2016** is enclosed herewith.

Please note that the **Ceylon Electricity Board** shall be adhered to all the conditions (**Twenty Two**) of the EPL, and failure to do so is an offence as per to the provisions of the Provincial Environmental Statute No. 12 of 1990 and regulations gazetted under said statute.

You are kindly informed to submit a renewal application for the EPL, one month prior to the completion of validity period.

Thanking you,  
Yours faithfully,

Saman Senanayake,  
Director,  
Provincial Environmental Authority (NWP),  
Maligawa,  
Kurunegala,

Copy : Hon Chairman/Secretary, Pradeshiya Sabha, Kalpitiya





**PROVINCIAL ENVIRONMENTAL STATUTE, NO. 12 OF 1990**  
**ENVIRONMENTAL PROTECTION LICENCE FOR EMISSION AND DISPOSAL OF WASTE ISSUED**  
**UNDER SECTION 21 (1)**

Ms. .... **Ceylon Electricity Board** .....  
of ..... **Narakkalliya, Norochchole** .....  
Situating within the area of authority of the ..... **Pradeshiya Sabha** ..... of ..... **Kalpitiya** .....  
is/are hereby authorized to discharge/deposit waste and/or emit noise/vibrations/air emissions  
which may arise as a result of the operation of the said industry/process, in accordance with the  
standards and criteria prescribed by the Provincial (Environmental Protection and Quality)  
Regulations No. 1 of 2010 and the Provincial Environmental (Noise control) Regulation No. 04  
of the Provincial Environmental Statute No. 12 of 1990.

This licence shall be in force from ..... **30/06/2016** ..... to ..... **29/06/2017** ..... unless it is  
earlier cancelled or suspended.

This licence is subject to the general terms and conditions stated overleaf and to the additional  
terms and conditions stated below;

**Special Terms and Conditions:**

- 1.0 This Licence is valid only for the 900 MW Coal Fired Thermal Power Plant in Kalpitiya Peninsula; Norochchole - NWP.
- 2.0 The Ceylon Electricity Board (hereafter referred to as Project Proponent- PP) 900 MW Coal Fired Thermal Power Plant is bound to ensure that these terms and conditions are adhered to and have full control over a third party, that may be involved in implementation of the project. The PEA -NWP should have access to the contract document pertaining to Environmental aspects, entered into by the PP and any outside contractors.
- 3.0 Any project activity coming under the jurisdiction of the Coast Conservation Department (CCD) should be adhered to the terms and conditions specified by the CCD.
- 4.0 PP where necessary should obtain fresh approvals in respect of any alteration that are intended to be made to the initial project proposal submitted to PEA -NWP, as per the EIAR in 2011.
- 5.0 Costs to be incurred in giving effect to the implementation of the terms and conditions of this approval should be borne by the PP as project implementation costs.

**30.06.2016**

Date

.....  
Director

Provincial Environmental Authority



## General Terms and Conditions

1. The licence shall be valid for such period as may be specified in the license, provided it shall **not** be for more than a period of one year from the date of issue. An application for renewal of the license shall be made at least three months prior to the date of expiry of the license.
2. The holders of the Licence shall permit the Director or any other officer duly authorized in writing by him at any time to enter the premises in respect of which the Licence is issued to examine and inspect any equipment or industrial plant ; and
  - (a) to take samples of any pollutants that are emitted, discharged or deposited from or by such equipment or industrial plant ;
  - (b) to examine books, records or documents relating to the performance or use of such equipment or industrial plant or relating to the emission, discharge or deposition from such industrial plant ;
  - (c) to take photographs of such equipment or industrial plants as he considers necessary or make copies of any books, records or documents seen in the course of such examination; and
  - (d) to take samples of any fuel, substance or material used, in such trade, industry or process carried on in or on such premises.
3. The holder of the Licence shall comply with any requirement communicated from time to time by the Authority as regards :
  - (a) the use of any techniques or installations in the production/process, handling and storage of goods, material, fuel and waste products with a view to minimizing environmental pollution and hazards ; and
  - (b) any additional technical measures for preventing or mitigating environmental pollution and hazards.
4. The holder of the Licence shall ensure that monitoring of environmental pollution or other acts that the authority considers necessary to protect the environment, including the following are done:
  - (a) measurements, calculation, registration of samples to determine actual level of pollution and risk of exposure ;
  - (b) recording and sorting of data and reporting to the Authority ;
  - (c) issuing written instructions to persons employed with regard to handling of hazardous material and installations to protect the environment ;
  - (d) assigning duties and responsibilities to management and staff with regard to protection of the environment ; and
  - (e) ensuring that persons referred to in (c) above, and charged with duties and responsibilities referred to in
  - (d) above are properly qualified persons.
5. This Licence is valid only for the type and nature of the industry/process/operation as stated in the preliminary application and to the information submitted by the Licencee.
6. Any alteration or extension made to the industry, process or operation should be indicated forthwith to the Authority.



## OPERATIONAL ACTIVITIES

- 6.0 No ground water shall be exploited for operational or any other activities without prior approval from the Water Resource Board.

### 7.0 AIR QUALITY

The ambient air quality levels specified by the Provincial Environmental Authority (PEA - NWP) under the extra ordinary gazette notification No. 1685/11 of 21.12.2010 shall strictly be adhered.

### 8.0 FUEL

- 8.1 Good quality, low ash coal with sulfur content of 1.0% or less by weight shall be used for the operation of the plant.
- 8.2 Moisture content and ash content of coal which will be used for the plant shall be in par with the table No. 4.4 of the EIAR prepared for this project.

### 9.0 STACK HEIGHT

It is recommended that the stack height shall be of 150 meters or above with an internal stack diameter of not more than 05 meters to ensure an exit velocity of flue gas about 20 m/s during operation.

### 10.0 EMISSION STANDARDS

- 10.1 Following interim stack emission levels are in place. However the condition No. 10.2 and 10.3 shall strictly be adhered by the PP

TYPE OF POLLUTION	EMISSION LIMIT mg/ Nm <sup>3</sup>
SO <sub>x</sub>	850 for maximum of 100 Kg SO <sub>2</sub> /MW/Day subject to maximum 50 metric tons of SO <sub>2</sub> /Day.
NO <sub>x</sub>	650
PM	150
Opacity	15%

- 10.2 It should be noted that a properly designed continuous emission monitoring system (CEM) shall be installed for opacity, SO<sub>x</sub>, NO<sub>x</sub> and PM from the stack.
- 10.3 It is mandatory to manage "Flue Gas Desulpherizer" unit (FGD) with an efficiency of 99% to remove SO<sub>x</sub>.

### 11.0 NOISE

- 11.1 The Noise level shall comply with standard given in the extra ordinary Gazette Notification No .1685/11 of 2010.12.21 published under the Provincial Environmental Statute (PES) No. 12 of 1990 of the North Western Province.
- 11.2 The workers shall be provided with quality earmuffs and the management shall ensure that the workers wear these while working within the plant.

*Signature*

## 12.0 VIBRATION

Maximum vibration level that could be allowable at the boundary of the proposed site is 5 mm/sec. (measured at peak particle velocity mode) while the plant is in operation.

## 13.0 LIQUID AND SOLID WASTE

- 13.1 Liquid effluents generated by various sources such as coal stockpile, spills from jetty, ash land fill, boiler blow down, sanitary / domestic sewage, demineralization plant effluents, metal cleaning effluents and drainage of contaminated areas etc; shall be treated to conform to the tolerance limits for industrial and domestic effluents discharged into the marine coastal areas as published in the gazette notification No. 1685/11 of 21<sup>st</sup> December 2010 under the PES.
- 13.2 Temperature at which the cooling water is discharged into the sea shall be maintained as described in paragraph 5.3.2 of the EIAR.
- 13.3 Mechanically sound oil separation devices shall be installed and operated in order to meet the specification for oils and grease indicated in the above standards. The oil separation devices shall be cleaned regularly to maintain their operation effectively. No oil or grease shall be discharged into the surface water or to the ground. Adequate facilities to recover spillage and to clean up the area must be ensured by the project proponent.
- 13.4 All scheduled/ hazardous waste which may be generated due to the project activities shall be disposed in accordance with regulation published under the extraordinary gazette notification No. 1685/11 on 21.12.2010 by the Provincial Environmental Authority (PEA).
- 13.5 The PP shall keep the PEA-NWP informed of the quantities and quality of hazardous waste generated at the plant premises on an annual basis.
- 13.6 All non- toxic and organic waste shall be collected at a central location and disposed of periodically in an environmentally safe and nuisance free manner in consultation with the Kalpitiya Pradeshiya Sabha.
- 13.7 Solid waste shall not be burnt in the open air within or outside the proposed site.
- 13.8 Ash handling and disposal shall be carried out as described in paragraph 5.2.2 of the EIAR.
- 13.9 All pollution control equipment shall be maintained in good working order at all times. Facilities shall be made available in order to repair any break down immediately, so that the pollution control equipment could be restored to working order without any delay.

## 14.0 VISUAL ASPECTS

A green belt in the buffer zone shall be established preferably with fast growing species with thick foliage in order to protect against coal dust from stock yard and to reduce visibility of the power plant and to act as a noise barrier . This should be done in consultation with the Forest Department.

## 15.0 TRANSPORTATION AND HANDLING

Transportation and Handling of coal shall be carried out as mentioned in the paragraph 2.7.2 of the EIAR.





## **16.0 SUPPLY OF SEA WATER AND COOLING PROCESS**

Supply of sea water and cooling process shall be done as mentioned in the paragraph 2.7.3 and 2.7.4 of the EIAR.

## **17.0 ENVIRONMENTAL MONITORING**

- 17.1 Monitoring programme and safety contingency plan mentioned in the chapter 6 of the EIAR shall be implemented.
- 17.2 A central environmental unit as mentioned in the EIAR shall be established within the organizational set up of proposed power plant. This unit should conduct the activities described in paragraph 6.1 of the EIAR.
- 17.3 This central environmental unit shall act as the contact person for members of the public and shall liaise with relevant organizations.
- 17.4 The monitoring shall be contracted out to agencies / institutions approved by PEA-NWP.
- 17.5 The Ambient Air Quality standard Gazetted under the PES shall strictly be adhered and monitored in consultation with the PEA-NWP. The monitoring locations, monitoring frequency and the method of monitoring shall be agreed upon between PEA-NWP and the PP.
- 17.6 Measurements shall be made available on request to PEA-NWP.
- 17.7 The project proponent shall make available sufficient resources to enable the monitoring plan to operate.
- 17.8 The PP shall consult PEA-NWP in preparing the above monitoring plan.
- 17.9 A monitoring committee consisting of representatives of PEA-NWP, Coast Conservation Department (CCD), National Aquatic Resources Agency (NARA), Ministry of Fisheries, Provincial Ministry of Fisheries, Agriculture Department, Irrigation Department, Non Governmental Organizations (Fisheries societies, Association of Thalawila church etc.), Department of Wild Life Conservation, Meteorological Department, Marine Environmental Pollution Prevention Authority, Water Resources Board, National Water Supply And Drainage Board (NWS & DB), Kalpitiya Pradeshhiya Sabha, Divisional Secretariat (Kalpitiya), Ministry of Power and Energy and any other member deemed necessary by PEA-NWP will be appointed at the cost of the project proponent. This committee will supervise and monitor all activities of the project, in order to ensure that stipulated conditions and mitigatory measures are being complied with. The terms of reference (TOR) of the monitoring committee will be formulated by PEA (NWP).

## **18.0 EMERGENCY PREPAREDNESS PLANS**

- 18.1 An emergency preparedness plan inclusive of a comprehensive contingency plan shall be prepared by the PP in order to encounter any unforeseen events such as breakdown of plant machinery, fire explosion, accidents etc; prior to commencement of the operation. The plan shall define accurately the types of incidents it is intended to deal with, the authority to activate the plan, duties and responsibilities of all persons involved including the alerting procedure, communications and setting up of an operational centre.

The suggestion made in paragraph 6.5 of the EIAR shall be considered in preparation the plan.

- 18.2 PP shall ensure that all employees are trained and aware of the plan their responsibilities in executing the plan. Copies of the plan shall be placed at a suitable location and consulted on a regular basis.

## **19.0 REPORTING**

- 19.1 Data on all Environmental aspects of plant operation shall be continuously updated and available in a form suitable for immediate inspection by authorized PEA-NWP officers and other officers from relevant agencies.
- 19.2 Data on all Environmental aspects of plant operation shall be submitted to PEA-NWP. The format and the frequency of submitting such report shall be determined by PEA - NWP.

## **20.0 EXPANSION / EXTENSION.**

- 20.1 Any expansion or extension to the operation or process shall not be carried out without prior approval of the PEA-NWP.
- 20.2 Installation or operation of any machinery other than those stated in the project proposal submitted to PEA-NWP shall not be carried out without prior approval of the PEA-NWP.
- 21.0 Any additional condition stipulated by the PEA (NWP) as and when required controlling any kind of pollution created by the operations of the industry shall be strictly adhered to.
- 22.0 This licence is issued for granting of approval for releasing of gaseous, liquid or solid waste or noise within the accepted standards, terms and conditions stipulated by PEA-NWP. The trade Licence from the relevant Local Authority is required.
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