

# Republic of Albania Ministry of Environment, Forestry and Water Administration

Protocol No. 90

Tirane, Date 03.03.2007

### License Committee Decree No. 2

#### ENVIRONEMENTAL LICENSE

(For activities impacting Environment)

According to article 36 of law No. 8934 date 05.09.2002 "For Environment Protection", issues "Environmental License" to Albanian Power Corporation KESH sh.a. with headquarter in Tirana, for following activities:

## "CONSTRUCTION AND OPERATION OF THERMAL POWER PLANT"

### 1. Technical Data

- 1.1 Project Location: Construction site located in Commune CENTER in the North of Vlora new Port.
- 1.2 Project Area: 14.6 ha
- 1.3 Power installed capacity: 97MW
- 1.4 Fuel oil to be used: Distillate fuel oil

## 2. Time effectiveness

Date of issuing of Environmental License:

03.03.2007

Date of validity of Environmental License:

03.03.2012

Environmental License for this activity issued for a time period of 5 years with the right for repeating. The re-applying procedure will be started three months before expiring date of this License.

### 3. Scope of Environmental License

This permission cover the phase of construction and installation of technology of thermal power plant and the phase of operation consisting in following activities:

- a. Updating and Preparation of construction site of Thermal power plant;
- b. Construction and installation of all of technology of Thermal power plant:
- c. Installation of cooling water pipelines and system;
- d. Construction of technology water treatment system
- e. Firefighting system and emergency protection system

## f. All of supporting services.

This permission covers also the period of operation activity for Thermal Power plant to which following environmental requirement are provided.

# 4. Using of Environmental License

This license implemented by all of contracted parties involved to realize all of activity phases of the project to which this license is issued.

The respecting of conditions of this permission is part of contract between parties involved and all of these subjects have legal obligation for non compliance to these conditions.

# 4.1 Changing of activity ownership

In the case when the project to which this Environmental License has been issued, changes the ownership or transfer the operation to other legal or physic entity, new owner should respect this license requirements.

# 5. Detailing of Environmental Conditions

In order to avoid, to minimize, monitor and manage environmental adverse impacts of the project during all of phases of its implementation, following conditions should be fulfilled:

## 5.1 For construction and installation phase

- To be installed only the technology provided in Environmental Impact Assessment report;
- To be constructed technological water and sewage water treatment system;
- To be installed in Thermal Power Plants stacks the smoke and gases filtering system;
- To be installed fire prevention and firefighting system which should be operable in all of thermal power plant area; (by metallic and plastic pipelines)
- In all of sites to be installed signalizing and advising system for protection against fire and
  accidents; to be provided all of firefighting systems and tools, to be provided protection
  clothes for workers, communication tools and firefighting team address and telephone
  numbers;
- To be constructed trucks and vehicles service center and oil's warehouse:
- To be installed alert and signalizing systems for fuel oil spillage in pipelines (If technology does not include other additional alternative observing methods to be applied;
- The soil and inert materials transport to be carried in clean wheels trucks which should be covered with prevention of spreading of materials over roads;
- To be periodically checked the technical conditions of works tools and machineries to avoid oils leakage, gas emotions and noises;
- The vehicles service, spare parts and lubricants keeping to be made in the way that to be avoid environmental pollutions.
- To be constructed a perimethric canal along site borderlines in the lowest level to control
  of soil volumes or other construction materials during digging and updating of
  construction site;

- The excavated soils to be accumulated in proper locations fixed in collaboration with local government. To be installed garbage baskets in proper positions.
- In case of any environment pollution, the subject should be involved immediately to mitigate and eliminate the impacts;
- During night to be used visual signalizing systems instead of audio systems;
- To be determined the number of trees will be cut during project execution and in collaboration with the Directory of Forestry Service of Vlora Region to be drafted reforesting project with three times of trees loosed including the planting place.
- To be carried all of measures of occupational and health safety according government decree No. 692 date 13.12.2001 "For special measures for occupational safety and health protection".

## Conditions for fuel storage

- To be respected engineering drawings;
- To maintain communication between access roads and main roads:
- To be respected construction and installation rules:
- To be settled water/oil separator;
- Reservoirs to be connected with water/oil separator to avoid oil spillage:
- Fuel deposits to be constructed within site and their capacity to be bigger than their volumes:
- All of water and oils possible spilled to be accumulated in separator;
- All of pipelines connections should guarantee good sealing;
- Pipelines to be with antirust materials and to be equipped with apparatus;
- To be arranged a container to help for discharges during operation and during reservoirs cleaning
- Site to be fenced and greened;
- Site to be provided with safety precautions and signalization of risks and danger situations;

# 5.2 During Operation phase

- Plant during operation to use as clean as possible fuel oil. (LNG will be preferable)
- Outlet Sea cooling water should be treated before discharging into the sea.
- In the case of non respecting of sea water outlet temperature rise limit, sea water should be re-circulated before discharging;
- All of environment protection of work places should be available. (Fire, air circulating, smoke filters etc.);
- Technological residuals and discharges to be temporary accumulated in a proper location before transporting to the place determined by Local Government;
- Fuel oils, lubricant and other chemicals with fire and explosion risk should be kept in appropriate isolated locations with permanent observation.

- Periodically to check the normal operation state of water treatment plants to avoid soil pollution. (monitoring);
- In the case of leaking of oil or other dangerous substances in environment, the subject should take all of appropriate measures to clean environment impacted;
- Along all of plant boundaries to be implemented green strip in order to rehabilitate of escape (possibly with autochthons trees) and to support existing of wild fauna of the zone;
- For industrial accidents, the emergency plan should be implemented.

## 6. Allowable limits for discharges to the environment

## 6.1 Liquid discharge

Allowable limits for liquids discharges are of Gov. Decree No. 177 date 31.05.2005 and

EU directives as stipulated in the following table:

No.	Parameters	Allowable limits
1	рН	6-9
2	Floated mass	50 mg/l
3	Petrochemical subproducts	10 mg/l
4	Chromium total	0.5 mg/l
5	Cu	0.5 mg/l
6	Zn	1 mg/l 1
7	Fe	1 mg/l
8	Free clorium	0.2 mg/l
9	Sea water temperature elevation	3°C
10	BoD5	50 mg/l
11	CoD	250 mg/l
12	Phenol	0.5 mg/l
13	Cn Total	1 mg/l
14	Cn free	0.1 mg/l
15	Р	2 mg/l
16	F	20 mg/l
17	Sulphides	1 mg/l

## Following conditions should be respected as well:

- 1. To avoid disposing of solid garbage in the sea area during construction phase;
- 2. Disposing of garbage and hydrocarbons wastes to be realized through licensed subjects.
- 3. Cooling water system should be separated with drainage system and sewage water system.

## 6.2 Air pollutions

For air quality during operation phase the limits to be respected are according the Gov. Decree No. 435 date 12.09.2002 "For air pollution norms in Republic of Albania" and other EU directives, these limits are:

PM10<50mg/Nm3 (dry @3% O2)

SO2,1700 mg/Nm3 (dry @3% O2)

Nox,450mg/Nm3 (dry @3% O2)

### 6.3 Solid wastes

Solid materials should be treated as stipulated in the Law No. 9010 date 13.02.2003 "For environmental management of the solid residuals" and the Law date 18.05.2006 "For management of dangerous residuals"

#### 6.4 Noises

To take appropriate measures to reduce noises in order to respect the limits for acoustic pollution to the nearby plant territories according the EU relative directives.

## 7. Environment management and monitoring

- To be drafted Environmental management procedures and systems and to be guaranteed their implementation;
- Environmental responsible persons to be trained with environmental management systems;
- To keep a special register to note all of possible events happened offshore;
- To be drafted Emergency Plan for industrial accidents according the law and to be guaranteed its implementation;
- To monitor and register air pollutions, residuals, noise level etc.
- To be bio-monitored the sea water in outlet of cooling water system;
- To be published monitoring data at least once per three months.

### 8. Closing and demolition of activity and installation

Closing and demolition of the activity and installation shall be done with special environment permission.

# 9. <u>List of legal acts to be respected during construction and operation of Thermal Power Plant.</u>

- Law No. 8934 date 05.09.2002 "For environmental protection"
- Law No. 8990 date 23.01.2003 "For environmental impact assessment"
- Law No. 9537 date 18.05.2006 "For administration of dangerous residuals"
- Law No. 9010 date 24.07.2003 "For administration of solid residuals"
- Law No. 9115 date 26.03.2001 "For air protection"
- Law No. 8756 date 26.03.2001 "For public emergencies"

- Law No. 8093 date 21.03.2006 "For water reserves"
- Law No. 9115 date 24.07.2003 "For treatment of polluted waters"
- Law No. 8905 date 06.06.2002 "For sea water environmental protection"
- Government Decree Nr. 177 date 31.03.2005 "For allowable limits of liquid discharges and criteria for appraisal of water protection"
- Government Decree Nr. 103 date 31.03.2002 "For environmental monitoring in Republic of Albania".
- Government Decree Nr. 435 date 12.09.2002 "For air pollution norms in the Republic of Albania".
- Regulation No. 1 date 15.03.2006 "For prevention of environmental and health impacts during construction activities"
- Law No. 8766 date 05.04.2001 "For fire prevention and firefigting"

#### OTHERS

License issued in 5 years base with repeating right

This license is effective with license of activity issued by related authorities;

Non staring of activity within 1 year from issuing date of this document expires the validity of this License.

The performing of any new environmental impact not known until the date of this license, need to have re assessment.

For non compliance with License conditions and Environmental legislation the legal sanctions will be applied.

Basing on Guideline No. 1 date 30.11.2005 for "Service Tariffs for Environmental License", this license is classified as point 13, letter c, the value of License is 60,000 Leke.

MINISTER

Lufter Xhuveli

Signature, Stamp

Certified Copy Notary Public Signature, seal Tax stamp

Translated by: Emine Dyrmishi

REPUBLIKA E SHQIPERISE DHOMA E NOTERISE, TIRANE NR 1235 Rep



# VERTETIM

Vertetohet firma e perkthyeses **Emine DYRMISHI**, e njohur personalisht prej meje, banuese ne Tirane, e cila deklaron se perktheu sa siper nga Shqip ne Anglisht, nenshkroi para meje rregullisht dhe une Noter, e vertetoj sipas ligjit.

Tirane, me 25/03/ 2007

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CERTIFICATE

It is certified the signature of the translator Emine DYRMISHI, personally known to me, resident in Tirana, who declares to have translated the above from Albanian into English, signed it in my presence and I, Notary Public, certify that according to the law.

Tirana, on \_\_\_\_\_\_\_2007

NOTARY PUBLIC

ERMIRA M. RIZAJ