

**Egyptian Environmental Affairs Agency (EEAA)**

**Compliance Action Plan (CAP)**

**Report Template**

**August 2009**

**Egyptian Pollution Abatement Project (EPAP II)**

# Compliance Action Plan

*(to be prepared in Arabic and English)*

## 1. General information about the factory

Factory Name:		Industrial Code:	
Address:			
Chairman Name:		Public sector/Private/	
Contact Person:	Title:		
Phone No:	Fax No:		
No. Of Workers:	No. Of shifts:	Operating Year:	
Period covering the following information: from / / 200 to / / 200			
Main Products:			
Year established:			
Available licenses:			
Surrounding area:			

- Google map showing factory site and surrounding area

## 2. Main production processes

### 2.1. Process description

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### 2.2. Process flow diagrams

### 2.3. Raw materials, Products and Utilities

Raw materials		Current Consumption, t/y	
Utilities	Usage	Consumption, m3/y	Source
Water	Domestic		
	Cooling		
	Process		
	Other		
	Type	Consumption /y	

<b>Fuel</b>	Mazot (fuel oil), t/y	
	Solar (diesel oil), t/y	
	Natural gas, m <sup>3</sup> /y	
	<b>Source</b>	<b>Consumption</b>
<b>Electricity</b>	National Grid	
	Self generated	
<b>Products</b>		<b>Actual Average Production, t/y</b>

### 3. Description of Service Units

Type of service unit	Brief Description
Water treatment	
Steam boilers	
Cooling towers	
Wastewater treatment	

### 4. Current environmental status

- Plant layout showing emissions and discharge points

#### 4.1 Air emission

Stack emissions for boilers, furnace and electrical generator and other processes -Combustion sources (limits given in table 5 of annex 6) and for non- combustion sources (limits given in table 2 of annex 6)

Parameter	Emission (m <sup>3</sup> /year)	Concentration (ppm or mg/m <sup>3</sup> )	Pollution load (tons/year)	Law limit (ppm or mg/m <sup>3</sup> )
Co				
Co <sub>2</sub>				
No <sub>x</sub>				
So <sub>2</sub>				
Excess Air				
Efficiency				
O <sub>2</sub> %				
Stack temperature				

**For each table:** Type of fuel and Height of stack:

**Dust emissions: Point source emissions limits given in Table 1 of the ER**

Sources	Concentration (ppm or mg/m <sup>3</sup> )		Law limits (ppm or mg/m <sup>3</sup> )	
	Tsp	PM10	Tsp	PM10

#### 4.2 Work environmental emissions

Noise (Annex 7 of ER)				
Location	Average level (db)		Law limits (db)	
Dust (Tsp, PM10) (Annex 8 pre-table 1 of ER)				
Location	Concentration (ppm, mg/m <sup>3</sup> )		Law limits	
	Tsp	PM10	Tsp	PM10
Gases and vapors (Table 1 Annex 8 of ER)				
Location	Pollutant	Concentration (ppm or mg/m <sup>3</sup> )	Law limits (ppm or mg/m <sup>3</sup> )	

#### 4.3 Wastewater (end-of-pipe)

Indicators	*Discharge(m <sup>3</sup> /year)	Concentration (ppm)	Pollution load (tons/year)	Law limits
pH				
BOD				
COD				
TSS				
Heavy metal				
Others				

#### 4.4 Hazardous Material

Type	Quantity (tons/year)	Management

#### 4.5 Solid Waste

Source	Solid classification	*Annual Quantity (ton)	Management

#### 4.6 Hazardous waste

Source	Hazardous waste classification	*Annual Quantity (ton)	Management

## 5. Existing pollution Abatement units

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## 6. Non-compliance issues

*This section should present a summary of non-compliance issues as concluded from previous tables*

## 7. Causes for non-compliance and planned solutions

*Based on the non-compliance issues identified in section 6 describe what causes these issues. In a certain location, emissions in workplace for example, can be caused by a number of sources.*

*Planned activities to reach compliance should be explained. Sometimes more than one activity can be performed to reach compliance (e.g. in a paper factory TSS in WW has been reduced first by fiber removal and recycling, then by treatment).*

*The following categories should be addressed according to need:*

1. Air emissions.
2. Wastewater.
3. Work Environment.
4. Hazardous materials & hazardous wastes.
5. Environmental Register

## 8. List of Sub-Projects

*The projects identified in the previous section should be listed in the following table:*

	Sub-Project Name	Cost	Type	Duration
1				
2				
3				
4				
5				

## 9. Sub-Project Requirements

*Please fill the following table for each sub-project with special emphasis on the sub-project description*

Sub-Project Name:	
Sub-Project Description:	
Sub-Project Cost:	
Source of finance:	
Economic Benefits:	
Environmental Impacts:	

## **10. Action plan**

*The information collected in the previous sections is used to fill the table below for non-compliance issues and related actions*

## **11. Environmental management of CAP**

- 1- Work team responsible for CAP implementation.
- 2- Distribution of Responsibilities.
- 3- Resources of work team.

**1. Non-compliance issues and related actions**

<b>Non Compliance Issues and Actions</b>	<b>Estimated Investment, Thousand LE</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Environmental Outcome</b>	<b>Economic Benefits</b>
Issue # 1 BOD in the effluent								
Action 1 Installation of Fiber Recovery Unit	200						BOD concentrations reduced from 200 mg/l to 30 mg/l	Recovery of fiber increasing throughput by 5%
Action 2 Expanding Aeration Tank	150						BOD	
Issue # 2 Particulate matter from Stacks								
Installation of Bag Filter								
Investment to be budgeted	350							
Funding to be sought from other sources	200							