

# Environmental Statement **2011**



# ENVIRONMENTAL STATEMENT 2011



VOLUNTARY ENVIRONMENTAL STATEMENT  
ACCORDING TO EUROPEAN REGULATION 1221/2009  
EMAS (Eco-Management and Audit Scheme)

8<sup>th</sup> of JUNE 2012

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# MANAGEMENT MESSAGE

With great pleasure I present the Environmental Statement 2011 of MOTOR OIL, which we publish according to the new European Directive 1221/2009 for EMAS (Eco Management and Audit Scheme). This is the sixth consecutive Environmental Statement voluntarily published by our company, which is registered since 2007 in the Greek Ledger of EMAS organizations with registration number EL 000067, in line to our commitment for properly and rationally managing environmental issues, and in the context of the Integrated Management System that we apply for this purpose.

MOTOR OIL operates in a way that fully respects the Environment, and takes care for the best management of natural resources, as well as for reducing the environmental impacts that result from its operations, having as a guide its Environmental Policy, and taking into account the interests of all stakeholders.

In the present Environmental Statement you will find data about the Refinery units and process activities, a reference to our Environmental Management Policy, an assessment for our 2011 Environmental performance, as well as the new objectives to which we commit ourselves.

The investment policy of the company is focused on the production of environmentally friendly products, by implementing innovative and environmentally friendly technologies, while investing in new projects and in the automation of production processes for improving the productivity and the energy efficiency of the Refinery. By implementing the above investment policy, we believe that we actively contribute to environmental sustainability, to the economic development of the local society in which we base our industrial operations, as well as to the development of our

country in general.

In 2011, the construction of a fifth 17 MW gas turbine unit was completed. The addition of this natural gas fed unit at the high performance Electricity and Steam Cogeneration Power Plant of the Refinery, will ensure its full energy self-sufficiency.

Moreover, MOTOR OIL obtained a CE marking certification of Bitumen and bituminous binders in accordance with European Directive 89/106/EEC Construction Products, as amended by 93/68/EEC and in accordance with the requirements of the European Standard EN 12591:2009.

The overall responsibility for the Environment, as well as the Health and Safety of our personnel is mine.

The duties that I have assigned to my colleagues and employees in the context of Health, Safety and Environmental Management are specific and, as I believe, effective. All the personnel of MOTOR OIL participate in the implementation of the Environmental Management System, through the appropriate training, the set-up of workgroups, the realization of the program of internal audits, and the carrying out of emergency preparedness exercises.

I hope that you will find this Statement not only informative but also interesting.

It is my obligation at this point to emphasize that MOTOR OIL's Environmental Statement is an opportunity to communicate with our associates and all stakeholders on the performance of MOTOR OIL in managing environmental issues, and in this context, my colleagues and I are at your disposal for any query or comment you might have.

**M. J. Stiakakis**

*Manufacturing General Manager*

# 1. COMPANY PRESENTATION

## 1.1 General Information

MOTOR OIL is a leading Company in the oil refining industry supplying its customers with a wide range of high quality products. The Company has evolved to one of the main pillars of the national economy, while, at the same time, it maintains and expands its key role in the wider area of South Eastern Europe.

MOTOR OIL started operating in 1972 as a company engaged in refining and trading of oil products and has been responsibly functioning ever since, aiming at sustainable profitability and socially responsible growth. The Company's Vision and Mission define the context which drives the planning and implementation of its dynamic growth. In addition, company operation is based on a set of strict Principles and Values, which comprise the constituent elements of its business practices.

MOTOR OIL's Vision and Mission are based on three basic principles:

- Respect for our People
- Respect for the Environment
- Transparency

Materializing the Corporate Vision and Mission is based on four corporate values:

- Effectiveness
- Accountability
- Social Responsibility
- Integrity

The Company Refinery is located at Agioi Theodoroi, Corinth, approximately 70 km from the center of Athens and the area of the premises of the facility is 1,141.5 acres (biodiversity index). Along with its auxiliary premises and its fuel distribution premises, the Refinery constitutes the largest private industrial complex in Greece, and is considered as one of the most flexible refineries across Europe.

It can process different types of crude oil, producing a wide spectrum of oil products that meet the strictest international standards, thus serving the supply requirements of Oil Companies both in Greece and abroad.

At the same time it is the only Refinery in Greece that has a lubricants production complex. Apart from the basic units, (atmospheric distillation, catalytic reforming and hydrotreating) the refinery includes conversion units as well (thermal, catalytic cracking, and hydrocracking).

The industrial plant of the Company has an operations license which has been granted by Y.P.A.N (Hellenic Republic Ministry of Development / Department of Energy / Department of Oil Installations / section A:Δ3/α/6841 – 16.08.2007, while for the new Atmospheric Distillation unit U-7100 the operating license is by YPEKA – Ministry of Environment, Energy & Climate Change/Department of energy and climate change / Department of Oil Installations / section A: Δ3/A/14094, date 12-11-2010) and they fulfill the legal requirements, which

demand the application of Best Available Techniques, measures for the protection of the ground, water and air, threshold limits for waste emission, emergency response measures (leakages, malfunctions, interruptions), waste management measures as established in the permit from YPEKA (Approval of the Environmental Operating Terms – YPEKA/Department of Air Pollution and Noise Control / Section of Industries : 145996/ date 22.06.2009 and 188358/date 10.10.2011), which are in a total conformity with the European legislation (directive IPPC (96/61/EK) and 2001/80/EK).

Also, the Refinery has a license for Greenhouse Gases Emissions with number YPEKA/Department of Environment/ Department of Air Pollution and Noise Control /ΓΕΔΕ 169486 – 26/11/2010.

The following table summarizes the company data.

<b>Statistical Codification of Economic Activity:</b>	232
<b>NACE Code:</b>	DF.19.20 - Manufacture of refined petroleum products
<b>Premises:</b>	Agioi Theodoroi, Corinth
<b>Installed Power:</b>	Main electric motors power 74.65 MW Back up electric motors power 48.44 MW
<b>Postal Address:</b>	71st km of Old National Road Athens – Corinth, position «Soussaki»
<b>Contact Person for EMAS and Integrated Management System:</b>	S. J. Sofos
<b>Telephone number:</b>	(+30) 27410-48602
<b>Fax:</b>	(+30) 27410-48255
<b>E-mail:</b>	sofosp@moh.gr
<b>Responsible for Health, Safety and Environment:</b>	G. A. Palaiokrassas palaiogi@moh.gr

Vardinoyannis Group is the major shareholder of MOTOR OIL. In 2001, the Company made an Initial Public Offering, listing its shares in the Athens Stock Exchange, substantially increasing its share capital.

The Company's shareholder structure at 31.12.2011 is presented in the following table.

SHAREHOLDERS	%
Petroventure Holdings Limited	40.0
Doson Investments Company	8.8
Free Float	51.2
<b>Total</b>	<b>100.0</b>

## 1.2 Timeline of Company's Growth

MOTOR OIL was founded in 1972, accomplishing afterwards step-changes towards the improvement, expansion and upgrading of its refinery. These steps are concisely presented in the following chronological table.

<b>1972</b>	Foundation and beginning of operation of the refinery comprised of a crude oil refining unit, a base lubricants production unit and port facilities.
<b>1975</b>	Construction of an Atmospheric Distillation Unit, with a capacity of 100,000 barrels/ day and tanks with a capacity of 1.5 million m <sup>3</sup> .
<b>1978</b>	Construction of a Catalytic Reforming Unit (further processing of naphtha for gasoline production).
<b>1980</b>	Installation of a Fuel Catalytic Cracking Unit (processing of fuel oil into high added value products).
<b>1984</b>	Construction of a Power Plant that uses fuel gas as raw material. License to sell electric power to the national grid.
<b>1993</b>	Quality Management System certification according to ISO 9002 standard, concerning all the activities of the Company.
<b>1996</b>	Purchase of 50% of the Company's shares by Aramco Overseas Company BV, 100% subsidiary of Saudi Arabian Oil Company (Saudi Aramco). Relocation of Company Headquarters to a modern building in Marousi, Attica.
<b>2000</b>	Manufacture of products according to European Union standards for the year 2000, by constructing new units and converting the naphtha reformer to a continuous 103 octane reformation unit (CCR). New Central Control Room and installation of a Distributed Control System (DCS). Environmental Management System certification according to ISO 14001:1996 standard.
<b>2001</b>	Share capital increases through public offer of shares and listing on the Athens Stock Exchange. Installation of the new gas turbine at the Power Plant. Upgrade of lubricants' vacuum unit.
<b>2002</b>	100% acquisition of AVIN OIL, a domestic retail marketing oil company.
<b>2003</b>	Development of a Quality Management System according to ISO 9001:2000 standard, which was certified on January 2003.
<b>2004</b>	Re-certification of the Environmental Management System according to ISO 14001:2004 for three more years. Beginning of operation of the Truck Loading Terminal at the Refinery.
<b>2005</b>	Beginning of operation of a Hydrocracker unit that enables the production of clean fuels according to 2005 and 2009 European Union specifications. Acquisition of the stake of Aramco Overseas Company B.V. in the Company by Motor Oil Holdings S.A.
<b>2006</b>	Re-certification according to ISO 9001:2000 for three more years (until 2009). Accreditation of the Refinery Laboratory according to ISO 17025:2005.
<b>2007</b>	Re-certification of the company Environmental Management System according to ISO 14001:2004, valid until 2010. Company Registration in the Greek Ledger of EMAS (Eco Management Audit Scheme).
<b>2008</b>	Certification of the Occupational Health and Safety Management System according to OHSAS 18001:2007. Safe implementation of the largest in company history refinery shut down program for periodic maintenance work. Start of construction of the New Crude Distillation Unit. The non-governmental organization "Ecocity" awards our company, for the second consecutive year, the "OIKOPOLIS 2008 - Environmental Investment" prize.
<b>2009</b>	Re-certification of the Integrated Management System according to the new ISO 9001:2008 standard, valid until 2012. At the same time some significant strategic initiatives were taken: Agreement with Shell International Petroleum Company for acquiring its downstream operations in Greece (except for Lubricants), start of the construction of the KORINTHOS POWER S. A natural gas power plant, acquisition by MOTOR OIL Group of an additional 64.06% stake in OFC Aviation Fuel Services SA with which the total Group share reached 92.06%.
<b>2010</b>	Beginning of operation of the new 60,000 barrels per day atmospheric distillation complex. Beginning of the installation of a fifth gas turbine at the Power Plant (17 MW natural gas unit). Re-accreditation of the Refinery Chemical Laboratory according to ISO 17025:2005, with validity until 2014. Re-certification of the Environmental Management System according to ISO 14001:2004 with validity until 2013. Successful completion of the acquisition of Shell downstream operations in Greece.
<b>2011</b>	Re-certification of the Occupational Health and Safety Management System according to OHSAS 18001:2007, valid until 2014. Certification CE marking of Bitumen and bituminous binders in accordance with European Directive 89/106/EEC Construction Products, as amended by 93/68/EEC and in accordance with the requirements of the European Standard EN 12591:2009. Completion of the construction of the fifth Gas Turbine unit (GT#5). With the addition of this Gas Turbine unit, the installed power of the Refinery Cogeneration Power Plant amounts to 85 MW and ensures for the Refinery full energy self-sufficiency, due to the addition of CDU.





### 1.3 Corporate Social Responsibility (CSR)

MOTOR OIL fully embraces the importance of the effort for sustainable growth via the application of the principles and objectives of Corporate Social Responsibility. It expresses its social responsibility with the commitment that its activities are based on respect for people, the environment and society. A natural outcome of this commitment is a holistic approach to the application of the principles of Corporate Social Responsibility, taking into consideration the protection of the environment, as well as the stakeholders - its personnel, the shareholders, the customers, the suppliers and society as a whole.

MOTOR OIL is a founding member of the Hellenic Network for Corporate Social Responsibility, and has subscribed and participates in the initiative of the United Nations Organization for the UN Global Compact, the aim of which is to direct the enterprises to sustainable growth through voluntary and responsible behavior and actions.

CSR indicates the balanced approach to the financial, social and environmental impact of company operations according to the three dimensions "society - environment - economy" that are globally accepted by the responsible members of the business community. These outline the main objectives of

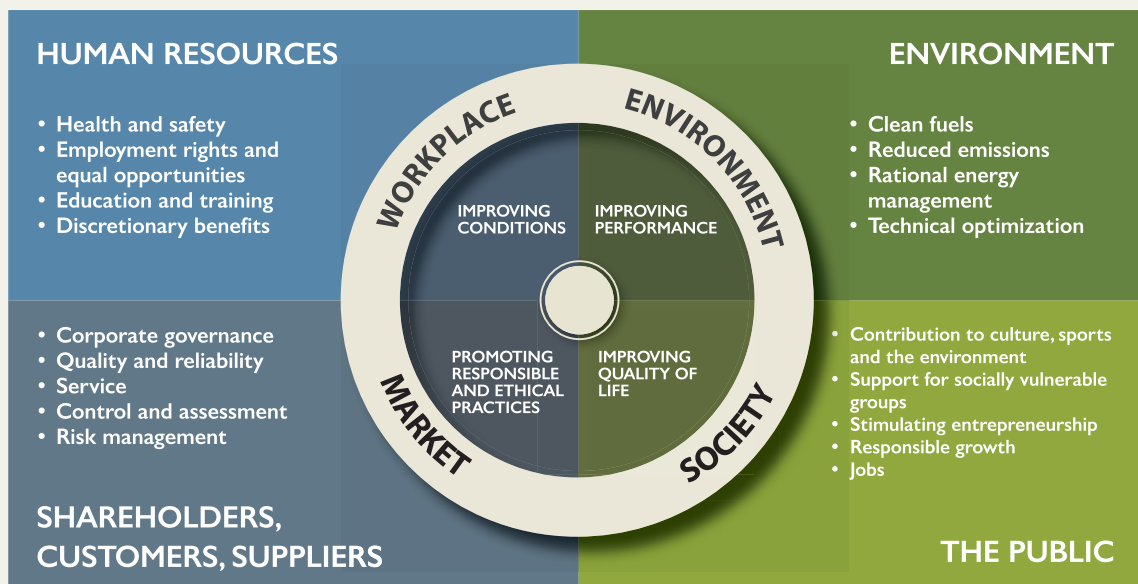
an organization to create value for its shareholders, while at the same time caring for the satisfaction of its customers, its personnel, the environment and society in general. Relevant to this is also the concept of sustainable growth, meaning the growth that aims at covering today's needs without jeopardizing the availability of resources for future generations.

Consequently, MOTOR OIL is committed / pledges to fully conform with the ten principles of the UN Global Compact, regarding:

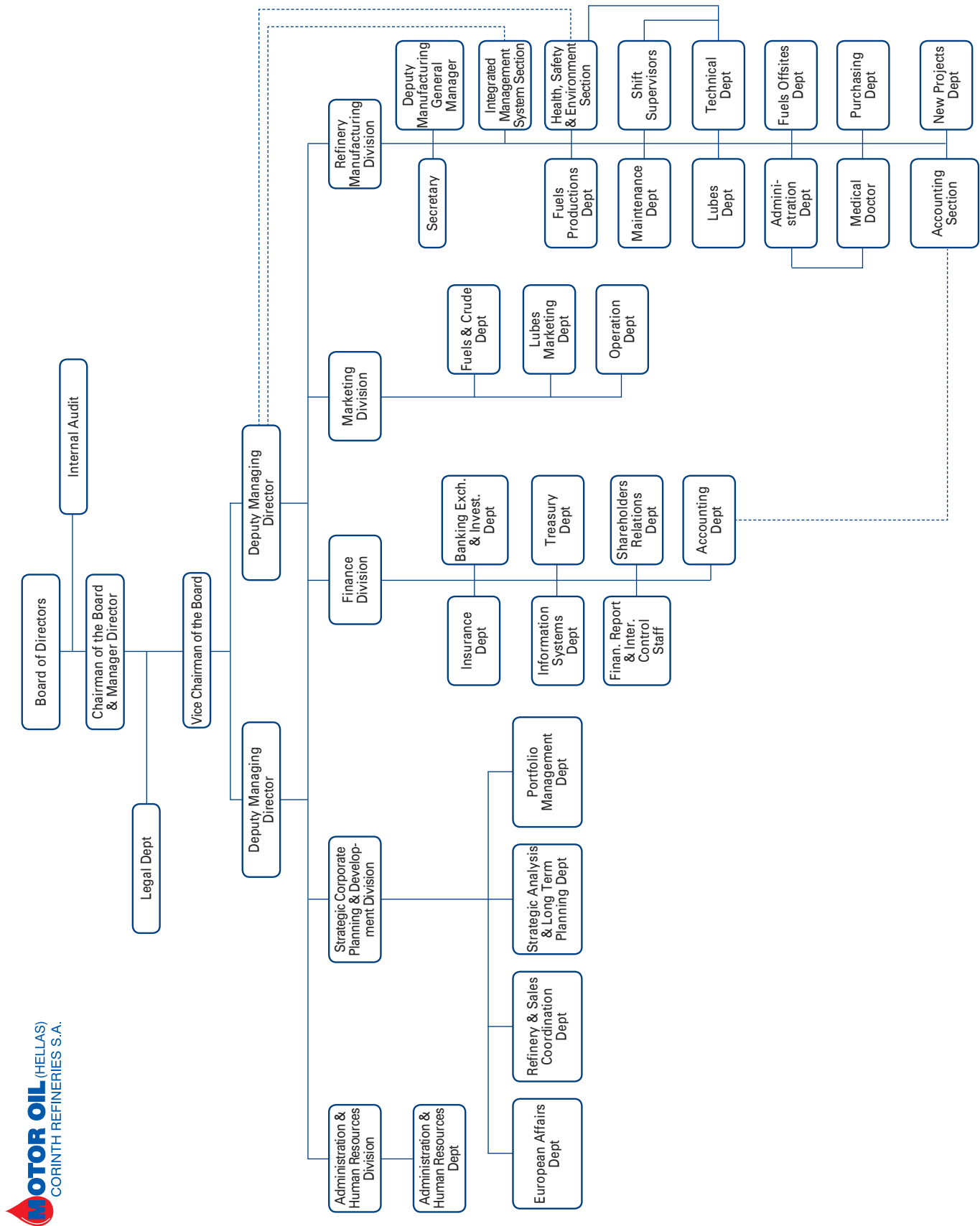
- Human rights,
- Labor
- The environment and
- Transparency (anti-corruption)

Amongst the challenges that MOTOR OIL faces, the most important ones are related with managing Health, Safety and the Protection of Environment. The frame for the management of these challenges and the achievement of continuous improvement in these particular sectors, according to the principles of Corporate Social Responsibility and the UN Global Compact, is defined by the policy for Health, Safety and the Environment.

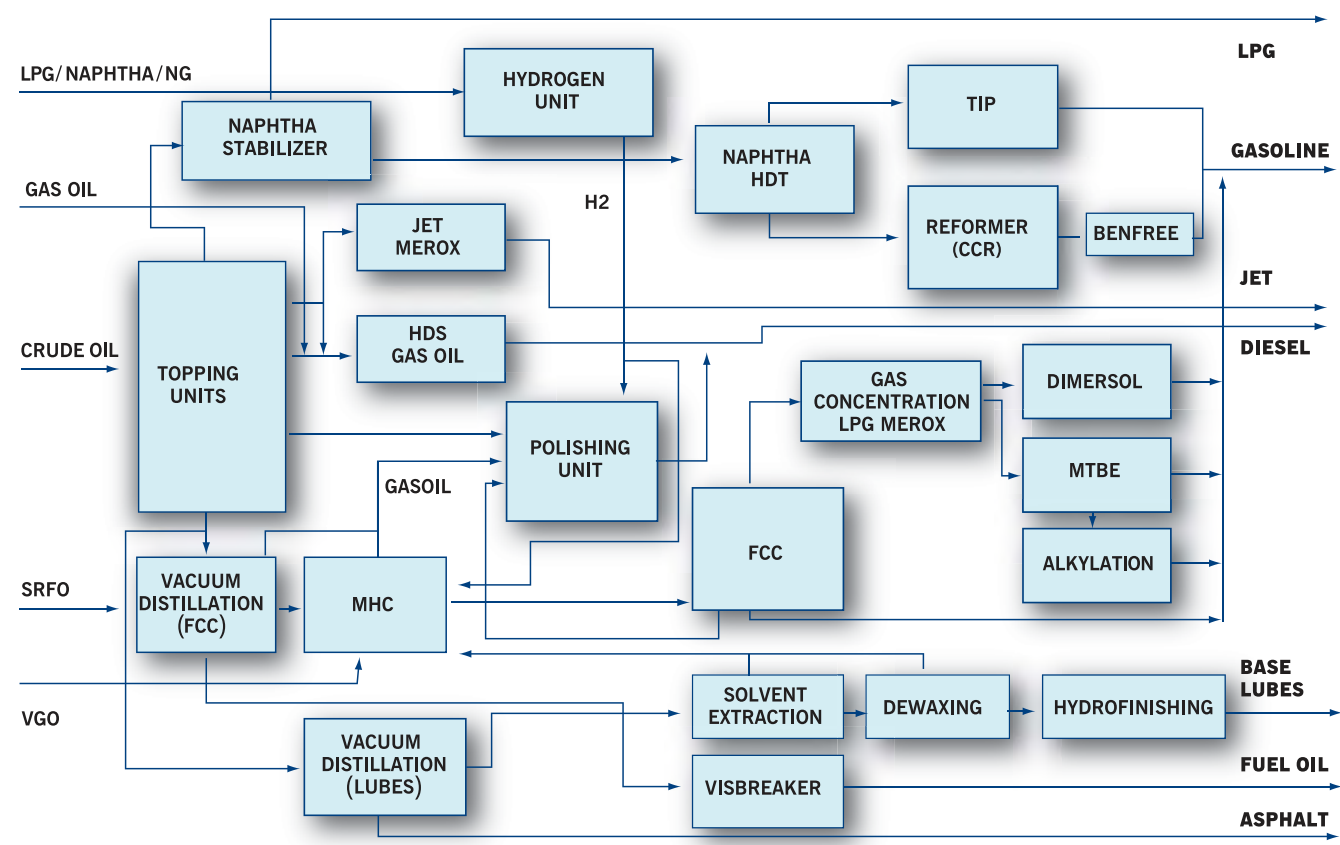
#### CORPORATE RESPONSIBILITY MANAGEMENT MODEL



## 1.4 Organization Chart



1.5 Refinery Process Flow Chart



## 1.6 Production– Products

MOTOR OIL Refinery processes several types of crude oil, producing a wide range of oil products that fulfill the strictest international specifications, serving this way oil companies both in Greece and abroad.

Products produced in the Refinery include:

FUELS	
	• Liquefied Petroleum Gas (LPG)
	• Naphtha
	• Gasoline
	• Jet fuels
	• Diesel Oil
	• Fuel Oil
LUBRICANTS	
	• Base lubricants
	• Automotive lubricants
	• Gear Oils
	• Industrial lubricants
	• Marine lubricants
OTHER PRODUCTS	
	• Asphalt
	• Paraffin

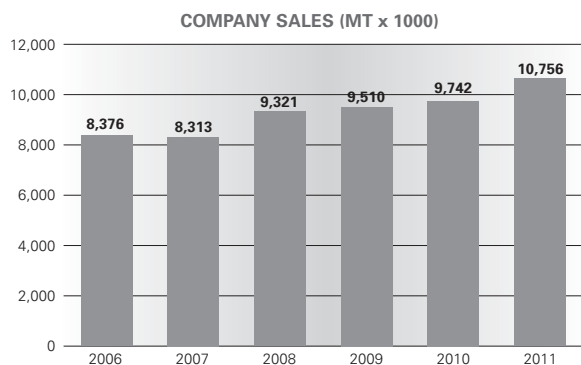
The maximum annual capacity of the main production units is the following:

Atmospheric Distillation Units	7,952,502 MT
Visbreaker	1,314,000 MT
Vacuum Distillation Unit/ Lubricants	823,440 MT
Heavy Hydrocarbons Desulphurization Unit	1,314,000 MT
Naphtha Desulphurization Unit	832,200 MT
Naphtha Catalytic Reforming Unit	569,000 MT
Benzene Hydrogenation Unit (Benfree unit)	444,815 MT
Vacuum Distillation Unit/ FCC	2,741,880 MT
Fluid Catalytic Cracking	1,533,600 MT
Mild Hydrocracker Unit	2,014,800 MT

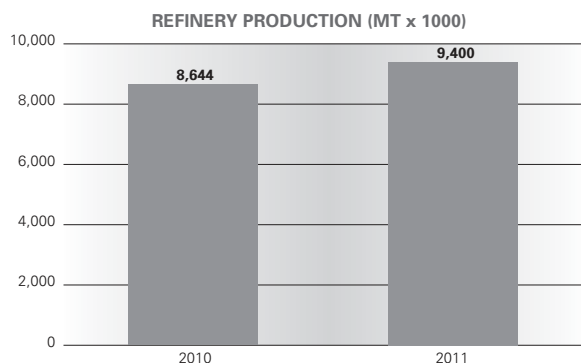
Storage and distribution premises include:

9 tanks for crude oil storage	1,080,000 m <sup>3</sup>
113 tanks for intermediate and final product storage	1,243,000 m <sup>3</sup>
Docks for tankers' loading and unloading	
Pipelines for transferring raw materials and products	
Truck Loading Terminals	

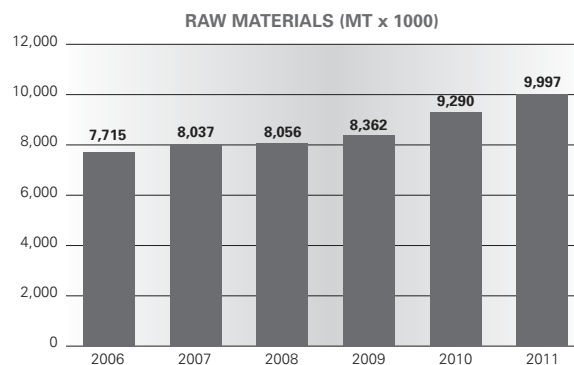
Company product sales over the last six years follow a steady uptrend, as it is shown in the table below:



The total Refinery production volume for 2010 and 2011 is shown in the table below:



The amount of raw materials that the Company processed over the last six years is shown in the following table:



The quantities of raw materials processed during 2011, reflect the new operational conditions of the Refinery after the addition of the new Crude Distillation Unit (CDU) having a capacity of 60,000 barrels per day. This unit was commissioned in 2010.

## 2. ENVIRONMENTAL MANAGEMENT

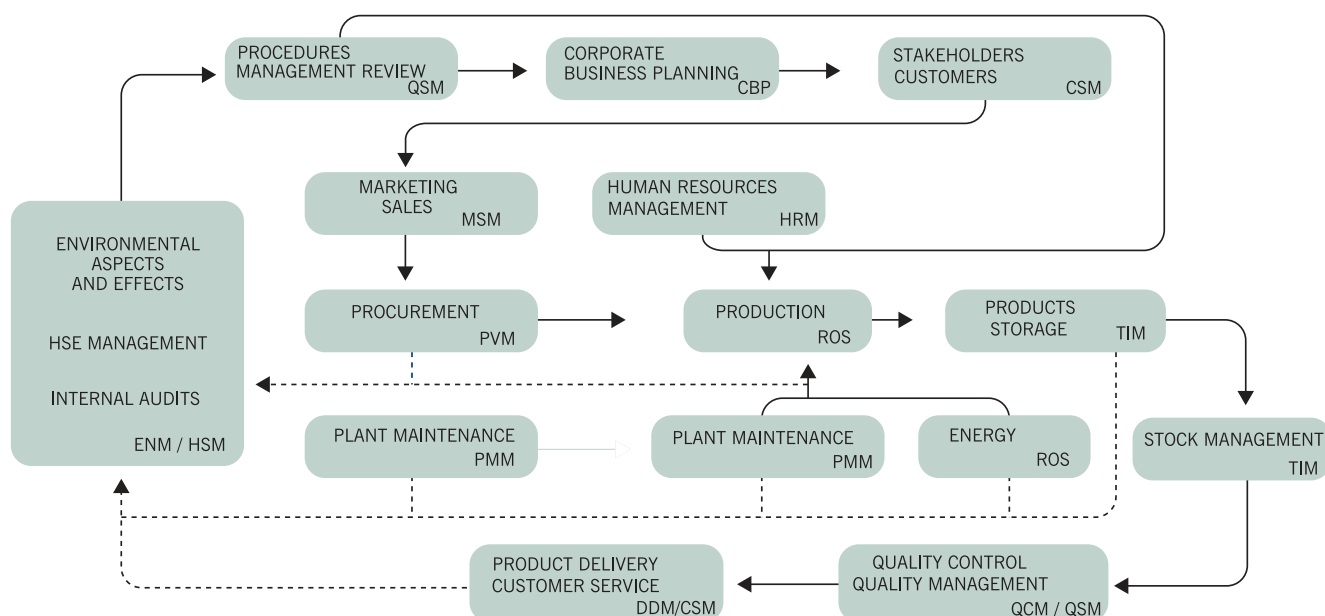
### 2.1 Environmental Management System

Making a continuous and systematic effort, MOTOR OIL has developed and implemented an Integrated Management System that includes Quality (ISO 9001:2008 and ISO 17025:2007), Environment (ISO14001:2004 and EMAS ER 1221/2009), Health and Safety Management (OHSAS 18001:2007) and certification CE marking of Bitumen and bituminous binders in accordance with European Directive 89/106/EEC Construction Products, as amended by 93/68/EEC and in accordance with the requirements

of the European Standard EN 12591:2009.

The scope of the management system concerns the production, trading and delivery of fuels, biofuels, lubricants, waxes, bitumens and special oil products. The Management System consists of a series of mutually interacting processes as it is depicted in the Interrelation Process Diagram, including the production processes, the critical processes as well as the supporting ones.

**Integrated Management System: Interrelation Process Diagram**



The explanation of the Integrated Management System acronym terms in the previous diagram of the Integrated Management System are given below:

CBP	Corporate Business Planning
MSM	Marketing Sales Management
TIM	Tank Inventory Management
ROS	Refinery Operating Scheme
DDM	Delivery & Dispatch Management
ENM	Environmental Management
HSM	Health & Safety Management
PMM	Plant Maintenance Management
CSM	Customer Satisfaction Management
PVM	Procurement Vendors Management
QCM	Quality Control Management
HRM	Human Resources Management
QSM	Quality System Management

Environmental Management is included in the Company's supporting processes. The Environmental Management System aims at accomplishing a continuous environmental improvement in compliance with the current Greek and European environmental legislation through the continuous

effort to minimize the diverse operations' impact on the Environment.

The System structure follows the steps of a dynamic cyclical process, as depicted in the following diagram.



MOTOR OIL's Environmental Management System includes the following levels of documentation:

- A Manual of the Integrated Management System, which, constitutes a guide for the implementation, maintenance and improvement of the Environmental Management System.
- Procedures – Environmental Management Guidelines, which describe the sequence of actions, the assignment of authorities and the relevant forms.
- Files – Forms and Documents.

One of the main points in planning and implementing the Environmental Management System, is the identification of environmental aspects and the evaluation of the environmental impacts.

The identification of the environmental aspects and the relevant impacts, is accomplished by a wide group of company staff and executives, which includes the Heads of Sections, employee representatives the Head of the Health, Safety and Environment Section, the General Manager of Manufacturing, as well as the Deputy General Manager of Manufacturing, in order to ensure a multilateral approach to the identification and control of the environmental aspects.

The identification of the impacts is accomplished through:

- Inspection of the Refinery process units and other premises.
- Investigation of the environmental documentation (manuals, procedures, forms and archives).
- The regular / scheduled or unscheduled (as required) internal audits.

The investigation of the environmental impacts takes into account the following:

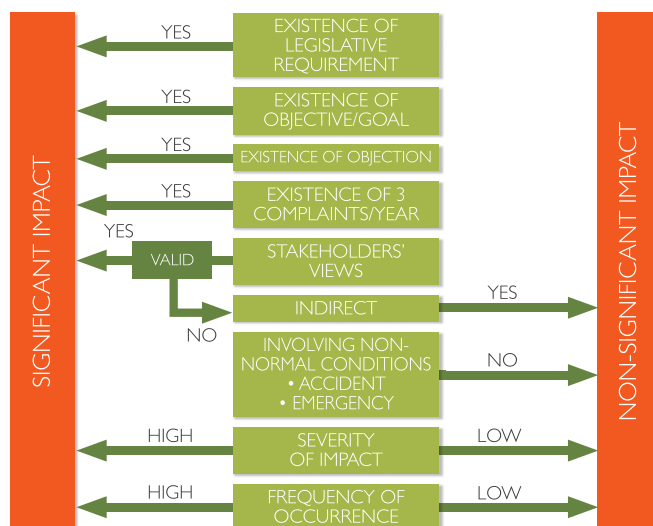
- Current regulatory requirements and their modifications
- The opinion of stakeholders and related parties.
- The operation of the Refinery under:
  - ◆ normal conditions
  - ◆ irregular conditions
  - ◆ probable emergency conditions.

The environmental impacts are assessed according to a series of criteria; more specifically:

- Every legislatively regulated impact is considered important.
- Every impact related with the environmental policy and/or an already established target / objective of the company is considered important.
- Every impact for which an objection or a complaint has been raised, or is viewed as significant by relevant stakeholders is considered important.

The assessment method of the environmental impacts is shown on the following diagram, from which the most important environmental impacts are extracted.

## CRITERIA FOR EVALUATION OF ENVIRONMENTAL IMPACT



## 2.2 Health, Safety and Environmental Policy (HSE Policy)

MOTOR OIL operates in a way that fully respects / with full regard for Health, Safety and the Environment. To achieve that, MOTOR OIL is committed to:

- Set objectives and targets in order to accomplish a continuous improvement of the implemented management systems concerning Health, Safety and the Environment.
- Meet or exceed the demands of legal and other requirements
- Manufacture products of guaranteed quality that comply with, or exceed Health and Environment Protection specifications for each product, and with efficient use of raw materials, energy and technology.
- Report both good and bad performance, as a responsible corporate citizen.
- Maintain emergency preparedness and response systems and plans, ensuring that all appropriate drills are regularly performed.
- Integrate Health, Safety and Environmental issues into all business decisions, plans and operations in the framework of the Integrated Management System.
- Provide consultation, information and training to employees, contractors and others working on its behalf and ensuring their commitment and awareness.
- Conscientiously and strictly implement the environmental operation terms that define the allowed level of produced wastes.
- Cooperate with all stakeholders so as to develop balanced Health, Safety and Environmental Protection programs, which take into account the needs of all those involved.

At MOTOR OIL, whatever we schedule, plan or do, we do it safely, in an environmentally friendly and a cost-effective manner.

## 2.3 Environmental Programs, Objectives and Improvements

During the years 2007-2011 the company has implemented numerous programs aiming at the minimization of the environmental impacts of its operations, while reducing losses,

recovering raw material residues / residues of raw materials and reducing production cost. The programs implemented and their time of completion is shown in the following table:

	2007	2008	2009	2010	2011
<b>AIR</b>					
10% reduction of local leakages of volatile organic compounds by implementing the LDAR program for detecting, controlling and repairing leakages. During 2006, this program expanded into the new truck loading terminal (TLT) and during 2007 to the Hydrocracker complex. A specific measurement schedule is enforced since 2001.	●				
Reduction of H <sub>2</sub> S, SO <sub>2</sub> emissions and other air pollutants:					
- Optimization of the performance control of the sulfur recovery units, using a permanent device monitoring H <sub>2</sub> S/SO <sub>2</sub> at the output of the units and installing a new Claus unit.	●				
- Upgrading the air quality monitoring station at the port for measuring additional pollutants (PM <sub>2.5</sub> ).		●	●		
- Monitoring CO <sub>2</sub> emissions by measuring carbon concentration in fuel gas. At the same time, accreditation of the MOTOR OIL Chemical Laboratory concerning the measurements of gas emissions.		●			
- Upgrading the air quality monitoring station at the port for measuring additional pollutants (benzene).				●	
<b>WATER</b>					
Installation of a system to deal with the foaming problem at the biofilter of the facility.		●			
Aeration of the stabilization tank for the sludge produced by the Waste Water Treatment Plant, in order to improve the quality of the sludge to be processed.		●			
Installation of an on-line chlorine meter at the sanitary wastewater treatment plant output, to improve operation monitoring.			●		
Conduct a hydrogeological study to define the water direction of the aquifer, in order to finalize the location of monitoring and control bores.				●	
Utilization of available inactive equipment in the industrial waste water treatment plant.					●
<b>SOIL</b>					
Completion of the results report of land environmental control, in the region where, the process of landfarming took place formerly.	●				
Completion of research for managing and neutralizing the sludge from the M-4000 wastewater treatment plant, so that it is suitable for use as an alternative fuel or to be legally disposed at Sanitary Landfills.		●	●		
Tear-down asbestos-cement sheets of 1075 m <sub>2</sub> surface and disposal through a licensed company.		●	●	●	
Reduction of soil waste quantity stored in the refinery.			●		
Tear-down asbestos-cement sheets of 1500 m <sub>2</sub> surface and disposal through a licensed Company.			●		
Investigation of alternative ways of management of the tank bottom sludges, after their treatment in decanter.				●	
<b>ENERGY</b>					
Connection with the national natural gas network and use of natural gas in the production process.		●			
Exploitation of natural gas in the production process.				●	

## 2.4 Environmental Aspects and Impacts

The environmental impacts are classified as [follows]:

- Direct or indirect: This depends on whether the company has or has not the responsibility of their direct handling, taking into account the existing legal context, contracts with clients or suppliers, as well as the feasibility for the company to control the impacts.
- Major or minor depending on whether handling these impacts is controlled by the Environmental Management System.

All the environmental impacts related to the operation of the Refinery have been evaluated according to their significance and among them the following are characterized as important:

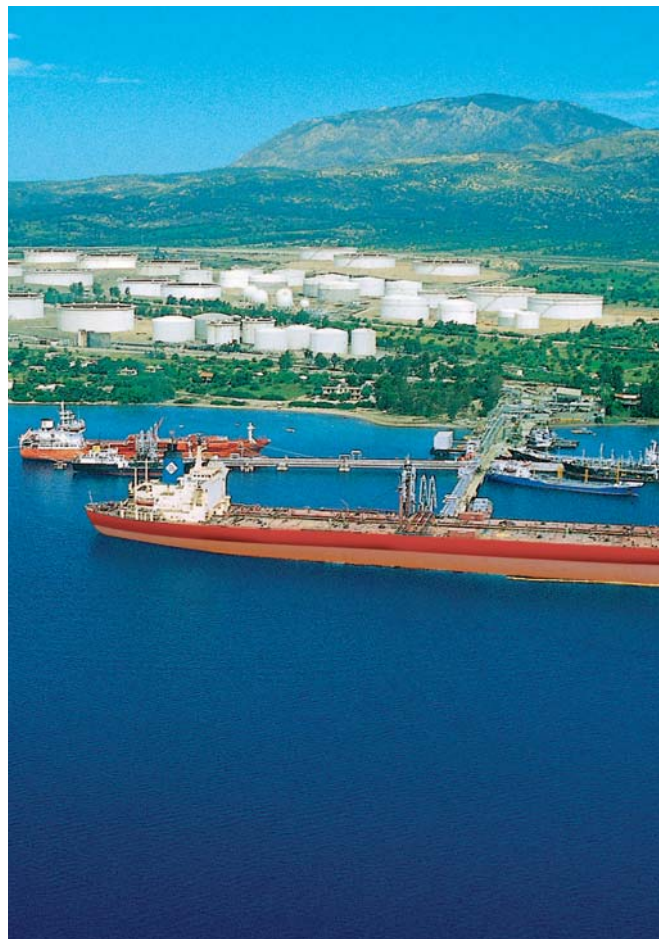
- Gas emissions from stationary sources (combustion plants) and refinery production processes
- Industrial and Sanitary waste water
- Solid waste, hazardous or not
- Energy and water consumption
- Noise

All the above environmental impacts are monitored and recorded on a regular basis, and relevant measures are continuously taken, so that the Company will act appropriately in order to improve its environmental performance. A similar evaluation of impacts is also carried out during the construction of new projects.

At the same time, the Company has evaluated the indirect environmental impacts resulting from the interaction with third parties, products and services over which the Company does not have any administrative control.

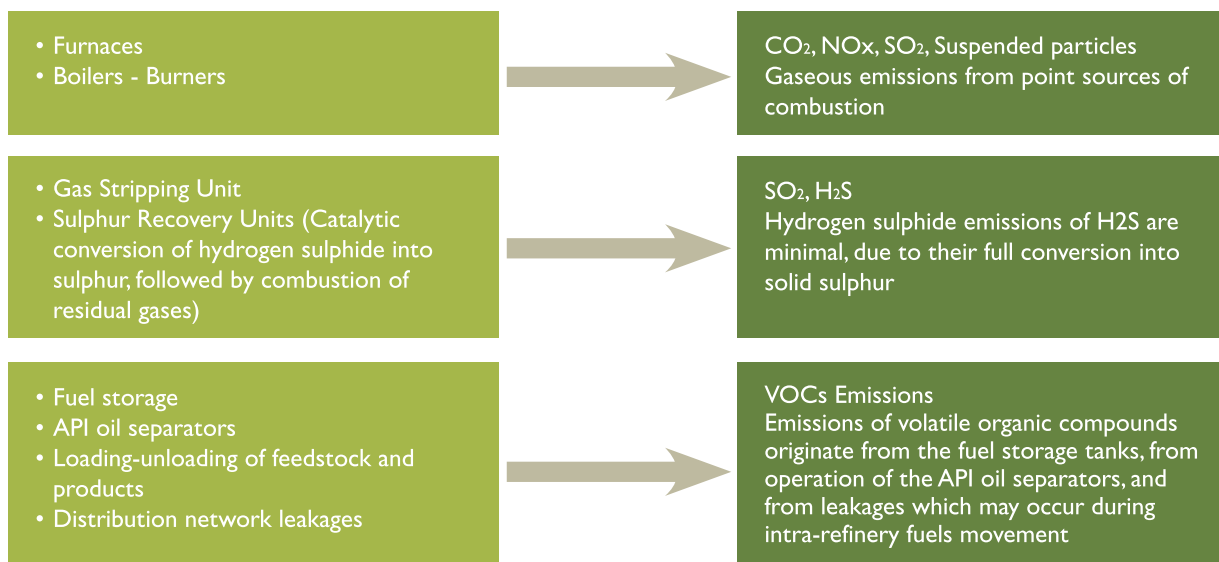
The main environmental aspects associated with gas

emissions, liquid and solid waste, and the indirect environmental impacts are described in the following sections.



### 2.4.1 Air Quality

The gas emissions due to the operation of the Refinery units, as well as their sources are shown on the following diagram.



The Refinery takes a series of measures and implements programs aiming at reducing gas emissions in the atmosphere. These measures include:

- The treatment of sour and liquid gases before their storage, or their use as a fuel, aiming at removing hydrogen sulfide.
- Installation of sulfur recovery units aiming to convert the produced hydrogen sulfide into solid sulfur, which is environmentally friendly.
- The reduction and control of hydrocarbon emissions by taking several measures such as the installation of closed circuits in gas processing operations, the routing of gases from safety valves to the flares, the installation of secondary seals in floating roof tanks, the installation of floating covers in oil separators and the installation of a Vapor Recovery Unit (VRU) in the Truck Loading Terminal.
- Performance control of burners and boilers.
- Measuring and recording of gas emissions.

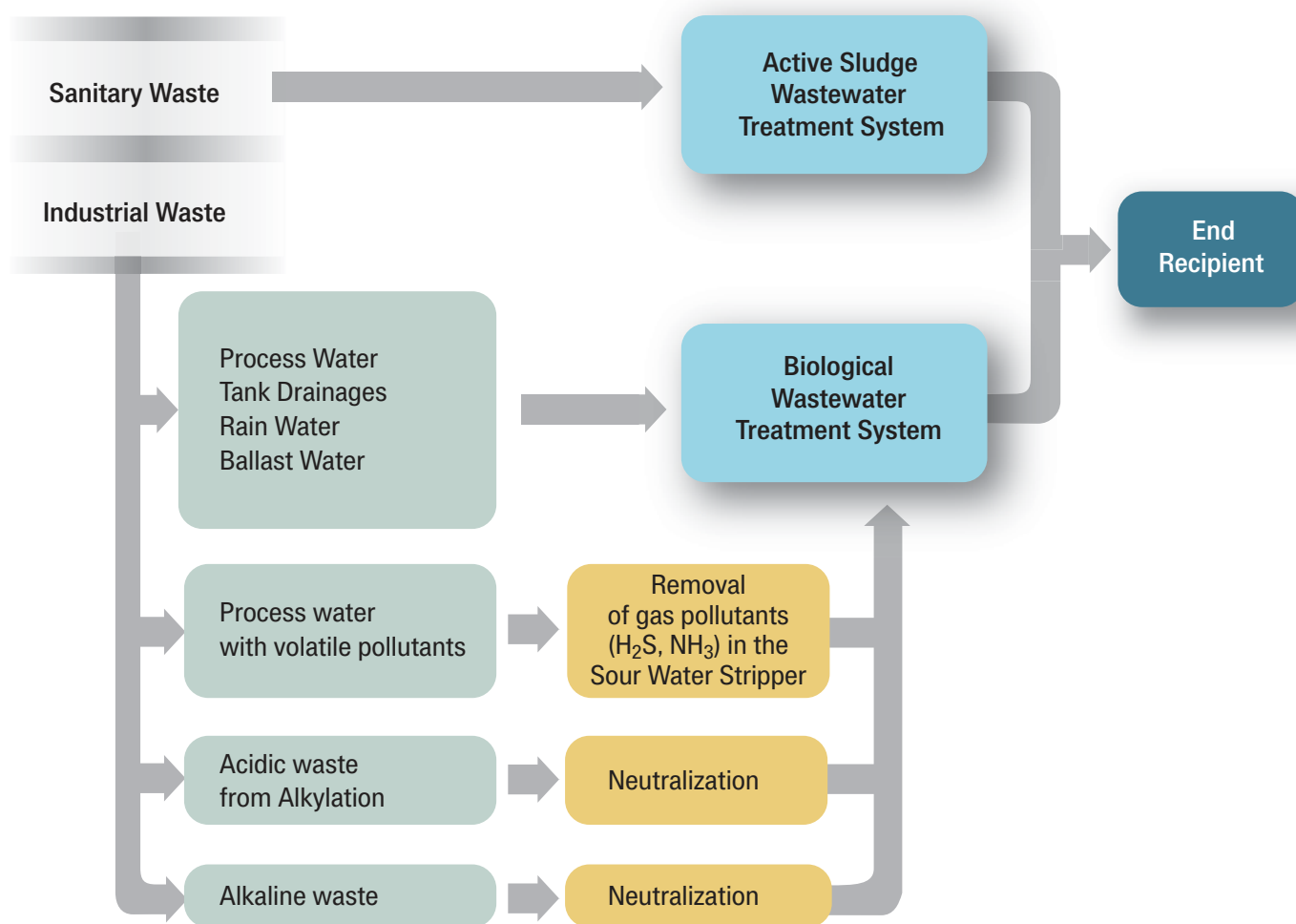
## 2.4.2 Wastewater

Wastewater produced in the refinery is distinguished in two categories:

- Industrial wastewater
- Sanitary wastewater

Industrial wastewater, which includes process water, tank drainage, rain water and ballast water is directed either directly, or after some pre-treatment process, to the Industrial Waste Water Treatment plant (secondary treatment), where the pollutant load is reduced, and the water is discharged, according to the environmental provisions and terms.

Sanitary wastewater coming from personnel catering and hygiene areas is treated in an active sludge wastewater treatment system (tertiary treatment). The qualitative characteristics of the treated wastewater are within the defined legislative limits.



### 2.4.3 Solid Waste

Solid waste generated in the Refinery consists of domestic waste resulting from human activities (consisting of household solid waste such as, paper and metal, food leftovers etc.) and of industrial solid waste (such as scrap materials, spent catalysts, etc.) which is produced during the different stages of the production process.

In order to ensure their safe environmental management and to prevent or reduce the negative consequences on the environment and the human health and safety risk, the Company implements an environmental integrated plan including the waste collection, transportation and temporary

storage or treatment, until the final disposal. The final disposal is performed by licensed companies, depending on the nature of the materials while the ultimate goal is waste reduction or reuse.

The company submits an annual waste report to the competent authorities of the Ministry of Environment, Energy and Climate Change, where all the waste types and the way of disposal / management, are reported.

In the table below, the main types of solid waste produced by the company facilities are presented.

Type of Waste	EWG Code	Management Method
Scrap materials	70407	Recycling
Wood packaging	150103	Recycling
Plastic packaging	150102	Recycling
Paper or cardboard packaging	150101	Recycling
Tyres at the end of their life cycle	160103	Recycling
Used activated carbon	190904	Use as an alternative fuel or as a raw material
Saturated or spent resins	190905	
FCC spent catalyst	160804	Re-export to the suppliers
Sludge resulting from tank cleaning (biodegradable material)	050103*	
Paraffin production waste	160305	Treatment in the sludge processing unit and biodegradation / stabilization
Alumina	050199	Use as an alternative fuel or as a raw material
Inactive pellets	050199	Collection and disposal to legal recipient
Recovery linings and refractories from non-metallurgical processes	161106	Collection and disposal to legal recipient
Stabilised wastes other than these reported in the point 190304	190305	Collection and disposal to legal recipient
Waste from electrical and electronic equipment	200136	Recycling
Mixed municipal waste	200301	Collection and disposal to legal recipient
Batteries Ni, Cd	160602*	Recycling
Accumulators	160601*	Recycling
Used mineral oils	130208*	Recycling
Spent catalyst	160803*/ 160802*	Recovery / Regeneration
Metal Wastes, contaminated by hazardous substances	170409*	Collection and disposal to legal recipient
Other construction and demolition wastes (including mixed wastes) containing hazardous substances	170903*	Collection and disposal to legal recipient
Packaging containing residues of hazardous substances or contaminated by such substances	150110*	Collection and disposal to legal recipient
Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	160506*	Collection and disposal to legal recipient
Fluorescent tubes and other mercury-containing waste	200121*	Collection and disposal to legal recipient
Soil and stones containing hazardous substances	170503*	Collection and disposal to legal recipient
Construction materials containing asbestos	170605*	Collection and disposal to legal recipient
Plastics	200139	Recycling

## 2.4.4 Indirect Environmental Aspects

The indirect environmental impacts are mainly related to the air pollution caused by forklifts and other vehicles, the H/C gas emissions during loading and unloading of the products into the ships, the noise coming from tank truck traffic and vessel stopover in anchorages, the wastewater of AVIN station, as well as the side impacts in case of an accident during the transport of products to and from the refinery either from suppliers or to customers.

Within the framework of the Integrated Management System, the Company evaluates its environmental performance and trains its suppliers, contractors and subcontractors on several environmental issues and continuously gives information to its customers regarding the usage and distribution of the products. At the same time, it investigates new, environmentally mild solutions to its transportation needs and attends to the effective organization of its raw material and product transport.

## 2.4.5 Environmental Incidents

Having set as main priorities the prevention of the undesirable effects of the operation of the units and the minimization of hazards during operations, the Company aims at the elimination of environmental incidents / accidents.

For that purpose the Company has compiled Emergency Plans that are fully compliant with the local and national plans for fighting pollution through which it provides necessary directions for the making the right decision and taking appropriate action. At the same time, the Company trains systematically its personnel in order to ensure that appropriate action is taken in response to any emergency.

The effectiveness of the above activities is attested to by a record of no environmental incidents / accidents during 2011, as well as in previous years.

# 3. 2011 RESULTS

## 3.1 Environmental Performance of 2011

### 3.1.1 Air Quality Management

Aiming at the protection of air quality, the company fully and constantly monitors the gas emissions both in Refinery units and in the wider area through continuous, periodic or occasional and random measurements that are executed not only on some specific emission sources (chimneys, flares) but also on diffused emissions.

The industrial premises of MOTOR OIL utilize modern equipment for monitoring air quality and spot emissions coming from different sources during the production process. The Monitoring System of Air Quality consists of a mobile station (A) that has the capability to measure and record continuously pollutants such as hydrogen sulfide (H<sub>2</sub>S) sulfur dioxide (SO<sub>2</sub>), suspended solids (PM<sub>10</sub>), suspended solids (PM<sub>2.5</sub>), nitrogen oxides (NO<sub>x</sub>), methane (CH<sub>4</sub>), non-methane hydrocarbons (NMHC), total hydrocarbons (THC), benzene (C<sub>6</sub>H<sub>6</sub>), carbon monoxide (CO), as well as, meteorological parameters (wind speed and direction, temperature and relative humidity of air). In addition there are three permanent stations for measuring hydrogen sulfide (H<sub>2</sub>S) and sulfur dioxide (SO<sub>2</sub>). Two out of three permanent stations are located within the refinery premises (B, C), and the third one at the Agioi Theodoroi Police Department Station (see map).

Oxygen measurements are also performed in all combustion plants in order to control combustion, -continuous measurements of sulfur dioxide (SO<sub>2</sub>), suspended solids (PM<sub>10</sub>), and nitrogen oxides (NO<sub>x</sub>) at the Large Combustion Plants (with rated thermal input >50MW) and non-continuous measurements at the other emission sources.

The results of the above measurements are compared with the pollutants' threshold values for air quality, as set forth in laws:

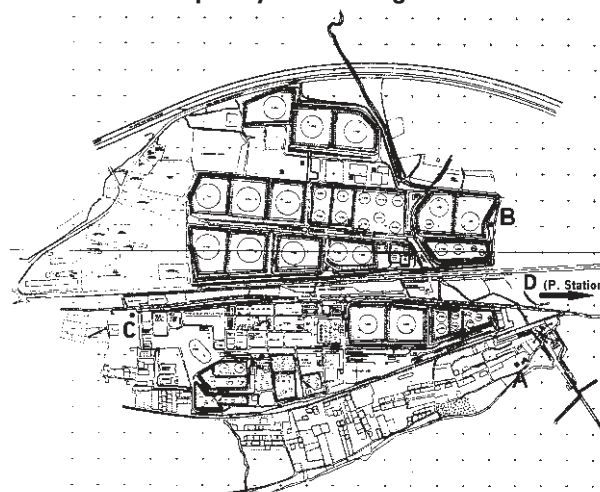
Cabinet Council Decree 34 / 30-05-2002, Gazette Nr. 125A / 05-06-2002.

Ministerial Decree 9238 / 332 / 2004, Gazette Nr. 4058 / 27-02-2004.

A list of Environmental Legislation items that concern the company is offered in Annex I of this Environmental Statement. Company compliance with the requirements of the Legislation is audited on both a regular and an ad hoc basis. The regular audits are made via the Internal Audits of the Environmental Management System (relevant procedure QSM-02 «Management Evaluations») at least once a year.

The ad hoc audits are made after a decision of the Manufacturing General Manager, or the Technical Dpt. Manager, or the Integrated Management System Section Head, depending on the factual elements contained in the information that is continuously provided to them.

**Map depicting the locations of air quality monitoring stations**



**Air Quality:****SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CH<sub>4</sub>, NMHC, H<sub>2</sub>S, THC, CO, Benzene**

The results of the monitoring program show that the air quality of the Refinery area is quite satisfactory.

Specifically, the recorded data during the years 2007, 2008, 2009, 2010 and 2011 show that not only there aren't any

excesses of the allowed hourly limits set forth in the legislation (SO<sub>2</sub>: 350 µg/m<sup>3</sup>, NO<sub>2</sub>: 200 µg/m<sup>3</sup>) or any excesses of the allowed daily limits (PM<sub>10</sub>: 50 µg/m<sup>3</sup>, SO<sub>2</sub>: 125 µg/m<sup>3</sup>), but also the observed values are much lower than the marginal ones.

The average hourly, daily and monthly values of pollutants, measured by the mobile station of the Air Quality Monitoring Network for the year 2011, are presented in the following table and the corresponding diagrams.

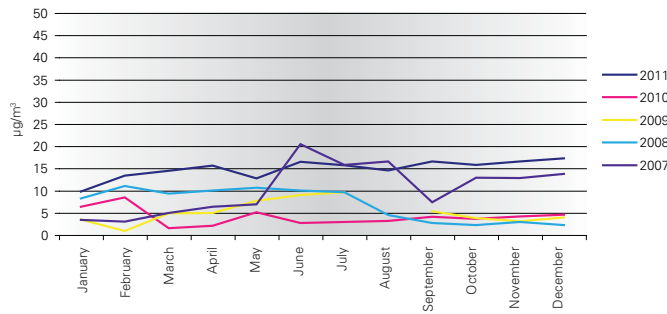
	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	NO <sub>x</sub>	CH <sub>4</sub>	NMHC	THC	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	Benzene
2011	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppb	ppb	ppb	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
JANUARY	3.83	9.73	15.13	18.17	2,783	1,673	4,455	0.04	17	5	2.32
FEBRUARY	2.56	13.29	14.43	16.11	2,627	1,667	4,294	0.02	19	13	1.90
MARCH	2.72	14.39	15.02	17.49	2,682	1,947	4,630	0.08	19	13	2.14
APRIL	4.96	15.61	13.96	16.28	2,456	2,226	4,681	0.04	19	13	2.11
MAY	4.17	12.70	16.84	19.79	2,387	2,414	4,800	0.16	19	13	2.52
JUNE	5.37	16.45	22.75	27.14	2,314	3,296	5,610	0.52	18	14	1.73
JULY	6.53	15.67	18.21	21.26	1,946	1,756	3,702	0.24	15	12	1.56
AUGUST	3.40	14.52	14.45	17.12	1,877	1,103	2,981	0.25	18	14	1.61
SEPTEMBER	6.50	16.49	15.13	17.47	1,839	1,270	3,108	0.78	20	11	2.53
OCTOBER	6.62	15.69	14.03	15.86	1,909	1,035	2,945	0.42	16	12	1.92
NOVEMBER	5.14	16.48	18.18	20.06	1,691	965	2,656	0.15	14	9	1.47
DECEMBER	5.44	17.19	18.43	21.26	1,921	1,402	3,324	0.15	19	13	1.86
<b>AVERAGE</b>	<b>4.77</b>	<b>14.85</b>	<b>16.38</b>	<b>19.00</b>	<b>2,203</b>	<b>1,730</b>	<b>3,932</b>	<b>0.24</b>	<b>18</b>	<b>12</b>	<b>1.97</b>

**AVERAGE LIMIT VALUES**

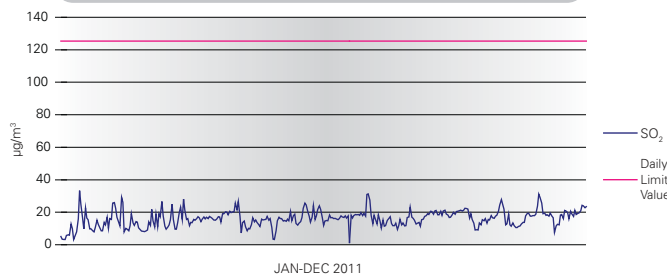
Period											
Hourly		350	200								
8 hr							10				
Daily		125							50		
Yearly			40	30					20	25	5

## Sulfur Dioxide

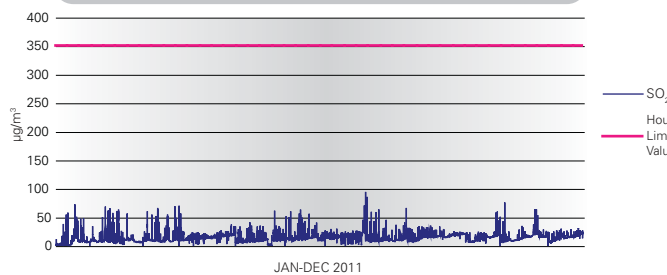
SO<sub>2</sub> Concentration, Average Monthly Values



SO<sub>2</sub> Concentration, Average Daily Values

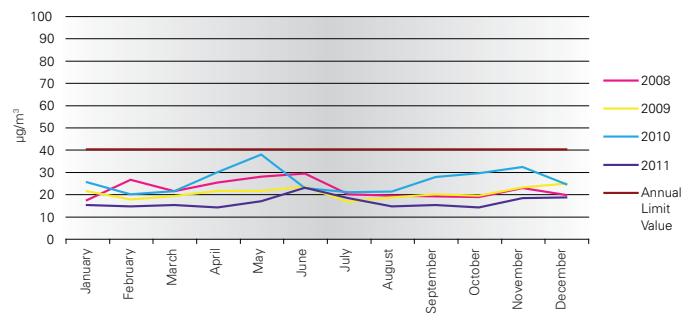


SO<sub>2</sub> Concentration, Hourly Values

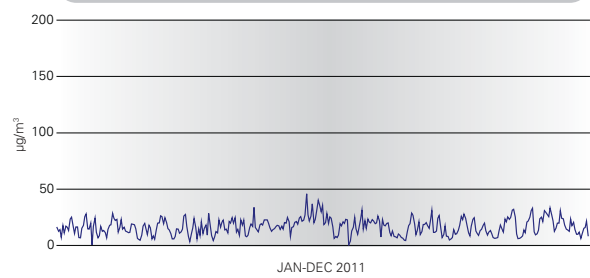


## Οξείδια του Αζώτου

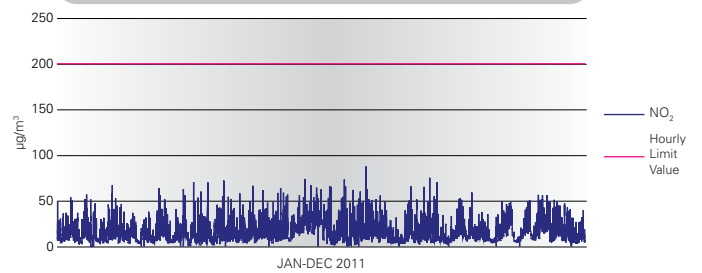
NO<sub>2</sub> Concentration, Average Monthly Values



NO<sub>2</sub> Concentration, Average Daily Values

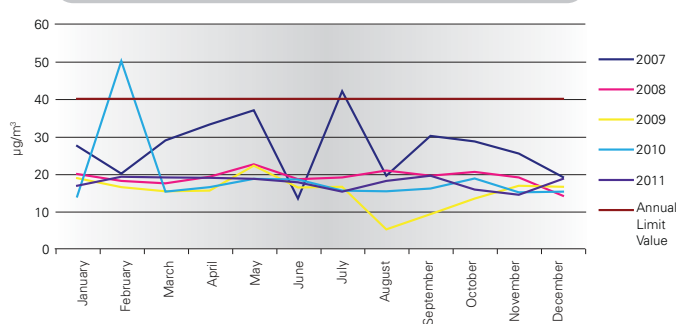


NO<sub>2</sub> Concentration, Hourly Values

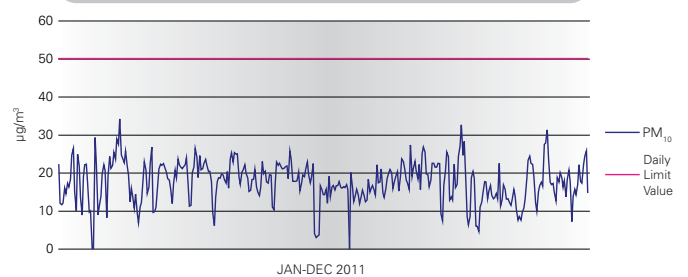


## PM<sub>10</sub> Suspended Solids

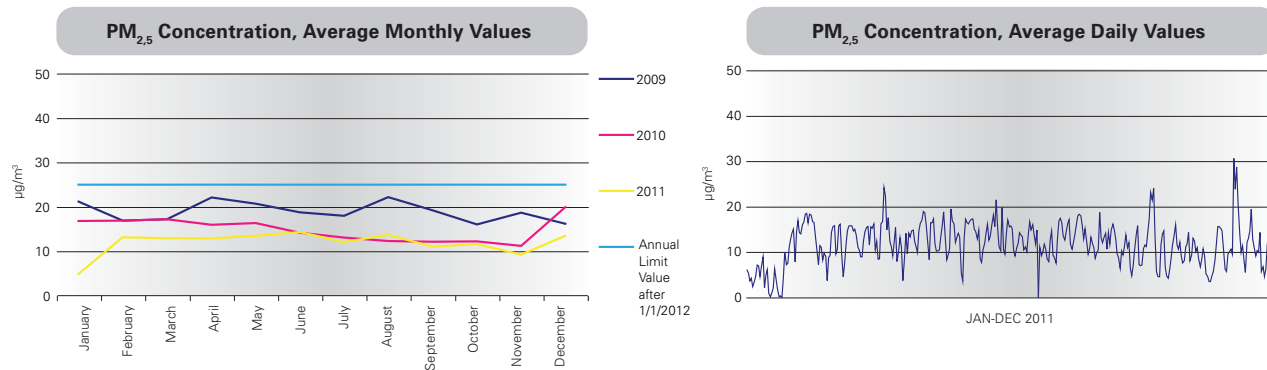
PM<sub>10</sub> Average Monthly Values



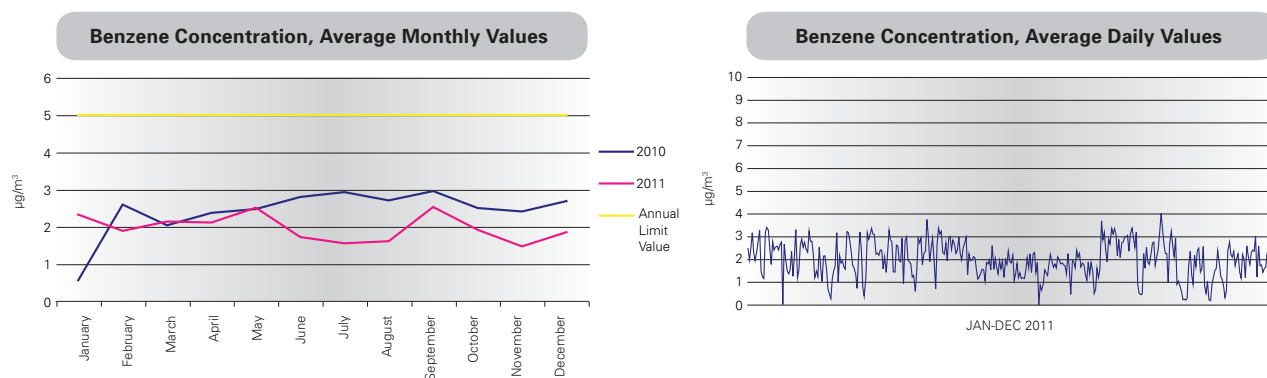
PM<sub>10</sub> Concentration, Average Daily Values



## PM<sub>2.5</sub> Suspended Solids



## Benzene

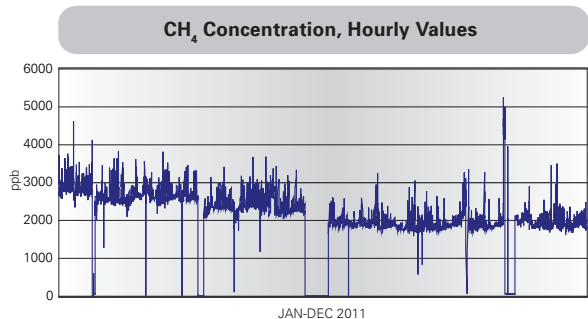
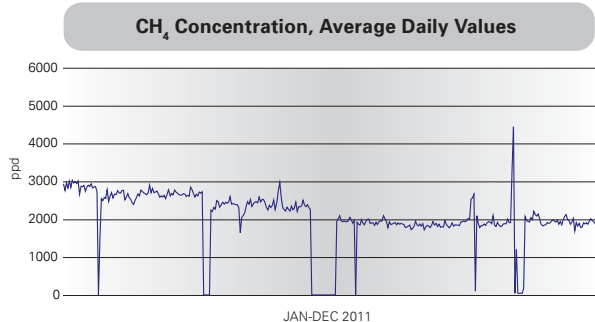
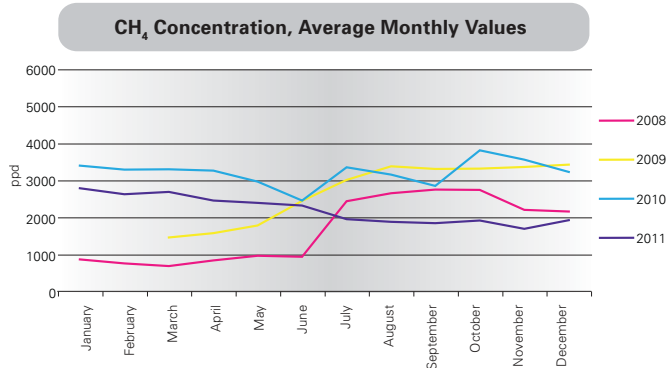


It must be noted that the Refinery is not the only source of air pollutants in the wider area of the installations. Other sources of air pollutants are the road traffic (National road Athens – Corinth), the presence of various Industrial Plants

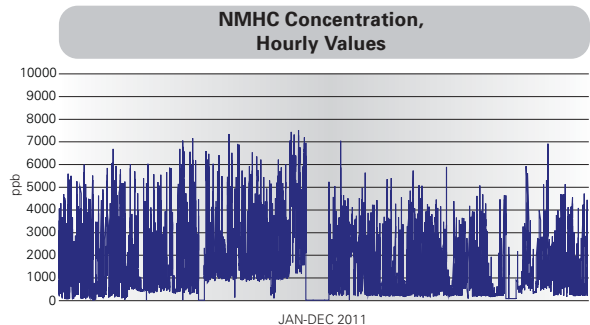
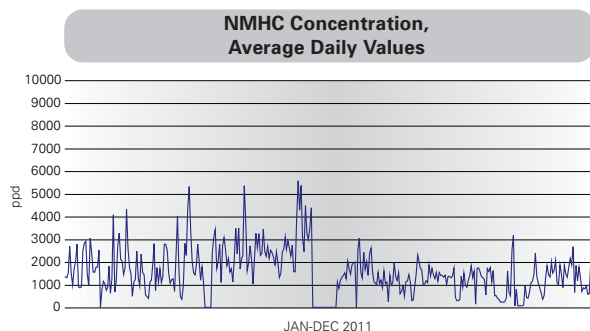
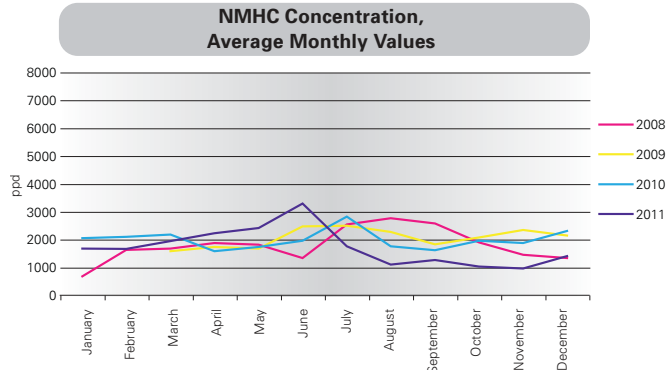
and the railway network.

In the diagrams below the concentrations of methane ( $\text{CH}_4$ ) and non-methane hydrocarbons (NMHC) are shown.

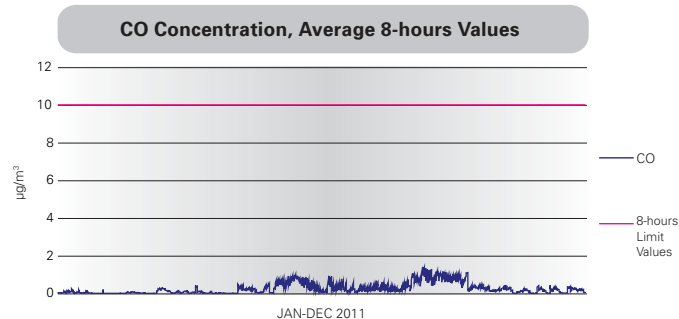
## Methane



## Non-Methane Hydrocarbons



## Carbon Monoxide



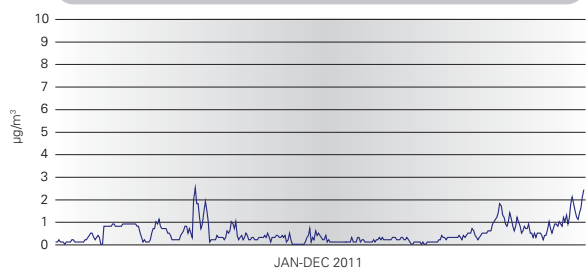
### Air Quality: H<sub>2</sub>S

The refinery has achieved minimization of hydrogen sulfide emissions by upgrading the sour gas processing units, as well as, the sulfur recovery units.

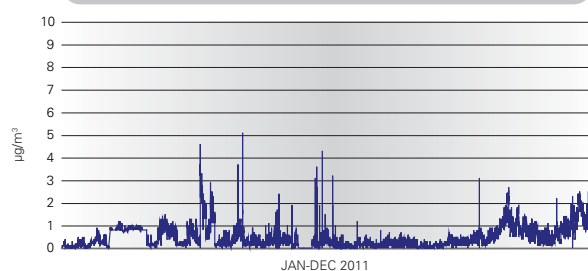
H<sub>2</sub>S concentration is monitored on a daily basis in all of the four stations of the Air Quality Monitoring Network.

Analyzing the results, it is concluded that H<sub>2</sub>S concentration in the wider refinery area is remarkably low, according to the measurements of the station located at Agioi Theodoroi (Police Station).

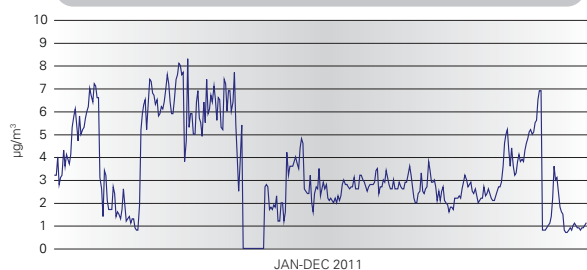
**H<sub>2</sub>S Concentration, Average Daily Values  
Station Ag. Theodoroi**



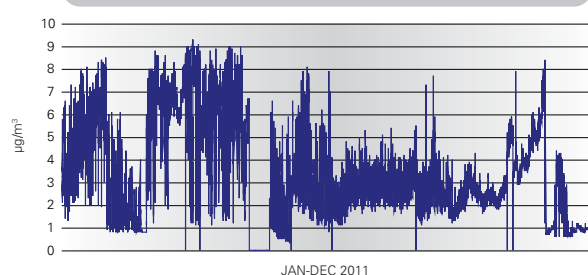
**H<sub>2</sub>S Average Hourly Values  
Station Ag. Theodoroi**



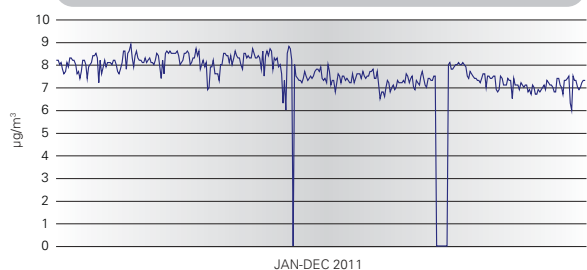
**H<sub>2</sub>S Concentration, Average Daily Values  
Station T-752**



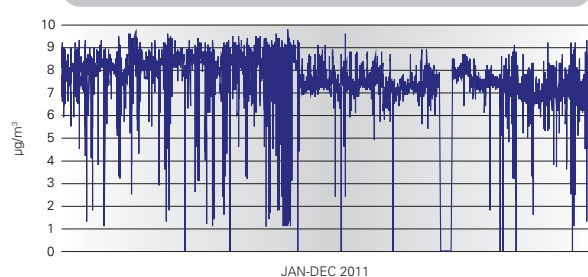
**H<sub>2</sub>S Concentration, Average Daily Values  
Station T-752**



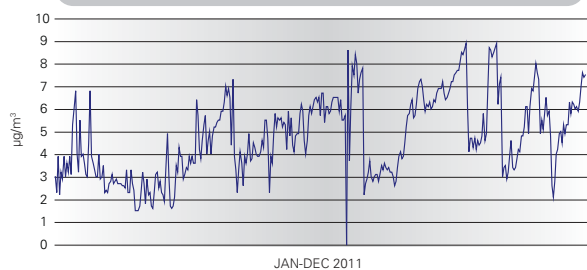
**H<sub>2</sub>S Concentration, Average Daily Values  
Station AVIN**



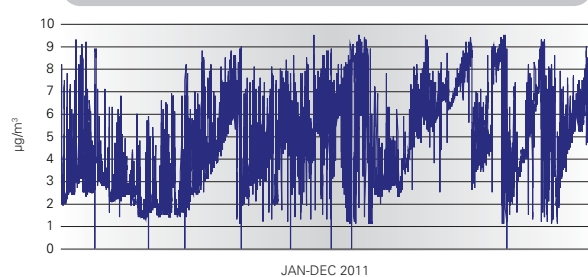
**H<sub>2</sub>S Concentration, Average Hourly Values  
Station AVIN**



**H<sub>2</sub>S Concentration, Average Daily Values  
Mobile Station**

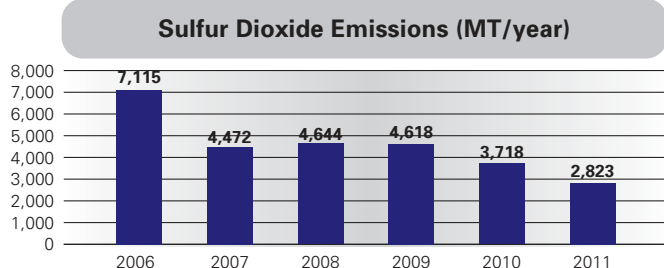


**H<sub>2</sub>S Concentration, Average Hourly Values  
Mobile Station**



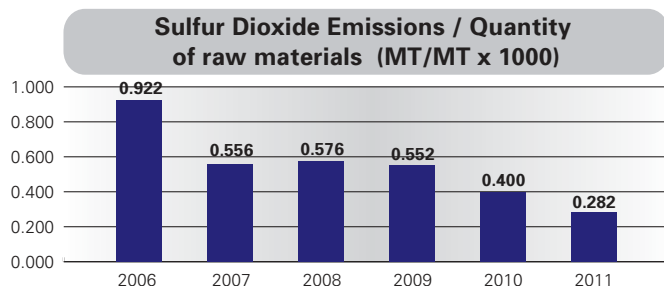
## Sulfur dioxide and Nitrogen oxides emissions

In 2007 the emissions of sulfur dioxide were remarkably reduced compared to previous years, despite the expansion of the process units and increased production. This is mainly due to the decrease of the sulfur content in self-consumption fuel. This environmental performance continued in 2008, 2009, 2010 and also 2011.

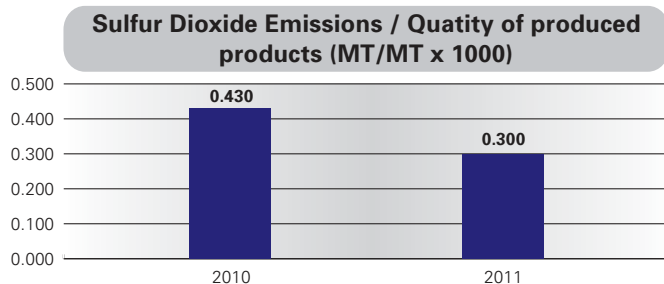


The reduction of sulfur emissions is achieved through the continuously improved emission control technology used and mainly thanks to the new sulfur recovery units, where the hydrogen sulfide produced is converted to elemental sulfur and the latter is used by fertilizer manufacturers as raw material.

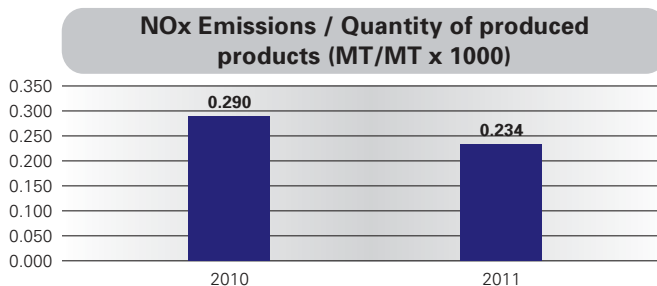
The diagram below shows a plot of the specific sulfur dioxide emissions (MT SO<sub>2</sub> / thousand MT of raw materials) for the period 2006 to 2011.



The specific index of sulfur dioxide emissions (MT SO<sub>2</sub> / thousand MT of produced products) for 2010 and 2011, is shown at the diagram below.

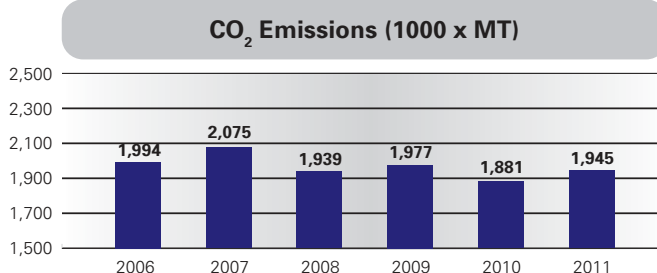


The emissions of Nitrogen Oxides (NO<sub>x</sub>) for 2011 are 2201 tn and the specific index per thousand MT of produced products for 2010 and 2011 are shown at the diagram below.

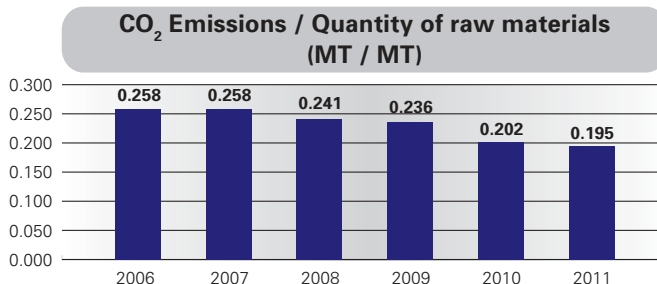


## Carbon dioxide emissions

Total carbon dioxide emissions (according to the European Directive 2003/87/EC) for 2011 were 1,945,300 tones. The annual emissions of carbon dioxide over the last years, are shown at the diagram below.

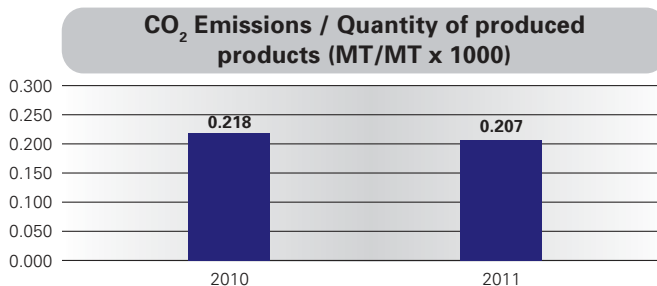


The specific carbon dioxide emissions (MT CO<sub>2</sub> / MT of raw materials) for the period 2006 to 2011 are shown at the diagram that follows.



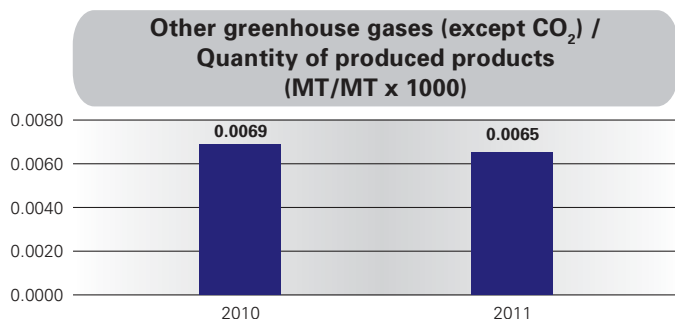
The specific Carbon dioxide emissions per quantity of raw materials for 2011 are 0.195, much lower than the 2010 value of 0.202, due to increased use of natural gas in conjunction with lower overall energy consumption.

The specific carbon dioxide emissions (MT CO<sub>2</sub> / MT of produced products) for the 2010 and 2011 are shown at the diagram below.



The reduction of specific carbon dioxide emissions per quantity of raw materials and also per quantity of produced products, were achieved during the last years, due to implementation of Environmental protection projects and due to the monitoring and checking of emissions.

It is also noted that the quantity of other greenhouse gas emissions except CO<sub>2</sub> in 2011 (i.e. CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, CFCS) was 61,4 tn. The specific index per quantity of produced products are shown at the table below.



### Emissions of Volatile Organic Compounds (VOCs)

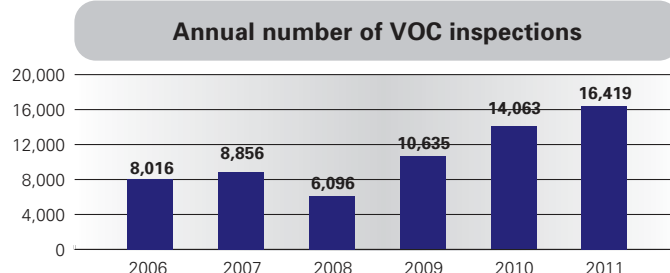
With the target of reduction and control of Volatile Organic Compounds, the Company has implemented amongst other a series of programs that include the reduction of diffused emissions coming from different sources (oil separators, unit equipment) and the installation of secondary seals in the floating roof tanks.

Diffused emissions of Volatile Organic Compounds, is a chemical and oil industry characteristic that is not only a

source of pollution but also a cause of forgone profits and loss of products for the industry. Thus, the goal of reducing such emissions is dual. The anti-pollutant measures taken in order to reduce the emissions coming from oil product storage and distribution units, include equipment upgrades (tanks, pumps, etc), as well as regular inspections and maintenance of all units, which is very crucial in emissions control. In order to reduce the emissions arising from the loading of tank trucks, a vapour recovery unit has been installed, in conformity with current legislation, which is the most effective and globally accepted measure for minimizing such emissions.

Specifically, in order to check the equipment, the Leak Detection And Repair (LDAR) program is applied, by which the leakages are detected and recorded during regular inspections done by the operators of the various sections. The inspections are carried out by making use of portable devices, and the leakages are fixed the soonest possible. As shown in the following diagram, the number of inspections in 2011 is 16,419 and is significantly higher compared to any previous year.

The Leak Detection And Repair (LDAR) program is allocated for



2011, as follows.

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AYG.	SEPT.	OCT.	NOV.	DEC.	TOTAL
<b>FUELS</b>	196	832	428	689	553	675	668	323	610	707	706	454	6,841
<b>FCC</b>	74	104	107	105	101	100	102	104	103	104	102	100	1,206
<b>LUBES</b>	36	34	34	35	35	36	34	35	35	35	36	34	419
<b>OFFSITES</b>	90	79	87	97	84	81	78	85	76	113	63	111	1,044
<b>JETTY</b>	35	47	25	34	14	24	35	47	25	34	14	24	358
<b>MHC/7100</b>	0	0	1,560	0	0	0	0	1,565	0	0	0	3,130	6,255
<b>TRUCK LOADING</b>	0	148	0	0	0	0	0	0	148	0	0	0	296
<b>TOTAL</b>	<b>431</b>	<b>1,244</b>	<b>2,241</b>	<b>960</b>	<b>787</b>	<b>916</b>	<b>917</b>	<b>2,159</b>	<b>997</b>	<b>993</b>	<b>921</b>	<b>3,853</b>	<b>16,419</b>

### 3.1.2 Wastewater

Industrial wastewater produced by the Refinery's production units is routed, after its pre-treatment, into the industrial wastewater treatment plant, where it is subjected to a sequence of treatment steps that are depicted on the diagram that follows (API Oil Separators, Dissolved Air Floatation (DAF) units, sand filters, biofilters, sludge treatment). At the same time, sanitary wastewater is treated in the sanitary wastewater treatment plant.

The goal of industrial and sanitary wastewater treatment systems is the full treatment of wastewater so that the treated effluent is in compliance with the requirements of current legislation. Wastewater effluents are measured on a daily basis, whereas, a number of programs are implemented aiming at efficiently dealing with the effects of malfunctioning of the treatment units, the automation of their functioning and the optimization of their performance. The quality characteristics of the effluents are shown in the table that follows, where one can conclude that in all cases the measured values are lower than those defined by the legislation.

The results of the measurements are in conformance with the corresponding threshold limits of the parameters, as they are

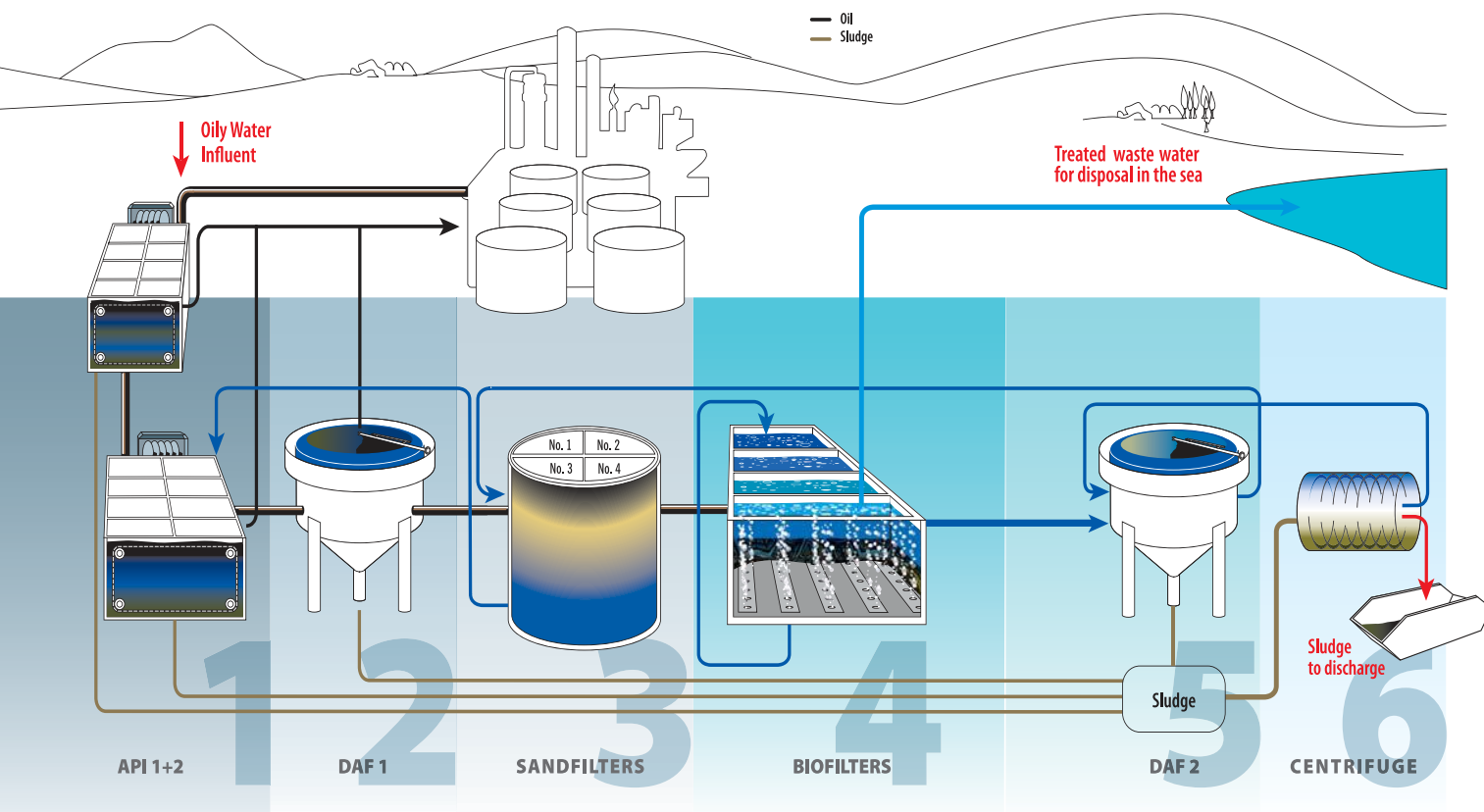
set in the Prefecture Decision 17823 / 79 (Gazette No.1132 / B / 79), which has been modified by the Prefecture Decision A3 / 6533 /81 (Gazette No. 477 / B / 81).

Concentration of polluting parameters at the outlet of the industrial wastewater treatment plant

S/N	Parameter	Average 2011 values	Threshold Limits
1	pH	7.6	6-9
2	Temperature (°C)	28	<35
3	Oil Content (mg/l)	3.6	<10
4	BOD <sub>5</sub> (mg/l)	24	<40
5	COD (mg/l)	105	<150
6	NH <sub>3</sub> (mg/l) 13.8	<15	
7	Phenols (mg/l)	0.3	<0.5
8	Sulfides (mg/l)	1.1	<2
9	Suspended solids (mg/l)	18	<40

Hydraulic and polluting load of the industrial wastewater treatment plant is as follows:

S/N	Parameter	Average 2007 values	Average 2008 values	Average 2009 values	Average 2010 values	Average 2011 values
1	Discharge (m <sup>3</sup> /day)	10,385	10,297	10,224	10,529	10,663
2	BOD <sub>5</sub> (kg/day)	286	265	241	247	256
3	Suspended solids (kg/day)	208	174	177	178	190
4	Phenols (kg/day)	2.58	3.79	3.71	3.30	3.01

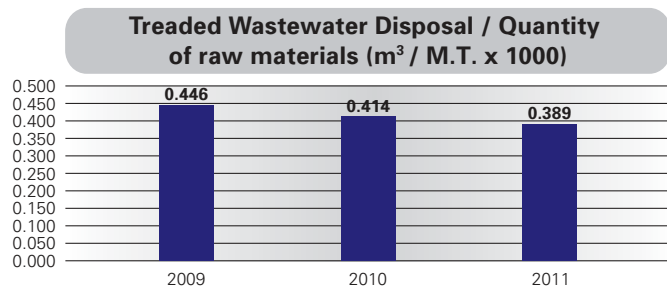


## Terminology

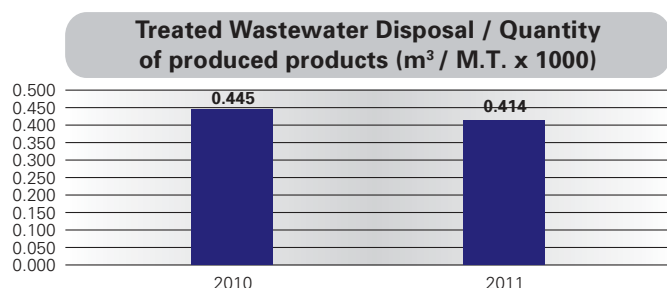
**BOD:** Biochemical Oxygen Demand

**COD:** Chemical Oxygen Demand

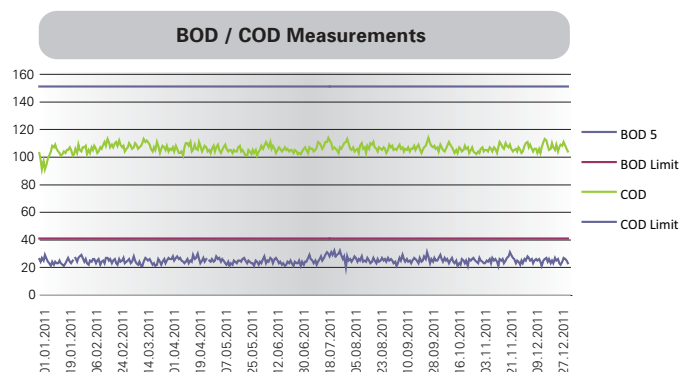
In the following diagram the specific volume of treated wastewater (m<sup>3</sup> / MT of raw materials) for the years 2009, 2010 and 2011 is plotted.



Furthermore, the specific volume of treated waste water per quantity of produced products for the years 2010 and 2011 is as follows:



In the following diagram the variation, during 2011, of the BOD and COD values of the industrial wastewater treatment plant is presented..



The concentration of benzene, toluene, xylene, ethyl benzene in the effluent of the industrial wastewater treatment plant is tabulated below.

KYA 4859/726/01 (FEK 253B)	Monthly threshold limits	Daily threshold limits	Average 2011 values
Method of measurement			GC/MS
Parameters of control	mg /l	mg /l	mg/l
Benzene	0,5	1	<0,05
Toluene	0,5	0,9	<0,08
Xylene	0,5	0,5	<0,01
Ethyl benzene	0,3	0,3	<0,01

## Sanitary Wastewater Treatment Plant Outlet

A/A	Parameter	Average 2008 values	Average 2009 values	Average 2010 values	Average 2011 values	Threshold Limits
1	pH	7.8	8.1	7,9	7,6	6-9
2	BOD <sub>5</sub> (mg/l)	15	18	21	20	<40
3	COD (mg/l)	37	43	51	52	<150
4	Suspended solids (mg/l)	10	11	12	16	<40
5	Phenols (mg/l)		0,19	0,22	0,22	<0,5

### 3.1.3 Solid Waste

Solid waste produced during the refinery's operation is collected and processed according to the relevant legislation: (Law 2939/01 (Gazette No. 179/A) – Packaging and alternative management of packaging and other products, Ministerial Decree 50910/2727/03 (Gazette No. 1909/B) – Measures and terms for the managing of solid waste, Ministerial Decree 19396/1546/97 (Gazette No. 604/B) – Measures and terms for managing hazardous waste), by the following methods:

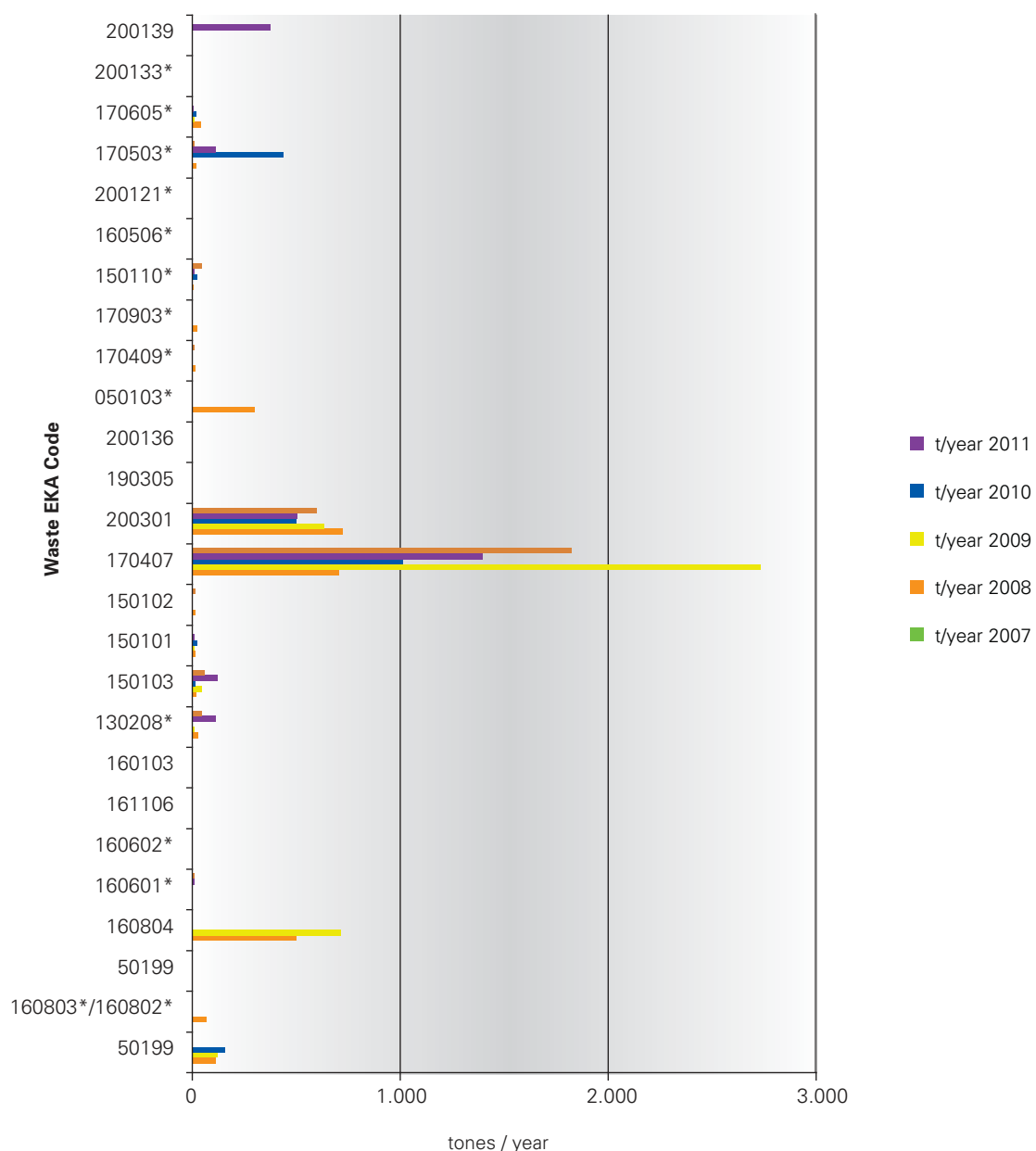
➤ Recycling (outside the refinery premises)

- Recovery (outside the refinery premises)
- Processing inside the refinery premises
- Re-usage
- Final disposal (outside the refinery premises)

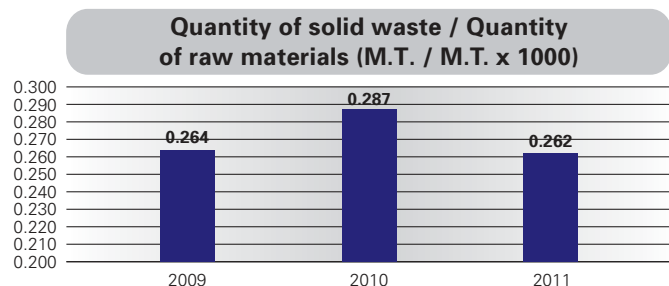
The Refinery is aiming at the increase of recycling and re-usage of the produced waste. The amount of solid waste that was disposed outside the refinery premises, over the last years, is shown in the following table.

### SOLID WASTE MANAGEMENT

		t / year 2007	t / year 2008	t / year 2009	t / year 2010	t / year 2011
50199	Waste not otherwise specified	115.00	120.60	158.26	-	
160803*/ 160802*	Spent Ni-Mo catalyst	68.42	-	-	-	
50199	Inactive pellets	0.00	-	-	-	
160804	FCC spent catalyst	502.28	716.24	-	-	
160601*	Lead batteries	0.14	2.52	1.91	10.458	10.548
160602*	Ni, Cd batteries	0.00	-	-	-	
161106	Recovery linings and refractories from non-metallurgical processes	0.00	-	-	-	
160103	Tyres at the end of their life cycle	0.00	-	-	3.34	
130208*	Other engine, transmission and lubricant oils	29.60	13.1	4.50	113.098	45.357
150103	Wood packaging	17.79	44.73	15.21	123.38	58.36
150101	Paper or cardboard packs	14.31	11.44	24.70	10.01	1.07
150102	Plastic packaging	17.60	-	0.39	3.56	14.36
170407	Scrap materials	704.08	2,731.81	1,012.13	1,394.79	1,822.95
200301	Mixed municipal waste	721.96	633.03	500.06	505.357	598.68
190305	Stabilised waste other than those reported in the code 190304	0.00	-	-	-	
200136	Electrical and electronic equipment waste	0.00	-	3.90	2.73	
050103*	Sludge resulting from tank cleaning	301.93	-	-	-	
170409*	Metal Waste, contaminated by hazardous substances	15.41	-	-	-	9.09
170903*	other construction and demolition waste (including mixed waste) containing hazardous substances	21.67	-	-	-	
150110*	Packaging containing residues of hazardous substances or contaminated by them	8.22	3.05	26.00	8.46	44.82
160506*	Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	0.04	0.1	-	0.05	
200121*	Fluorescent tubes and other mercury-containing waste	0.06	0.34	-	0.12	
170503*	Soil and stones containing hazardous substances	21.24	-	439.88	111.95	10.97
170605*	construction materials containing asbestos	40.58	11.56	20.48	7.77	
200133*	Mixed Batteries	-	0.187	0.48	-	
200139	Plastics				374.23	

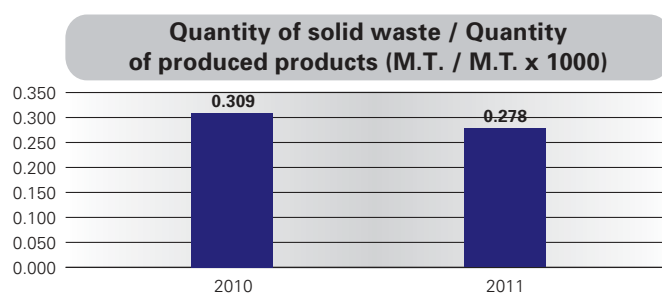


The specific quantity of solid waste per quantity of raw materials for the years 2009, 2010 and 2011 is as follows:



The fluctuation of the specific quantity of solid waste per MT production is attributed to the replacement of equipment (scrap) during the regular maintenance of the production units (turnaround).

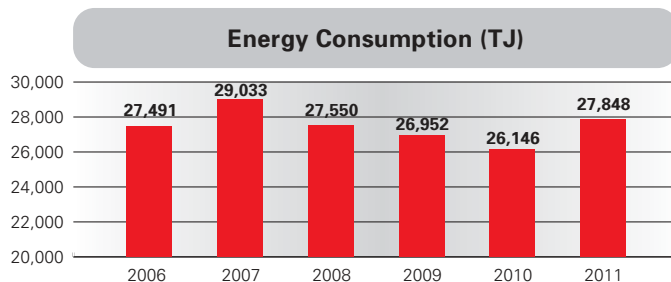
The specific quantity of solid waste in relation to the production (waste/thousand MT of produced products), is shown below:



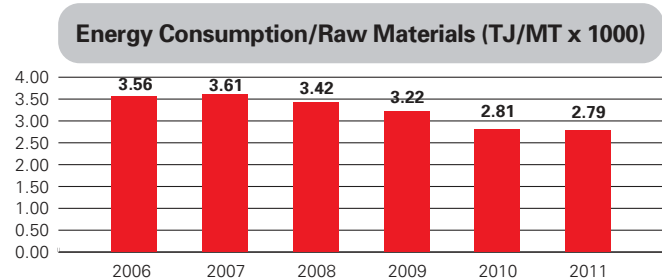
### 3.1.4 Energy Consumption

The energy consumption of the refinery includes the fuel used in combustion processes and the electric power for the operation of mechanical equipment, which is almost exclusively produced by the Power and Steam co-Generation Plant. The refinery fuel mixture includes fuel oil, fuel gas, liquefied gas and natural gas.

The projects that were completed in the previous years, (mainly the introduction of natural gas in the refinery fuel mixture in 2008, the replacement or extensive maintenance of gas turbines, the upgrade of the preheating furnaces, the increase of the recovery level of condensates, the installation of an Advanced Control System, the use of hot streams to preheat cold streams, the maximization of refinery gas usage etc), combined with the systematic monitoring of energy efficiency and the preventive maintenance schedules, contributed to the continuous reduction of the refinery energy consumption over the last years, even though the production volume increased. The energy consumption by the refinery processes for 2011 is 27.848 TJ.

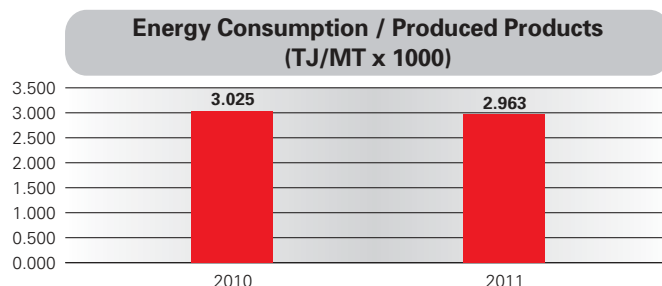


Furthermore, the increase in energy efficiency is shown by the ratio of Energy/ thousand of Metric Tons of raw materials.



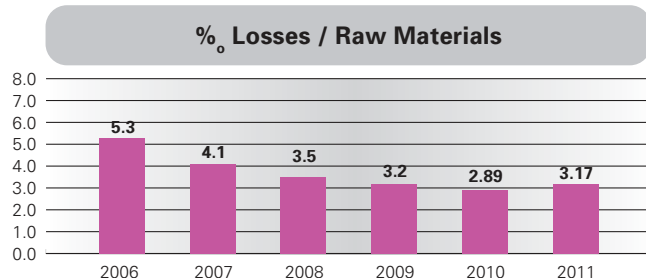
It must be noted that the amount of raw materials and not that of the end products is chosen as the basis for comparison, because this convention is common and internationally accepted as a benchmark for evaluating the environmental impacts in the oil refining industry (bref: IPPC reference document on best available techniques for mineral oil and gas refineries, February 2003). It also allows for the right interpretation and the evaluation over time of the environmental efficiency of the refinery.

The specific index of Energy / thousand Metric Tons of produced products, is shown below:



The reduction in energy consumption has an immediate positive impact both on emitted CO<sub>2</sub> and on other pollutants, since its optimization results in minimization of emissions (indicator of efficient use of materials).

Total losses have decreased during the last years compared to those of 2006, as shown at the diagram below.

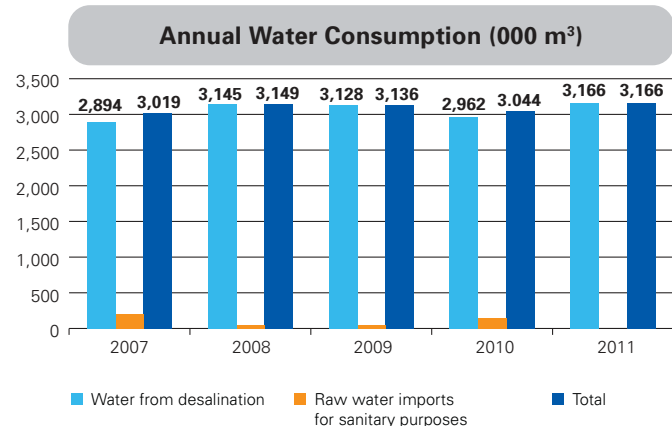


In 2011 there was a small increase in losses compared to the previous year, mainly due to a general shut down of the Refinery for maintenance and the increased quantity of crude oil processed.

### 3.1.5 Water Consumption

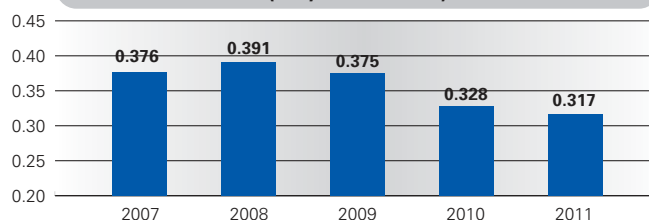
Water used for the Refinery's various operations is mostly obtained by sea water desalination, and much less by raw water carried by tank trucks and vessels.

The water quantity consumed in 2011 shows a small increase compared to the previous year, due to an increase in the quantity of crude oil processed.



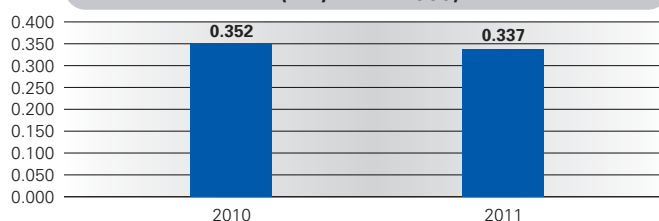
As shown in the following diagram water consumption per unit of raw materials processed in the refinery follows a downtrend as a result of its better management (index of efficient use of materials).

**Annual Water Consumption / Raw Materials (m<sup>3</sup> / MT x 1000)**



The specific index of water consumption per unit of produced products is shown at the following diagram.

**Annual Water Consumption / Produced Products (m<sup>3</sup> / MT x 1000)**



It should be emphasized that the water being used in the manufacturing process comes exclusively from the processing of sea water, and consequently, there is no negative impact on the natural resources of the area whatsoever.

It is also pointed out that, in the context of the company's social contribution, amounts of water covering the water supply needs of nearly two hundred neighboring residences are granted free of charge.



### 3.1.6 Noise

Having set as a goal the reduction of environmental noise levels within and up to the boundaries of the Refinery premises, the Company has taken all the necessary measures, which include the installation of silencers, as well as the purchasing of low noise level equipment.

In order to achieve reduction in the noise levels, sound curtains

have been installed at the aeration units of the wastewater treatment plant.

The noise levels are monitored on a regular basis by conducting measurements at a large number of locations around the Refinery. The positions where measurements are recorded are shown on the following Map:



Indicative measurements for 2011 are presented in the following table:

Locations	Average Measurements January 2011 (dBA)	Average Measurements June 2011 (dBA)	Average Measurements October 2011 (dBA)	Threshold Limits (dBA)
Perimeter of the refinery-	53.6	55.3	56.6	65.0
South perimeter (points 1 to 15)	52.7	53.4	53.1	55.0

## 4. OBJECTIVES

### 4.1 New objectives and programs

MOTOR OIL constantly implements new programs and actions aiming at improving its environmental performance, while setting new objectives for the future. The objectives and programs that are planned for the following years are presented in the following table.

OBJECTIVES AND PROGRAMS	2012	2013	2014
<b>AIR</b>			
Certification of the continuous measurement online analyzers on the stacks according to international standards, aiming at monitoring and reducing emissions and improving air quality.	●		
Installation of CO <sub>2</sub> and humidity measurement analyzer in the FCC stack		●	
Estimation of the As, Cd, Hg and PAHs concentrations concerning the air quality.	●		
<b>WATER</b>			
Installation of conductivity meters in the inlet and outlet streams of the desalination unit.		●	
<b>SOIL / EARTH</b>			
Reduction of the quantity of solid waste stored in the Refinery and implementation of new alternative management methods:			
- Management of the sludge from the dewatering unit of the waste water treatment plan (WWTP)			●
- Alternative management and use of solid waste (catalysts, resins, discoloring earth) by the cement industry (through a licensed disposal company).			●
- Complete the research for managing and neutralizing the sludge from the M-4000 wastewater treatment plant, so that it is suitable to use as an alternative fuel or for disposal at Sanitary Landfills		●	
- Alternative treatment of the sludge from the bottom of the tanks after treatment in a decanter			●

## Registration Information / Next Environmental Statement

The company is registered in the European System of Ecological Management and Audit Scheme EMAS. Moreover the company is registered in the Greek Ledger of EMAS Organizations with registration number EL000067.

The present Environmental Statement concerns the year 2011. The next Environmental Statement will be edited, verified and issued on June 2013.

Mr. Spyros J. Sofos, Integrated Management System Section Head is responsible for issuing the Environmental Statements.

### 1. ORGANIZATION

Company name	MOTOR OIL (HELLAS), CORINTH REFINERIES S.A
Address	Agioi Theodoroi , p.o box 23, 20100
City	Corinth
Postal code	20100
Country	Greece
Contact Person	S. J. Sofos
Telephone	27410 – 41800
e-mail address	sofossp@moh.gr
Internet network	www.moh.gt
Public access to the environmental statement or the updated environmental statement	
a) printed form	YES
b) electronic form	YES
Registration number	EL 000067
Registration date	18 / 06 / 2012
Suspension date	
Deletion date	
Date of the next verification of environmental statement	June 2013
Date of the next updating of environmental statement	June 2013
Application for deviation according to article 7	NO
Code of activities NACE	DF.19.20
Number of personnel	990
Work circle or annual balance-sheet	7.146.118.000 €

**2. AREA OF ACTIVITIES**

Company name	MOTOR OIL (HELLAS), CORINTH REFINERIES S.A
Address	Agioi Theodoroi , p.o box 23, 20100
City	Corinth
Postal code	20100
Country	Greece
Contact Person	S. J. Sofos
Telephone	27410 – 41800
e-mail address	sofossp@moh.gr
Internet network	www.moh.gt
Public access to the environmental statement or the updated environmental statement	
a) printed form	YES
b) electronic form	YES
Registration number	EL 000067
Registration date	18 / 06 / 2012
Suspension date	
Deletion date	
Date of the next verification of environmental statement	June 2013
Date of the next updating of environmental statement	June 2013
Application for deviation according to article 7	NO
Code of activities NACE	DF.19.20
Number of personnel	990
Work circle or annual balance-sheet	7.146.118.000 €

**3. ENVIRONMENTAL CERTIFICATOR**

Name	BUREAU VERITAS CERTIFICATION HELLAS S.A
Address	Aitolikou 23, Pireas
City	Pireas
Postal Code	
Country	Greece
Telephone	210 – 4063000
Fax	210 – 4063118
Number of registration or accreditation	246 – 4
NACE codes	ESYD EL – V – 0007/26.05.11 (Code 19)
Accreditation or Certification institution	ESYD
Athens, 18/06/2012	
Organization Representative Signature	

Corinth 8th of June 2012

Spyros J. Sofos  
Integrated Management System Section Head

## ANNEX I:

### LIST OF ITEMS OF LEGISLATION

SUBJECT	GREEK AND EUROPEAN COMMUNITY LEGISLATION
<b>Environmental Permissions</b>	<ul style="list-style-type: none"><li>• Law 1650/86 (Gazette No-160 A') For the protection of the environment.</li><li>• Ministerial Decree 69269/5387/90 (Gazette No 678/B 25.10.90) Categorization of activities and projects. Content of study for the Environmental Impacts, determination of content for special environmental studies and other relevant provisions according to the law 1650/86 (replaced).</li><li>• Law 3010/02 (Gazette No 91A / 25.04.2002) Conformity with the law 1650/86, with the Directives 97/11 EC and 96/61 EC, Procedure of delimitation and regulations of issues related to the water streams and other provisions.</li><li>• Ministerial Decree 15393/2332/2002 (Gazette No B 1022/2002) As it was modified and completed with Ministerial Decree 145799/2005 (Gazette No B 1002/2005). Categorization of certain public and private projects and activities according to the article 3 of law 1650/1986 as it was replaced with the article 1 of law 3010/2002 «Conformity of law 1650/86 with the Directives 97/11/EC and 96/61/EC (A91)».</li><li>• Ministerial Decree 11014/703/Φ104/2003 (Gazette No 332/20.03.2003) Procedure of Preliminary Environmental Assessment and evaluation and approval of the environmental terms according to the article 4 of the Law 1650/1986 as it was replaced from the article 2 of the Law 3010/2002 «Conformity of the Law 1650/86 with the Directives 97/11/EC and 96/61/EC and other provisions».</li><li>• Law 3325/2005 (Gazette No 68A/2005) Foundation and operation of industrial – manufacture installations in the frame of a sustainable growth and other provisions.</li><li>• Ministerial Decree 41624/2057/E103(Gazette No 1625 B/2010) Measurements, terms and program for alternative management of the waste, electrical columns and accumulators in conformity with the provision of the Directives, 2006/66/EC and 2008/103/EC of the European Parliament and Council.</li><li>• Directive 85/337/EEC For the assessment of the environmental impacts.</li><li>• Directive 97/11/EEC Which modifies the Directive 85/337/EEC.</li><li>• Directive 96/61/EC Of the European Council of 24 September 1996 concerning integrated pollution, prevention and control.</li><li>• Directive 2004/35/EC Of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage.</li><li>• Ministerial Decree 1958 (Gazette 209/A/2011) Categorization of public and private projects and activities according to the article 1 of law 4014/21.09.2011</li><li>• Law 4014/2011 (Gazette 209/A/21.09.2011) Environmental permission of projects and activities, regulation of illegal constructions in accordance to environmental balance and other provisions of Environmental Ministry.</li></ul>
<b>Air pollution</b>	<ul style="list-style-type: none"><li>• Ministerial Decree 10315/93 (Gazette No 369B/24.05.93) Regulation of issues related to the operation of the stable combustion spots for heating buildings and water.</li><li>• Ministerial Decree 11294/93 (Gazette No 264/B) Terms of operation and approved limits of gas waste emissions from the industrial boilers.</li><li>• Ministerial Decree 11641/1942, 2002 Measurements and terms for the reduction of the Volatile Organic Compounds (VOC) Emissions which are resulted from the use of organic solvents in some activities and installations (Gazette No 832B/02.07.2002).</li></ul>

SUBJECT	GREEK AND EUROPEAN COMMUNITY LEGISLATION
<b>Hazardous waste</b>	<ul style="list-style-type: none"> <li>• Directive 92/42/EEC Of the Council at 21.05.1992 on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels.</li> <li>• Act of the Council of Ministers 34/30.05.2002 (Gazette No 125A/05.05.2002).</li> <li>• Ministerial Decree 9238/332/2004 (Gazette No 4058/27.02.2004).</li> <li>• Ministerial Decree 37411/1829/E103 (Gazette No B 1827/11 September 2007) «Determination of the appropriate values, meters and procedures for the application of the Regulation 2037/2000 of the European Parliament and of the Council of 29 June 2000 «on substances that deplete the ozon layer».</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Ministerial Decree 19396/1546, 18.07.1997 Measures and terms for managing the hazard wastes.</li> <li>• Ministerial Decree 13588/725/2006 (Gazette No 383/B/28.03.2006) «Measures, terms and restrictions for handling hazardous wastes according to the Directive 91/689/EEC for hazardous waste» Replacement of the Ministerial Decree 19396/1546/1997 «Measures and terms for handling hazardous waste».</li> <li>• Ministerial Decree 8668/2007 (Gazette No 287 B / 2.03.2007) Approval of national planning of Handling Hazardous Wastes according to the article 5 (paragraph A) 13588/725 common ministerial decision «Measures, terms and restrictions for handling the hazardous wastes etc» (B' 383) and in conformity with the provisions of the article 7 (paragraph 1) of the Directive 91/156/EC of 18 March 1991 Council». Modification of the Ministerial Decree 13588/725/2006.</li> <li>• Ministerial Decree 24944/1159 (791 B / 2006) Approval of the General Technique Specifications for handling the hazardous wastes according to the article 5 (paragraph B) of the 13588/725 common ministerial decision «Measures, terms and restrictions for handling the hazardous wastes etc» (B' 383) and in conformity with the provisions of the article 7 (paragraph 1) of the Directive 91/156/EEC of the 18 March 1991 Council».</li> <li>• Directive 91/689/EEC Of 12.12.1991 for hazardous wastes.</li> <li>• Commission Decision 96/350/EC Of 24.05.1996 adapting Annexes IIA and IIB to Council Directive 75/442/EEC on waste.</li> <li>• Directive 78/319 Of 20.03.78 for toxic and hazardous wastes.</li> <li>• Decision 94/904/EEC of 22.12.1994.</li> </ul> <hr/>
<b>Solid and packaging waste</b>	<ul style="list-style-type: none"> <li>• Ministerial Decree 50910/2727/2003 «Measurements and terms for managing the solid wastes – National and Regional Planning of Management».</li> <li>• Ministerial Decree 114218/97 (Gazette No B 1016) «Creation of a frame with the specifications and general programs for managing the solid waste».</li> <li>• Law 2939/2001 «Packaging and alternative management of packaging and other products. Foundation of National Organization of Alternative Management of Packaging and other products.</li> <li>• Directive 91/156 EEC Of 18.03.91 which modifies the Directive 75/442 for waste</li> <li>• Directive 2006/12/EC Of the European Parliament and of the Council of 5 April 2006 on waste.</li> <li>• Directive 94/62/EC Of 20.12.1994 of packaging and packaging waste.</li> </ul> <hr/>

SUBJECT	GREEK AND EUROPEAN COMMUNITY LEGISLATION
<b>Electrical and Electronic equipment</b>	<ul style="list-style-type: none"> <li>• Presidential Decree 117 of 5.04.2004 «Measurements, terms and programs for alternative management of the waste which result from the electric and electronic equipment», in conformity with the provisions of the Directive 2002/95 «on the restriction of the use of certain hazardous substances in electrical and electronic equipment».</li> <li>• Presidential Decree 15/2006 (Gazette No 12/ A' /3.02.2006) Modification of the presidential decree 117/04 (82/A), in conformity with the provisions of the Directive 2003/108/EC of the European Council of 8 December 2003 amending Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)</li> <li>• Directive 2002/96/EC Of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE).</li> <li>• Directive 2002/95/EC Of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.</li> </ul>
<b>Lead Batteries and Accumulators</b>	<ul style="list-style-type: none"> <li>• Presidential Decree 115/2004 (Gazette No 80A / 2004) «Replacement of Ministerial Decree 73537/1438/95 "For the electrical columns and accumulators which consist certain hazardous substances" (B781) and 19817/2000 Ministerial Decree «Modification of 73537/1438/95 Ministerial Decree etc» (B' 963) Measurements, terms and program for alternative management of electrical columns and accumulators».</li> <li>• Directive 91/157/EEC Of 18.03.1991 on batteries and accumulators containing certain dangerous substances.</li> <li>• Directive 98/101/EEC In order to adapt the Directive 91/157/EEC to technical progress for the electrical columns and the accumulators containing certain dangerous substances».</li> </ul>
<b>Waste oils</b>	<ul style="list-style-type: none"> <li>• Presidential Decree 82/2004 Of 02.04.2004 (Gazette No 64/2004) «Replacement of Ministerial Decree 98012/2001/96 "Determination of the measurements and terms for managing the used waste oils". Measurements, terms and program of alternative management of waste lubricant oils».</li> <li>• Directive 75/439/EEC Of 16.06.1975 on the disposal of waste oils.</li> <li>• Directive 87/101/EEC About the disposal of waste oils.</li> </ul>
<b>Tyres</b>	<ul style="list-style-type: none"> <li>• Presidential Decree 109/2004 «Measurements and terms for managing the used tyres of vehicles. Measurement for their management».</li> <li>• Directive 94/62/EC Of 20.12.1994 on packaging and packaging waste.</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>• Ministerial Decree 37393/2028/2003 (Gazette No 1418B) Measurements and terms for the noise emission in the environment by equipment for use outdoors.</li> <li>• Ministerial Decree 13586/724/2006 (Gazette No 384B) «Determination of measurements, terms and methods for assessment of the management of noise in the environment, in conformity with the provision of the Directive 2002/49/EC «related to the assessment and management of environmental noise» of the Council of 25.06.2002.</li> <li>• Presidential Decree 1180/81 (Gazette No 293 A) «About regulation of issues related to the foundation and operation of industries, manufactures, all nature of mechanical installations and storages for the insurance of the environment»</li> <li>• Directive 2000/14/EC On the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.</li> <li>• Directive 2002/49/EC Of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise.</li> </ul>

SUBJECT	GREEK AND EUROPEAN COMMUNITY LEGISLATION
<b>Chemical Substances</b>	<ul style="list-style-type: none"> <li>• Direct application of the Regulation 793/93 For the assessment and the control of the danger from the existing substances in the National Legislation.</li> <li>• Ministerial Decree 378/94/20.09.1994 (Gazette No B' 705) Approval of the ΑΧΣ 378/1994 related to: «Dangerous substances, classification, packaging and labeling of them, in conformity with the Directive 67/548/EEC of the European Council as it has been modified and is in effect.</li> <li>• Decision of the Higher Chemical Council ΑΧΣ 265/2002 (Gazette No B 1214) – Classification, packaging and labeling of dangerous preparations in conformity with the direct 1999/45/EC and the directive 2001/60/EC.</li> <li>• Ministerial Decree 87/2007 (Gazette No 872B 2007) Modification of the decision Α.Χ.Σ 378/1994 (Gazette No 705/B/20.09.1994) in conformity with the Directive 2006/121/EC (EE L 396 of 30.12.2006) of the European Parliament and of the Council « amending Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances in order to adapt it to Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency».</li> <li>• Ministerial Decree 19403/1388/08/2008 (Gazette No 781 B / 02-05-2008) Modification of π.δ 104/1999 (113Α) in conformity with the provisions of the Commission Directive 2003/28/EC of 7 April 2003, the Commission Directive 2004/111/EC of 3 November 2006 for the fourth, fifth and sixth time adaption to technical progress of the Council Directive 94/55/EC on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road.</li> <li>• Directive 67/548/EC On the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances, as it has been modified and is in effect.</li> <li>• Council Regulation (EEC) 793/93 Of 23 March 1993 on the evaluation and control of the risks of existing substances.</li> <li>• Ministerial Decree 52167/4683/2012 (Gazette 37/B/20.01.2012) Adaption of Greek legislation to the provisions of the Directive 61/2010/EEC of 2nd September 2010 for the first adaption to the scientific and technical progress of the annexes of the regulation 2008/68/EEC of the European Parliament, about the inland transport of dangerous goods. Modification of Annexes of Ministerial Decree 35043/2524/2.9.2010 (B 1385)</li> </ul>
<b>Solid Waste</b>	<ul style="list-style-type: none"> <li>• Ministerial Decree 9268/469/2007 (B 287/2007) Modification of the quantitative objectives for the recuperation and recycling of the waste packaging according to the article 10 (paragraph A1, last section) of the law 2939/2001 (Α' 179), as well as other provisions of this law, in conformity with provisions of the Directive 2004/12/EC «amending Directive 94/62/EC on packaging and packaging waste» of the Council of 11 February 2004.</li> </ul>
<b>Energy</b>	<ul style="list-style-type: none"> <li>• Law 3661/2008 (Gazette No 89A / 2008) Measurements for the reduction of the energy consumption into the buildings and other provisions</li> <li>• Law 3855/10 (Gazette No 95 A / 23.06.2010) Measurements for the improvement of the energy efficiency during the final use, energy services and other provisions.</li> <li>• Directive 2002/91/EC Of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings.</li> <li>• Ministerial Decree Δ6/B/5825 (Gazette No 407/09-09-2010) Regulation of Energy Efficiency of Buildings</li> </ul>

SUBJECT	GREEK AND EUROPEAN COMMUNITY LEGISLATION
<b>Treatment of waste - Protection of the water sources</b>	<ul style="list-style-type: none"> <li>• Sanitary Provision E1B. 221/65 (Gazette No 138B / 24.02.65) Disposal of waste and industrial waste</li> <li>• Law 1739/87 (Gazette No 201 A / 20.11.87) Management of water sources and other provisions</li> <li>• Law 3199/2003 (Gazette No 280 A / 09-12-2003) Protection and management of water – conformity with Directive 2000/60/EC</li> <li>• Ministerial Decree Δ. ΥΓ2 / Γ.Π. 133551/2008 (Gazette No 2089/ B' / 09.10.2008) Modification of case (γ) of paragraph 1, article 8, E1B/221/65 Sanitary provision.</li> <li>• Prefecture Decision 17823/79 (Gazette No 1132 / B / 79)</li> <li>• Prefecture Decision A3/6533/81 (Gazette No 477 / B / 81)</li> </ul>
<b>Fire Protection</b>	<ul style="list-style-type: none"> <li>• Fire Department Provision 12/2007 (Gazette No 545/2007) Establishment of a book with the controls of preservation and good operation of the meters for active fire protection of the enterprises.</li> <li>• Ministerial Decree 81813/5428/1993 (Gazette No 647/B'/30.08.1993) Modification and completeness of π.δ 71/88.</li> <li>• Ministerial Decree 58185/2474/1991 (Gazette No 360/B'/28.05.1991) About modification and completeness of π.δ. 71/88 «regulation of fire protection for buildings».</li> <li>• Presidential Decree 374/1988 (Gazette No 168A/12.08.1988) Modification and completeness of π.δ. 71/88 «regulation of fire protection of buildings» (Gazette No 32/A/28-3-88)</li> <li>• Presidential Decree 71/1988 (Gazette No 32A/17-2-1988) Regulation of fire protections of buildings.</li> <li>• Ministerial Decree 16085Φ.700.1/2009 (Gazette No 770/B'/28-4-2009) Taking meters for protection of fire in Private Centers of Technical Control of Vehicles, in car garages of preservation and repair, in Merchandising Stations of Cars as well as in other car service installations which are under competence of the Transferring and Communicating services of the Prefecture Government of the country.</li> <li>• Ministerial Decree 50292/3549/08/2009 (Gazette No 272/B'/16-2-2009) Supply the vehicles with portable fire extinguisher</li> <li>• Fire Department provision 13α/2010 Modification of the 13/2008 Fire Department provision about «determination of the procedure for giving certificate of fire protection in enterprises which are in buildings».</li> </ul>
<b>Environmental Responsibility</b>	<ul style="list-style-type: none"> <li>• Presidential Provision 148 (Gazette No 190/29-09-2009) Environmental Responsibility for prevention and repairing the damages to the environment – Conformity with the Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004.</li> <li>• Directive 2004/35/EC Of the European Parliament and of the Council of 21 April 2004.</li> <li>• Law 4042/2012 (Gazette 24/A/13.02.2012) Criminal law environmental protection – Harmonization with the directive 2008/99/EEC – Framework for the production and management of waste- Regulation of provisions of Environmental Ministry.</li> </ul>

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