

Diagnosis of mercury at the Mediterranean countries

State of play - Greece

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*Ministry of the Environment,
Energy and Climate Change*

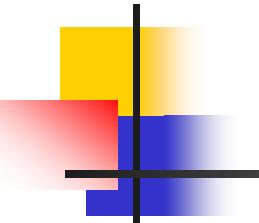
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Directorate of Environment

General Chemical State Lab.

Ministry of Finance

Almaden, 12/11/2012



Competent Authorities

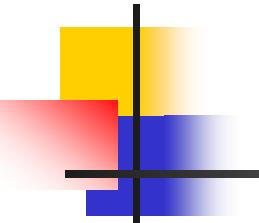
Ministry of Environment, Energy and Climate Change

- (1) Special Water Secretariat
- (2) Directorate of Environmental Planning
 - Department of Solid Waste
- (3) Directorate of Air and Noise Pollution Control
 - Department of Industries
 - Department of Air Quality
- (4) Department of International Relations and EU Affairs (CP/RAC focal point)

Ministry of Finance

General Chemical State Laboratory

- REACH
- Import – Export
- Chemical analysis/detection (e.g. food, water)



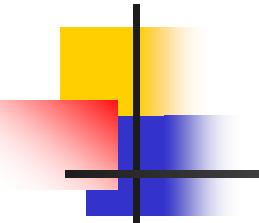
Recent Legislation (I)-MinEnv

Water

- (1) Marine Strategy Framework Directive 2008/56/EC - Law 3983/2011 (OJG 144/A/17-6-2011)
- (2) Directive 2008/105/EC on environmental quality standards in the field of water policy - JMD 51354/2641/E103/24-11-2010 (OJG 1909/B/8-12-2010)

Waste

- (3) Waste Framework Directive 2008/98/EC - Law 4042/2012 (OJG 24/A/2012)
- (4) Directive 2006/66/EC on batteries and accumulators and waste batteries - JMD 41624/2057/E103/2010 (OJG 1625/B/2010)
- (5) Council Directive 2011/97/EU amending Directive 1999/31/EC as regards specific criteria for the storage of metallic mercury considered as waste - under transposition
- (6) JMD 146163/2012 (OJG 1537/B/2012) on the management of clinical waste (includes provisions for devices containing mercury and mercury amalgams)



Recent legislation (II) - GCSL

Food and health safety

Regulation EC 1881/2006 (maximum levels for certain contaminants, including Mercury in fish)

Directive 1102/2008/EC

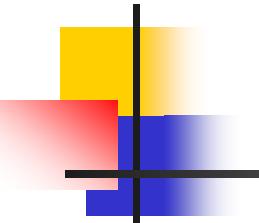
- Gradual abolition of global production until 2020
- Safe storage within the Community
- The export of metallic mercury, cinnabar ore, mercury (I) chloride, mercury (II) oxide and mixtures of metallic mercury with other substances (alloys of mercury), is banned since 15/3/2011.

Directive 2007/51/EC

Amendment of REACH Regulation, regarding measuring devices containing mercury. Since 3/4/2009 the disposal of mercury to the market is not allowed.

A) Thermometers (Until 2011 all conventional thermometers should be substituted by digital ones)

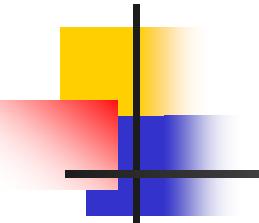
B) Instruments for everyday use (manometers, barometers, other thermometers)



Enforcement

Responsible for the enforcement is the Hellenic Environmental Inspectorate (HEI) which is part of the Special Secretariat for the Environment and Energy (Ministry of Environment, Energy and Climate Change). Its main responsibility is to undertake inspections in order to monitor compliance with the environmental permits for projects of the private and public sectors. This is a technically competent authority which monitors compliance and has the power to adequately enforce legislation.

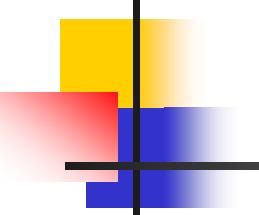
Very recently a new law was adopted, Law 4042 (OJG 24/A/2012), which incorporates Directive 99/2008/EC (legal protection of the environment) in the legal system of Greece



Implementation of the UNEP mercury program (I)

Solid waste inventories :

This is part of the inventory kept by the Ministry of Environment, Energy and Climate Change, for the Hazardous Waste Management Bodies. In this inventory, companies that are permitted to manage hazardous waste are registered. Data concerning the hazardous waste managed by each company are kept (EWC codes, quantity, final disposal sites etc). Data regarding mercury waste (and more specifically mercury vapour lamps and mercury lamps) exported to EU member states for recycling have been submitted and included.

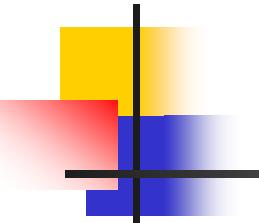


Implementation of the UNEP mercury program (II)

Water quality control (inland and coastal waters):

The General Chemical State Laboratory monitored surface water quality for the period 2006-2008. Hg levels were monitored, together with a number of other parameters, at approximately 200 monitoring points, 4 times/year. These monitoring points correspond to lakes and rivers located at the different regions of Greece. There were very few exceedances observed during this period. More specifically, exceedances were observed at six monitoring points in 2007 and at one monitoring point in 2008.

Furthermore, very recently a National Monitoring Program has been established for the assessment of the status of surface and ground water by the Ministry of Environment, Energy and Climate Change. Mercury, among other parameters, is one of the priority substances that is systematically monitored at approximately 315 surveillance and operational monitoring stations through the National Monitoring Program.

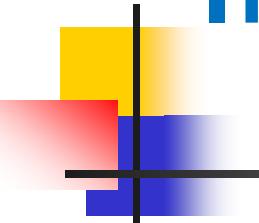


Mercury waste management

Two collective systems are authorised by the Ministry of Environment, Energy and Climate Change for the alternative management of lamps:

- ➡ Recycling Appliances S.A.
- ➡ Fotociclosi S.A.

Both systems have established collection facilities all over the country (i.e. sites at Municipalities, retailers, public services, schools etc). The systems are operated in conformity with the WEEE legislation (Presidential Decree 117/2004).



Industrial processes and production of mercury containing products

There is a chlor-alkali industry using mercury cell process in Thessaloniki (Hellenic Petroleum S.A.)

Hg emissions for 2011:

- (1) In the products: 2.690 Kg Hg
- (2) In wastewater: 1.000 Kg Hg
- (3) Aerosol emissions: 1.046 Kg Hg

TOTAL (1+2+3): 4.7 Kg Hg or 0.12 gr Hg / tn Chlorine capacity (39900 tn/year)



Thank you for your attention!