

# **REPRESENTATION on application for IPPC Permit relative to DELIMARA POWER STATION EXTENSION**

**Joint Submission on behalf of :  
Marsaxlokk Local Council  
Birzebbuga Local Council  
Żejtun Local Council**

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Date: 6<sup>th</sup> October 2011

**Ref: IP 0002/07/A  
PA 4854/09**

## **Representation on application for IPPC permit IP 0002/07/A**

**Site:** Delimara Power Station, Marsaxlokk.

The basis of this representation is the documentation submitted to the Local Councils and made Public on the MEPA website.

This submission is being made notwithstanding that the affected Local Councils consider that the permitting process is defective. The studies submitted for their consideration should have been available before the tendering stage for the equipment required at the Delimara power station extension. As things stand at the moment a Planning permission has been issued by MEPA whilst Enemalta Corporation has selected its preferred equipment irrespective of the decision still to be taken by MEPA on the IPPC permit application.

These representations are being submitted within the limited time made available by MEPA for consultation. Only the minimum time allowable of 30 days was allowed for consultation between the Enemalta last submission of the 7<sup>th</sup> September 2011 and the extended deadline of the 7<sup>th</sup> October 2011. This despite that Enemalta had applied since 1<sup>st</sup> February 2010 for this permit. A longer consultation period would have made it possible for further in depth analysis of the documents submitted.

## **SUBMISSIONS**

The Local Councils of Marsaxlokk, Birzebbuga and Żejtun submit for your consideration the following three documents, namely:

Document A : Technical Submission authored by Engineer Arthur Ciantar

Document B : The Delimara Power Station Extension Cost Benefit Analysis (CBA) for the IPPC Permit, authored by Dr Edward Mallia  
Document C : Health Effects Associated with Ambient Air Pollution, authored by Dr Jason J.Bonnici.

The Local Councils of Marsaxlokk, Birżebbuġa and Żejtun consider it appropriate to highlight a number of points resulting from the abovementioned reports.

### **PM<sub>2.5</sub> emissions**

The first point is in respect of the maximum limits of particulate matter established by Directive 2008/50/EC namely the Directive on ambient air quality and cleaner air for Europe.

The attention of MEPA is drawn to Annex XIV of the said Directive which establishes 25µg/m<sup>3</sup> as the upper limit of exposure to PM<sub>2.5</sub> which had to be met by the 1<sup>st</sup> January 2010.

In the document entitled “Air Dispersion Modelling of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, Metals and Benzo-a-Pyrene from Delimara Power Station” on page 17 thereof the average daily reading for PM<sub>2.5</sub> is quoted as being 52.70 µg/m<sup>3</sup> for Marsaxlokk and 34.70 µg/m<sup>3</sup> for Birżebbuġa. On the other hand the maximum readings for PM<sub>2.5</sub> is quoted as being 149 µg/m<sup>3</sup> for Marsaxlokk and 61µg/m<sup>3</sup> for Birżebbuġa.

These readings are well in excess of what is permissible in the above quoted EU directive and is clear proof that the target of not exceeding a measurement of 25µg/m<sup>3</sup> as of the 1<sup>st</sup> January 2010 has not been met.

Given that article 15 and Annex XIV of the EU Directive above quoted establish that member states shall take all necessary measures not entailing disproportionate costs to reduce exposure to PM<sub>2.5</sub> it follows that the minimum expected of MEPA is not to approve IPPC (or other) permits which increase exposure to PM<sub>2.5</sub> emissions unnecessarily.

As pointed out in the enclosed document A in Table 5.3 the use of Heavy Fuel Oil by the proposed extension of the Delimara Power Station will increase the emissions of PM<sub>2.5</sub> by 63.49% over and above the emissions of the existing Delimara Power Station. The PM<sub>2.5</sub> emissions which would result if gasoil is used in the proposed extension would only increase by 39.52% (Document A, pages 10-1)

### **PM<sub>10</sub> emissions**

The second point in line with the first point above concerns PM<sub>10</sub> emissions. The attention of MEPA is drawn to Annex XIV of the said Directive which establishes 35µg/m<sup>3</sup> as the upper limit of exposure to PM<sub>10</sub>.

In the document entitled “Air Dispersion Modelling of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, Metals and Benzo-a-Pyrene from Delimara Power Station” on page 16 thereof the average daily reading for PM<sub>10</sub> is quoted as being 54.10 µg/m<sup>3</sup> for Marsaxlokk and 70 µg/m<sup>3</sup> for

Birżebbuġa. On the other hand the maximum readings for PM<sub>10</sub> is quoted as being 154 µg/m<sup>3</sup> for Marsaxlokk and 250µg/m<sup>3</sup> for Birżebbuġa.

Even in respect of PM<sub>10</sub> emissions MEPA has targets set by the EU which are not being met.

Attention is drawn to the Air Quality Plan for the Maltese Islands. Whilst Appendix 2 details the measures which are to be taken to reduce PM<sub>10</sub> emissions these emissions are still substantially above the permissible limits even if the statistical limits have not been exceeded.

### **Health impacts**

Attention is drawn to Document C on the Health Effects Associated with Ambient Air Pollution and in particular to the correlation between pollution and mortality rates primarily but not exclusively as a result of lung cancer and cardiopulmonary impacts. It would be pertinent to draw attention to page 21 of the said report which draws on US studies to point out that for every 10µg/m<sup>3</sup> increase in fine particulate air pollution is associated with a 4% increased risk in all cause mortality, a 6% increased risk of cardiopulmonary mortality and an 8% increased risk of lung cancer mortality.

### **Tariffs for consumption of electricity**

Attention is drawn to Document B entitled “The Delimara Power Station Extension Cost Benefit Analysis (CBA) for the IPPC Permit” as well as Document A on page 17 which clearly show that the use of gasoil at the Delimara Power Station extension will see reduced costs when compared to the costs currently incurred at Marsa Power Station through the use of HFO to generate electricity.

In view of the above as well as in view of the contents of the attached documents Document A, Document B and Document C it is submitted that :

- 1) the existing air quality at Marsaxlokk and the surrounding localities of Żejtun and Birżebbuġa, in particular that related to PM<sub>10</sub>, PM<sub>2.5</sub>, is already very worrying and it is in this context the duty of MEPA not to make it any worse through approving technology using HFO which further increases PM<sub>10</sub>, PM<sub>2.5</sub> emissions thus making an already bad situation worse,
- 2) the use of gasoil instead of HFO will reduce substantially PM<sub>2.5</sub> emissions,
- 3) the use of gasoil instead of HFO will eliminate the solid waste which would be produced if HFO is used,
- 4) there will be no increase in tariffs for the consumption of electricity if the HFO currently utilised at Marsa Power Station is substituted with gasoil in the Delimara Power Station extension,
- 5) the equipment in place at the Delimara Power Station extension can be run on both HFO and gasoil.

It is hence requested that in considering the IPPC permit to be issued for the Delimara Power Station MEPA directs Enemalta to opt for the use of gasoil until such time that the necessary infrastructure is in place to consider the use of gas.

**Edric Micallef  
Perit**

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