

From mike Woodfield the 10 March 2006

Dear Ms Hornibrook,

Further to our telephone conversation just now, thank you for your email of 20 Jan (below) inviting UKPIA to comment on the EGTEI costs of abatement. This is the first time UKPIA has been invited to comment on this data, and we appreciate the opportunity. UKPIA is the trade association representing the oil refining industry in the UK, and our members own and operate all the UK's major crude oil refineries.

We have not been able to check the data sheets thoroughly, but instead have looked at a few of the key parameters. You may be aware that UK refineries are in the final stages of making IPPC applications to the Environment Agency and SEPA, and some of these costs have been discussed by the trade association with the Environment Agencies in the course of development of UK IPPC guidance.

As a general point, we are considering the total installed project cost of retrofitting abatement on existing plant at existing refineries, together with the cost of providing additional utilities and waste treatment. There is an assumption that physical space can be made available - although in reality this will sometimes be in doubt, and may lead to higher costs.

Of especial note is the cost of retrofitting wet gas scrubbing on Fluid catalytic cracking units, given as k?8000. This capital cost seems grossly too low. Detailed cost estimates prepared by the major project department of a large multinational for retrofitting WGS on a large (75,000b/d, 3.5mta) FCCU including the costs of associated utilities and effluent treatment indicate around £45m, or ?60m. Such costs have been discussed with the UK Environment Agency on Nov 22 2005 and for more normal size units (say 2mta feed) capital costs of £30+ were agreed.

Another key abatement technique is the addition of tail gas treatment to sulphur recovery units. We understand installed costs are likely to be around £20m, or three times the cost indicated of k? 10,000.

We hope these comments are helpful.

Yours sincerely,

Ian McPherson
Director Environment, Health and Safety
UK Petroleum Industry Association
Tel 020 7632 9883

-----Original Message-----

From: Sheila Hornibrook [mailto:sheila.hornibrook@aeat.co.uk]

Sent: 20 January 2006 14:45

To: Sheila Hornibrook

Subject: Notification to Trade Associations

Dear Sir

Cost of emission abatement - Sector Specific Synopses

You may recall that some time ago I circulated a letter bringing your attention to the work of the UN ECE Expert Group on Techno-economic Issues (Egtei) and their need for cost of emission control information at a sector level - see attachment. Egtei, together with other EC and UNECE expert groups, provides information that is used by the UN ECE, the European Commission and Member States in the further development of air quality management policy.

The detailed background documents that I referred to in my original letter have now been summarised in an attempt to assist Member States and Industrial groups provide cost of control information or verify the default factors commonly used. I attach the Synopsis sheet of most relevance to your sector. Should you wish to submit sector information or to propose amended default factors you are invited to respond directly to the Egtei secretariat via the CITEPA web site http://citepa.org/forums/egtei/egtei_index.htm. As before the Defra wishes to take a UK view so it would be useful if you could also copy any responses to Defra via: sheila.hornibrook@aeat.co.uk

Yours faithfully

Mike Woodfield

UK delegate to the UNECE CLRTAP Expert Group on Techno-Economic Issues (Egtei)

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