

13 June 2007

Mr. Hans Jürgen Stehr
Chair, CDM Executive Board

c/o CDM Secretariat
sent by email

**Comments on request for review
for request for issuance of CERs for 0003 HFC Decomposition Project in Ulsan**

Dear Mr. Stehr

On behalf of all the participants of 0003 HFC Decomposition project in Ulsan, I am writing to make comments on the recent "request for review by CDM EB" for our request for issuance for the CDM project dated 7th June 2007.

The request for review concerns the emission coefficients for natural gas, steam generation and electricity consumption, and the requirement to clarify if the coefficients have been reviewed in line with the Monitoring Methodology Ver.2.

Electricity Coefficient

The PDD quoted 2001 KEPCO (Korea Electric Power Corporation) emission coefficient of 0.770 kg-CO₂/kWhr from 'Yearbook of Energy Statistics 2002'.

The only statistics available to the participants, currently, are for 2001 and 2005, as there is no data for 2004. The 2003 data is not applicable as the Decomposition facility was not operating. The 2005 data was published in mid 2006. The 2006 data is available mid 2007.

The 8th request for issuance of CERs, subject to request for review used 2005 KEPCO (Korea Electric Power Corporation) emission coefficient of 0.7559 kg-CO₂/kWhr from 'KEPCO (Korea Electric Power Corporation) 2006, Statistics for Electric Power in 2005'. This was the latest available data when the report was submitted.

The 6th (1st July-30th September 2006) and 7th requests also used the same source 'KEPCO (Korea Electric Power Corporation) 2006, Statistics for Electric Power in 2005', as the 2006 data (due to published in mid 2007) was not available.

The emission coefficient used in all previous requests for issuance was that referenced in the PDD. The 1st request for issuance of CERs was for the period 1st January 2003 until 31st March 2005, with the destruction facility operating from March 2004.

The 5th request dated 10th July 2006, might have used the 2005 statistics instead of the 2001 statistics. This would have reduced the emissions due to electricity from 14.4 to 14.1 tonnes CO₂. The use of the 2001 statistics resulted in a more conservative emission value, although the differences are extremely small.

In addition all the emission factors used are conservative, as they exclude nuclear power. If nuclear power was included the emission factor would be about 0.42 kg-CO₂/kWhr. The fossil fuel only factor was deliberately selected in the PDD (see page 63), as the Korean network consists of a single grid, and to take account of additional electricity consumption required potentially being fossil fuel.

Natural Gas Coefficient

The PDD discusses the natural gas composition and emission coefficient (page 65). This discussion concluded that the any variation in composition would lead to a negligible change in the emission factor, and it has been treated as a fixed emission factor for all the monitoring reports. The natural gas emission factor depends on the composition of the gas, with the small variations in natural gas composition leading to negligible changes.

To confirm that the natural gas emission factor can be treated as fixed, the composition given in the PDD on page 64 was compared with the average composition for September 2006, published by the gas supplier. The emission factors are compared for these compositions and confirm that the difference in calculated emissions is negligible. See the Appendix for the composition comparison.

Impact on Emission Calculation for Monitoring Report 8

Q_NGy Nm3	E_NGy	Emissions tonnes CO2	Comment
28398	0.00224	63.65	Used in Monitoring Report 8
28398	0.00223	63.45	Using Sept 2006 Emission Coefficient

Steam Coefficient

The PDD discusses the steam co-efficient on page 64. The steam co-efficient is calculated from the specification of the decomposition facility and the boiler efficiency. The monitoring methodology AM0001/ Version 2 states:

'The value of E_{Fi} for steam depends on the source of the steam and may vary over time.'

The source of the steam has not changed, and the coefficient is fixed until the source of the steam is changed. So far there have been no changes that affect the steam coefficient. Therefore the same coefficient has been used for all monitoring reports.

For Monitoring Report 8, the emissions due to steam are 3.0 tonnes CO₂.

Summary

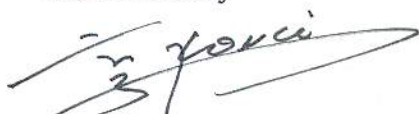
We have reviewed the emission coefficients for electricity, and confirm that we have changed the factor when new data became available. There is one monitoring report where it might have been possible to use an updated factor, but the factor used gave a conservative emission value, and the difference would have been 0.3 tonnes CO₂.

The PDD set out that the natural gas coefficient was to be treated as fixed based on the negligible effect of changes in natural gas composition. The impact of natural gas composition, based on September 2006 data, has been shown to be negligible. However the natural gas composition and emission factor will be checked annually to confirm that any differences are negligible.

The source of the steam has not changed throughout the project to date and therefore no changes to the emission coefficient have been required.

I hope this clarifies the use of emission coefficients for our project and confirms that the requirements have been met.

Yours sincerely



Toru Komai

General Manager,
INEOS Fluor Japan Ltd.

Attachment: Appendix Natural Gas Composition Comparison

Appendix: Natural Gas Composition Comparison

E_NG Calculation					
2006 September Natural Gas Composition					
Compound Fi	Mol %	Mol Wt	Mol Wt Fi	No of C	No of C in Mol Wt of Fi
CH4 (Methane)	90.56	16	14.489	1	0.90556
C2H6 (Ethane)	5.66	30	1.698	2	0.11323
C3H8 (Propane)	2.52	44	1.109	3	0.07559
I-C4H10 (I-Butane)	0.51	58	0.297	4	0.02049
N-C4H10 (N-Butane)	0.54	58	0.313	4	0.02157
I-C5H12 (I-Pentane)	0.02	72	0.011	5	0.00076
N-C5H12 (N-Pentane)	0.00	72	0.003	5	0.00022
N2 (Nitrogen)	0.19	28	0.054	0	0.00000
CO2 (Carbon dioxide)	0.00	44	0.000	1	0.00000
TOTAL	100.00		17.974		1.13743
E_NG = MW of CO ₂ / (MW of Fi / C in MW) =			2.784450	t-CO ₂ /t-NG	44/(17.974/1.13743)
			0.00223	t-CO ₂ /Nm ³	2.784450/22.4/1000*17.974
PDD (page 64) Natural Gas Composition					
Compound Fi	Mol %	Mol Wt	Mol Wt Fi	No of C	No of C in Mol Wt of Fi
CH4 (Methane)	88.91	16	14.226	1	0.88910
C2H6 (Ethane)	8.93	30	2.679	2	0.17860
C3H8 (Propane)	1.34	44	0.590	3	0.04020
C4H10	0.74	58	0.429	4	0.02960
C6H12	0.06	84	0.050	6	0.00360
N2 (Nitrogen)	0.02	28	0.006	0	0.00000
CO2 (Carbon dioxide)	0.00	44	0.000	1	0.00000
TOTAL	100.00		17.979		1.14110
E_NG = MW of CO ₂ / (MW of Fi / C in MW) =			2.792551	t-CO ₂ /t-NG	44/(17.979/1.1411)
			0.00224	t-CO ₂ /Nm ³	2.792551/22.4/1000*17.979