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6th October, 2004.

Mr Jean-Jacques Becker, Chair
CDM Methodologies Panel
c/o CDM Secretariate,
UN Framework Convention on Climate Change

by email

Dear Sir

As you might be aware, Gujarat Fluorochemicals Limited has submitted a request for registration of its Project for GHG emission reduction by thermal oxidation of HFC23, in Gujarat, India. This project uses AM0001, and was the first CDM project to request registration.

We understand that the Executive Board, at its 15th Meeting, has, taking into consideration information that has emerged since the approval of AM0001, agreed to request the Methodologies Panel to review the said methodology and make a recommendation on the possible revision in order to address, inter alia, the potential leakage. We also understand that the Executive Board has opened a call for public input in relation to the same.

Our understanding is that the possible revision in AM0001 shall not affect our project, since our project was validated and had requested registration much before the Executive Board agreed to request the Methodologies Panel to review the AM0001.

However, we believe the Methodologies Panel should have sufficient information to facilitate a meaningful review process. We also believe that, being engaged in the business of HCFC22 manufacture for the past several years, we can add value to the quality of this information. We therefore take the liberty of responding to the call for inputs, and are pleased to make this submission.

The submission consists of four parts:

- Some broader issues which potentially impact the entire CDM process
- Some specific issues around AM0001
- Issues specifically indicated to be helpful in the call for inputs
- Conclusions and recommendation

We shall be grateful for the Methodologies Panel to take into consideration the inputs provided through this submission. We shall be pleased to provide any further clarifications as may be required.

Yours sincerely
For Gujarat Fluorochemicals Limited

deepakasher
Deepak Asher
Vice President (Corporate Finance)

Copy to

Mr John Kilani, Chair CDM Executive Board UNFCCC Secretariate	while this submission is made in response to the call for inputs by the Methodologies Panel, a copy of this submission is also marked to you, since it is believed that some of the issues impact upon the whole of the CDM process, and not just AM0001

1.0 Some broader issues which potentially impact the entire CDM Process

1.1 Adherence to the laid down public consultation process

The approval of methodologies, and the validation of projects, involves a well laid down public consultation process. The approval of AM0001, as well as the two projects that have already requested registration, have successfully undergone the public consultation process as defined. Indeed for AM0001, as well as the two projects that have been validated and have requested registration, no negative comment was received during public consultations. The information that has emerged, leading to the decision to review AM0001, was received, in private, outside the defined procedures for stakeholder input and several months after the expiry of the stipulated period for public comments. Accepting comments outside the laid down procedure, creates uncertainty about the public consultation process. In fact, it goes directly against para 30b of the EB15 report, which states that only comments received within the public consultation period should be considered. It is suggested that, consistent with this decision of the Executive Board, such information should be considered only if, and when, submitted through the formal public consultation process for approval of methodologies and registration of projects.

1.2 "Leakage" outside the project boundaries

It is understood that the Methodologies Panel is asked to consider the issue of "leakage" arising out of potential increased HCFC22 production. HCFC22 is produced for sale and consumption outside the boundary limits of the project. Considering such "leakage" (assuming it was to occur), as attributable to the project could have several wide-ranging ramifications, across all projects and all methodologies. All approved methodologies would need to be reviewed to consider the impact of possible increased production due to CDM subsidizing the cost of production. Since all CDM projects should lead to sustainable development in the host country, the impact of sustainable development caused by the CDM project on such leakages would then also need to be considered. All methodologies would probably need to be placed on hold till such review occurred. Such suspensions, reviews and possible revisions would seriously undermine the confidence of all stakeholders in the CDM process and delay project development and investment. Some experts feel that this will undo all the progress made till date, and set back the CDM development process by another two years.

1.3 Kyoto gases

So far, all participants have considered CDM to be limited to the six Kyoto gases. If the concept of "leakage" is expanded to cover the non-Kyoto gases (HCFC22), this will represent a fundamental change in the interpretation of CDM, possibly opening CDM to all greenhouse gases. This in turn could throw up several challenges in terms of methodologies and measurement, lending further uncertainty to the process.

2.0 Some specific issues around AM0001

While full information on the subject is not publicly available, it appears that the primary concern that may have been expressed is that the CERs granted to HFC23 destruction projects could possibly lead to a perverse incentive to maximize production of HCFC22 and, since HCFC22 is a greenhouse gas, also governed by the Montreal Protocol, the suggestion seems to be that the "leakages" due to increased HCFC22 should be considered in review of the Approved Methodology AM0001.

2.1 Whether CDM could lead to increased HCFC22 production

HCFC22 demand is a derived demand. Its key application (around 70% today) is in the refrigeration and air-conditioning (RAC) equipment sector. The demand for HCFC22 therefore largely depends on Original Equipment Manufacture (OEM) demand and replacement use for RAC equipment.

The cost of HCFC22, however, constitutes a very insignificant part of the RAC equipment cost (<1%). Therefore, any price change in HCFC22 does not materially impact RAC equipment cost, and therefore price. For this reason, HCFC22 demand in the RAC sector is historically known to be insensitive to HCFC22 price.

The balance HCFC22 production (around 30% today) goes in PTFE manufacture where the issue of increase in use of HCFC22 is irrelevant both from the Montreal Protocol and Kyoto Protocol perspectives. Since HCFC22 is used as a raw material (feedstock) in PTFE manufacture, it gets fully transformed, and hence leads to no ozone depletion or global warming. Moreover, PTFE today is the lowest price fluoropolymer derived from TFE and therefore still lower HCFC22 price (due to CDM) is not expected to have a significant impact on demand.

Therefore, even if it is argued that CDM would reduce HCFC22 cost of production, this is not expected to impact HCFC22 demand materially, at a global level.

2.2 Whether global warming potential of incremental HCFC22 must be considered in determining CERs issued for HFC23 destruction

It is possible to argue that CDM may make some plants more competitive than others, and hence, could lead to increased HCFC22 production at these plants. Therefore, the argument could possibly go, the global warming potential of the increased HCFC22 production must be considered for determining the CERS that these plants would be eligible to.

However, it must be recognized that since increased HCFC22 production at these sites would be matched by a corresponding reduction in HCFC22 production elsewhere (based on the premise that CERs will not cause global HCFC22 production to increase – see 2.1 above), there would not be any impact on global warming caused by increased HCFC 22 production due to the CDM project activity.

Secondly, it must also be recognized that most of the HCFC22 production facilities in India and China, due to their inherent cost competitiveness, have had reasonably healthy production growth rates. Since these growth rates were achieved without

CDM, it would be reasonable to assume that these production facilities would have continued to grow at the rates achieved in the past. Hence only the HCFC22 production in excess of such projected production levels could be said to be attributable, if at all, to the CDM project activity.

Thirdly, many HCFC22 production facilities are swing plants – manufacturing CFCs in one production campaign, and HCFC22 in another, using the same production assets. Many of these facilities are running at close to peak capacity, and hence, have been able to increase HCFC22 production due to reduction in CFC manufacture. Considering that CFC has a global warming potential much higher than HCFC, from a methodological perspective, for swing plants, the increased HCFC22 production would actually reduce global warming, due to reduction in CFC production.

Lastly, not all incremental HCFC22 production could lead to global warming. As stated earlier, HCFC22 used in PTFE as feedstock does not have any global warming potential. Around 30% of HCFC22 is presently used in PTFE manufacture, and this is expected to go up to around 50% of HCFC capacity by 2010. Furthermore, some HCFC22 may be used in countries where it will be recycled or destroyed in Montreal Protocol driven recovery / destruction schemes.

The definition of leakage requires it to be measurable. Considering all the above arguments, it is anticipated that there would be no real measurable incremental leakage caused by possible increased HCFC22 production due to CDM.

2.3 Whether CDM could lead to non-compliance with the Montreal Protocol

The Montreal Protocol stipulates a phase-out schedule for all ozone depleting substances, including CFCs and HCFCs. Different phase-out schedules have been prescribed for developed countries and developing countries, for different ODSs, depending on their ozone depleting potential. However, the Montreal Protocol regulates production of ODS only for non-feedstock use.

There are no controls on production and use of HCFC22 as feedstock (for PTFE), and this will primarily depend on demand for PTFE. As stated, PTFE demand is around 30% of total HCFC22 demand today, is expected to grow at about 3% to 4% globally. By 2010, PTFE is expected to require over half the HCFC22 production capacity.

All countries that are signatories to the Montreal Protocol (and its amendments) are committed to adhere to the production and consumption phase-out schedules as prescribed under the Montreal Protocol. Compliance to the Montreal Protocol is assured through rigorous local legislation, including, in some countries like India, a quota system, and frequent audits. All signatories to the Montreal Protocol are found to have adhered to the phase-out schedule for CFC production and no major production related non-compliances are known to have been reported.

In fact, on the contrary, in the case of CFC phase-out, several developing countries have experienced lower CFC demand compared to the allowed consumption limits in

the respective countries under the Montreal Protocol, due to market dynamics. RAC equipment manufacturers had started making equipment, which requires non-CFC refrigerants, much ahead of the phase-out schedule, and this has led to much faster demand shrinkage than expected. This has happened despite CFC prices being lower than those of some of the current substitutes.

A similar trend is expected to arise in HCFC22 consumption in the RAC segment. Under the Montreal Protocol, developed countries are required to phase-out OEM use of HCFC22 rapidly. Developed countries have legislated regulations much ahead of these requirements and accordingly Western MNCs have started to standardize equipments, which use non-HCFC refrigerants.

This move will also quickly spread to developing countries like China, which make and export sizeable numbers of RAC equipment to developed countries. In fact, most RAC equipment manufacturing MNCs have large production bases in South East Asian countries.

Hence market dynamics (demand from developed countries and the need to standardize equipment), as in the case of CFCs, are likely to phase-out HCFC22 in the RAC sector much faster than permitted under the Montreal Protocol.

Based on the historical experience of CFCs, there is no reason to apprehend non-compliance for phase-out of HCFCs. The experience with CFCs shows that irrespective of cost and price considerations, phase-out schedules are not only adhered to, but also, in fact, complied with faster than mandated.

3.0 Issues specifically indicated to be helpful in the call for inputs

3.1 Possible alternative approaches to assessing the baseline scenario for destruction of HFC23 in the HCFC22 industry

In our view, the approach used in AM0001 for assessing the baseline scenario is quite appropriate, for the following reasons:

a) It uses the actual historical emissions for the past three years as a cut-off ratio. These plants use expensive raw materials, and hence, if it was technologically feasible and commercially viable to implement technologies to reduce the cut-off ratio, commercial enterprises driven by profit motive would have done this. Therefore, taking actual historical emissions ensures that CERs are restricted to emissions that actually arose in the past, and reflect a "business as usual" scenario.

b) Using data for the past three years (for the two validated projects using this methodology, this refers to 2000, 2001 and 2002) ensures that the data pertains to a period during which the project developer had no knowledge of CDM and hence, the cut-off ratio would not be influenced by any perverse incentive due to knowledge of CDM.

c) Only the lowest cut-off ratio of the last three years is used – this ensures conservatism in approach.

d) The actual cut-off ratio is capped to the IPCC default of 4%. Hence, if plants achieved a cut-off ratio lower than 4%, the lower number actually achieved would apply. If, on the other hand, they achieved a cut-off ratio of higher than 4%, it would be capped at 4%. This ensures that inefficient plants are not unjustly rewarded.

e) For a new plant, or where no historical data is available, the lower of the IPCC default value is used as the cut off ratio.

g) It recognizes that if any of the HFC23 is required to be destroyed by regulations, AM0001 reduces the cut-off ratio to the extent of HFC23 so required to be destroyed.

h) Lastly, to exclude the possibility of manipulating the production process to increase the quantity of HFC23, CERs are allowed only based on actual emission reduction, which are independently verified, by accredited DOEs, but subject to a maximum ceiling of the cut off ratio as determined above. This ensures that projects cannot claim higher credits by increasing emissions later.

3.2 Common practices in this industry, complementing previously available information

Common practices in the HCFC22 industry dealing with HFC23, include the following:

a) Where required by legislation, HCFC22 manufacturing units control or destruct HFC23 emissions. However, in most non-Annex I countries where HCFC22 capacities exist, there is no legislation to control or destruct HFC23 emissions. In fact, AM0001 recognizes that absence of HFC23 destruction is the typical situation in non-Annex I countries.

b) Where there is a known and viable market for HFC23, these units capture HFC23 for sale. There is known to be a negligible world market for HFC23.

c) Where it is technically feasible and commercially viable to implement technologies for reduction of HFC23 emissions, HCFC22 manufacturing units would do this, to optimise on raw material efficiencies and cost of production. These technologies are not known to be widely available, or commercially feasible.

d) Where there is no legislation to control HFC23 emissions, or a known or viable market for HFC23, units emit HFC23 into the atmosphere. Probably all HCFC22 plants in non-Annex I countries fall in this category.

In fact, AM0001 explicitly recognises that in absence of regulations requiring HFC23 destruction, it is typically released into the atmosphere because a destruction facility entails significant capital expenditure and operating costs, and the host entity has no direct economic incentive to incur these costs.

3.3 Possible impacts of such project activities on the supply and demand of HCFC22

Already dealt with at length under 2.1 above. Even if it is argued that CDM would reduce HCFC22 cost of production, this is not expected to impact HCFC22 demand materially, at a global level.

4.0 Conclusions and recommendation

Though the matter under consideration should not apply to the two projects using AM0001 that have been duly validated while AM0001 was in force and were submitted for registration prior to the decision to review the approved methodology AM0001, we strongly urge that AM0001 should be reinstated without any material change, for the reasons stated hereinabove.