

HINDUSTHAN NATIONAL GLASS & INDUSTRIES LTD.

Registered Office: 2, Red Cross Place, Post Box: 2722, Kolkata - 700 001, India Tel.: 2254-3100, Gram: "GLASSAGE", Fax: (91)(33) 2254-3130 E-mail: hngkol@hngil.com Website: www.hngindia.com



UNFCCC Secretariat Martin-Luther-King-Strasse 8 D-53153 Bonn Germany

Kind Attention: CDM Executive Board

Re: Response to request for review "Fuel efficiency improvement in glass melting (1018)"

Dear Members of the CDM Executive Board,

We enclose the response to requests for review on issuance of the above project. As requested, we provide below the answers to your observations. The DOE have turned in their replies separately. We appreciate your queries and have done our best to provide you with answers.

Comments

1. The monitoring report states that "the weight of glass bottles produced is checked at regular frequency at calibrated weighing machine and recorded regularly...". Further clarification is required on the exact frequency of the measurement and how the DOE has verified the calibration for the equipments measuring parameter MGy (molten glass produced in the furnace).

Response

As reported in the monitoring report, the molten glass produced in a furnace (MGy) is calculated by multiplying all measured values of 'rate of machine output', 'total hours of machine operation' and 'weight of glass produced'.

Rate of machine output or the rate at which glass bottles are produced from molten glass (bottles per minute (BPM)) is measured by in-build auto program based drive control system supplied by international suppliers. The digital reading showcased at each machine actually counts number of cuts per minute and number of gobs produced during each cut. On multiplying the two counts, the machine displays number of bottles produced per minute. This is then recorded in an on-line computer system and archived continuously. For manual verification, the machine operator also records the same once in every two hours for management reporting.

Similarly, 'total hours of machine operation' in a day is logged by shift operators in shift log-books.



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And the weight of bottle produced during each cut per minute from number of gobs, is measured both at hot end as well as at cold on random sampling basis once in every two hours with the help of weighing machines. These weighing machines are calibrated every year using metal weights, calibrated by Weights and Measure Department of Govt. of India, also once in a year.

The calibration certificates were shown to the verifier during verification.

2. Clarification is required on the calibration for the equipment(s) measuring cullet %.

Response

Please note that "Cullet (%)" is a calculated value obtained as a percentage of "total broken glass" to "total feed to the furnace" for production of molten glass. The "total weight of broken glass" and the "total weight of soda-lime silica glass" fed into the furnace are weighed by weighing machine connected to the load cell of the respective conveyor belts carrying the raw materials. These are then logged on the daily log-sheets maintained at the plants. The weighing machines are calibrated on annual basis using physical weights, calibrated by Weights and Measure Department of Govt. of India, also once in a year.

With this, we hope we have been able to provide all details required against your queries. Should you need to contact us for any clarification, please do not hesitate to call our contact person given below: -

Mr. Rajeev Dutta Hindusthan National Glass & Industries Ltd. 2 Red Cross Place Kolkata - 700 001

Cell: +91 98368 34734 Tele: +91 33 2254 3113 (D) Fax: +91 33 2254 3130