Pfizer Biotechnology Ireland
PO Box 19
Shanbally
Ringaskiddy, Cork
(address for correspondence)
-Website: www.pfizer.ie

Pfizer Biotechnology Ireland

Reg .No. P0846-01 3rd December, 2008,

Dear Ms. Kehoe.

Further to the Agency's request for additional information in respect of particulate emissions please find clarification below.

(i) Facility HEPA filtered vents:

There are 5 down-flow booths provided to address the sampling and dispensing of powders. 3 of these booths are located in the Warehouse; Sampling, Buffer Dispensing and Media Dispensing. 2 further booths are located on the 2nd floor of the production area; Media Prep and Small Scale Buffer Prep.

The down-flow booth operates on a re-circulatory airflow principle. A clean down-flow of air is supplied from the ceiling via HEPA (High Efficiency Particle Arrestor) filters suppressing any dust away from the operator's breathing zone.

Louvered grilles in the lower rear wall capture airborne contaminants and filter the air via three stage filtration. This comprises of primary roughing filters, secondary bag filters and finally HEPA filters. Airflow then routes back overhead to discharge over the operator's head, providing a nominal evenly distributed downflow. This provides a continued down-flow to suppress dust below the operator's breathing zone into the extract area.

The Booth operates with inward airflow, ensuring airborne contamination cannot escape into the external environment and make-up air can only enter the Booth at low level.

Included within the booth are pressure indicating devices to monitor the performance of the extraction together with automatic control of the variable speed fans to maintain optimum operating conditions.

All such booths are contained within the facility and re-circulate air within the facility, through the coarse and HEPA filters. There are no emissions to atmosphere from such booths.

The powders handled in these areas are detailed in Table G.1(i) Details of process related raw materials, intermediates, products etc. used or generated on site.

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(ii) Resource Utilisation

Mains Water Usage

Mains Water usage is estimated to average approx. 125 m3/day. This reconciles with the normal daily average waste figures provided (at approx. 120 m3/day)

Water Usage	
Plant process Utilisation	119 m^3
Sanitary Outfall 1	3 m^3
Sanitary Outfall 2	3 m^3
Total (per day)	125 m^3

Electrical Usage

Electrical Usage is estimated at approx. 4.8 Million kWh annually. However based on the maximum projected load summary the facility has a capability to use up to 12.5 Million kWh annually.

Gas Oil Usage

Oil is used as a source of fuel for the Emergency Generator only. Based on the consistency of electrical supply in the local area, the projected usage per annum is very low at 2.65 m^3 stored and 15.9 m^3 annual usage. This information replaces that included in table G.1(i) - 35U which is incorrect (refers to tonnes rather than m^3).
This equates to 188 MWh (Mega Watt Hours).

Natural Gas Usage

There is no natural gas storage on site. It is piped directly from the Bord Gais mains. Based on an estimated annualised average of 50% of the maximum fuel usage rate {see table E.1 (iv) – 50% of (263 + 136) = 199.5 kg/hr}, hourly usage of gas is 0.1995 tonnes/hr or 1,748 tonnes / annum. This information replaces that included in table G.1(i) - 36U which is incorrect. This equates to an annualised thermal energy input of 23,652MWh.