

National Institute for Public Health and the Environment *Ministry of Health, Welfare and Sport*

New PM₁₀ EF for Handling of less drift senstive agricultural products

Kees Peek, Dutch PRTR

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Current situation

- * Although agricultural products can be divided into drift-sensitive (e.g. flours) and less drift-sensitive products (e.g. soy beans) there is only 1 general EF included in the Guidebook at this moment
- * This EF of 24 gr/ton product can be found in: 2.H.2, Food and beverages of the 2016 Guidebook
- Derived from a study by Vrins (1999).



Study to determine a PM₁₀ EF for Handling of less drift sensitive products - 1



- The aim of this study was to determine a PM10 EF for less drift sensitive products
- Location measurement campaign: IGMA, a bulk terminal in Amsterdam's harbour, is specialised in the transhipment of agricultural products, coal and minerals.



Study to determine a PM₁₀ EF for Handling of less drift sensitive products - 2

- Carried out in close consultation with the competent authorities and a Commision which is responsible for including new PM₁₀ EF used in the National system
- Involved products: mainly soy products



Study to determine a PM₁₀ EF for Handling of less drift sensitive products - 3

- Determination is based on:
 - a measured period of 74 days;
 - Number of ships unloaded and measured: 12.
 - Observations took place during 312 hours in time intervals of 10 minutes: This gives a total of 1870 observations and an EF determined for every **10 minutes**

(In the Vrins (1999) study, the measured **time interval** was at least **one hour**).



Study to determine a PM₁₀ EF for Handling of less drift sensitive products - 4

- Finally this resulted in an average EF of 12 gr/ton product
- So, from now on there are 2 EF which can be used to calculate PM10 emissions from Handling of agricultural products:
 - * 24 gr/ton product for **drift sensitive** products
 - * 12 gr/ton product for **less drift sensitive** products



Many thanks for your attention

Are there any Questions ?

For more information you can contact: kees.peek@rivm.nl

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