NeR chapter 3

Requirements and emission reductions

3.1 Introduction

Guidelines on how to read this document
This chapter lists the requirements and measures to be taken in order to limit emissions.
The requirements are specified as general requirements for the various kinds of emissions in §3.2.
In addition, special regulations are given on specific situations in §3.3, §3.4 and §3.5.
§3.6 discusses how to evaluate odour emissions.
§3.7 describes the method of monitoring the emissions.

System used
The information in chapter 3 of the NeR provides the actual content in modular form for the permit requirements. In chapters 1 and 2 it has already been described how this information must be used. In short it comes down to the following.

- Emission reduction must primarily aim at reducing the total mass flow of the substances being discharged.
- Fugitive emissions must be abated as much as possible through process-integrated or source specific measures.
- The necessity to reduce the remaining channelled and quantifiable emissions depends on the volume of the mass flow.
- If the mass flow from the device exceeds the mass flow limit, emission abatement facilities in accordance with Best Available Control Technology must be implemented.
- The proper functioning of these facilities must be ensured, for example, through emission requirements to be specified in the permit.

Interpretation
In interpreting the general requirements the following is important.

- The emission requirements of the NeR must be regarded as an upper limit for concentrations averaged over a period of 30 minutes. This applies with due observance of §2.4. The emission concentrations are monitored in accordance with §3.7.
- In determining the concentration in the waste gases only the air flow which is necessary for the normal process is taken into consideration. Air flows which are mixed with the waste gas flow in order to dilute, cool or otherwise treat it, or which are discharged together with the waste gas flow via the same discharge point may in principle not be taken into consideration in determining the concentration of waste gases. Mixing a stream of air with air or inert gases for – evident – process related technical reasons is exempted from this stipulation. In situations where large quantities of air are used for cooling or drying purposes, it will be necessary to decide on a per situation basis what air flow is relevant in calculating the emission concentration.

Combining air and waste gas flows, compensation and dilution
Compensating emissions by combining waste gas flows and diluting waste gas flows with air in order to comply with the emission standards is not permitted.
Combining waste gas flows to be discharged through one common stack will be considered a form of 'diluting'.

An overview of the classification of substances is given in Appendix 4.5.