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# Key provisions of the draft Administrative Regulation implementing BATs for refineries in Germany

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## Examples of projected amendments of the TA Luft

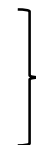
**Example: BREF Refining of Mineral Oil and Gas; note: not part of draft TA Luft 2017; will be published separately as a sectoral Administrative Regulation**

- **Administrative Regulation for Refineries** is currently under consultation and will be concluded soon (together with amendments of 13. Ordinance for Large Combustion Plants)

→ Draft version, tentative, may still undergo a few changes!

- **Content:**

- Combustion units in refineries
- Catalytic Cracking
- Sulphur Recovery Units (SRUs)
- Calciners



BREF Refining of Mineral Oil and Gas

- **Combustion units** (Example: gas-fired installations):

- BAT 34: 30 – 150 mg/m<sup>3</sup> → 150 mg/m<sup>3</sup> as monthly average (so far TA Luft 2002: 200/300 mg/m<sup>3</sup> as daily average value)
- there are 13 refinery sites in Germany operating around 300 combustion units
- 50% regulated by TA Luft (< 50 MW)/ 50% regulated by 13. BImSchV (> 50 MW); for around 140 installations new NO<sub>x</sub>-value is challenging

- **Installations for catalytic cracking:**

- Adm. Regulation proposes to differentiate NO<sub>x</sub> & SO<sub>x</sub> BAT AELs for new /existing units
- emission values proposed adhere to upper end of the BAT-AEL range (BAT 24 und 26)

## 4. Examples of projected amendments of the TA Luft (20)

### Example: BREF Refining of Mineral Oil and Gas (2)

- **Sulphur recovery units (e.g. Claus process)**
  - BAT leads to reduced S emission rates in the Administrative Regulation (1.5% ; 0.5%)
- **Calciner:**
  - 4 Calciners operated in Germany
  - no BAT AELs in the BAT conclusions, only „narrative BATs“
  - transition periods for existing units expired → SO<sub>2</sub> 350 mg/m<sup>3</sup> = 5.2.4 class IV
  - Draft VwV: Dust: ~~30~~ 10 mg/m<sup>3</sup> and existing units ~~40~~ 20 mg/m<sup>3</sup>
- **Integrated emission management („bubbles“ for NOx and SOx)**
  - Combustion unit in refineries
  - Fluid catalytic cracking units (FCC)
  - Sulphur recovery units (SRU)
  - Calciner

	} Bubble 1	} Bubble 2	} Bubble 3 SOx
	NOx	SOx	(only in Germany)
	BAT 57	BAT 58	
- „Bubbles“ BAT 57 and 58: emissions released from the bubble must be equal or less than the sum of the emissions of the single sources if they all would apply BAT
- Provision in Germany: Overall emission of bubble 3, i.e. including calciners, shall not exceed overall SOx emissions of bubble 2

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