

**General information regarding character of Serious Industrial Accident hazard including their potential impact on humans and environment**

| Facility             | Source               | Hazardous Substance | Hazard Characteristics                  | Basic Accident Scenario – Physical Exhibitions |
|----------------------|----------------------|---------------------|---|--|
| CRM                  | RR cistern car 30 t  | Ammonia             | Ammonia Leak while siphoning RR cistern | immediate leak - toxic dispersion              |
|                      |                      |                     |   | continuous leak – toxic dispersion             |
| CRM                  | warehouse 3x30t      | Ammonia             | Ammonia leak from storage tanks         | immediate leak - toxic dispersion              |
|                      |                      |                     |   | continuous leak – toxic dispersion             |
| Coated prod. and Tin | RR cistern car 30 t  | Ammonia             | Ammonia Leak while siphoning RR cistern | immediate leak - toxic dispersion              |
|                      |                      |                     |   | continuous leak – toxic dispersion             |
| Coated prod. and Tin | warehouse 2x30 t     | Ammonia             | Ammonia leak from storage tanks         | immediate leak - toxic dispersion              |
|                      |                      |                     |   | continuous leak – toxic dispersion             |
| Power Engineering    | BF gas holder        | BF gas              | BF gas leak from BF gas holder          | immediate leak of the entire gas holder volume |
|                      |                      |                     |   | continuous leak of the entire volume           |
| Steel shops          | converter gas holder | converter gas       | BOF gas leak from BOF gas holder        | immediate leak of the entire volume            |
|                      |                      |                     |   | continuous leak of the entire volume           |
| Power Engineering    | section A2+C2+C3     | BF gas              | BF gas leak                             | continuous leak - toxic dispersion-            |
| CRM - annealing      | pipeline DN 108      | Ammonia             | Ammonia leak from pipeline              | continuous leak - toxic dispersion.            |
| Power Engineering    | Section F4           | natural gas         | Natl gas leak from pipeline             | continuous leak                                |

## **BF gas**

### Impact on Humans

Extremely flammable gas. May cause or contribute to development of fire; oxidation agent. Toxic when inhaled. May cause dizziness or drowsiness. May damage fertility or damage unborn child. Causes damage of body organs.

Impact on Environment BF gas is toxic for fish.

## **BOF gas**

### Impact on Humans

Extremely flammable gas. May cause or contribute to development of fire; oxidation agent. Toxic when inhaled. May cause dizziness or drowsiness. May damage fertility or damage unborn child. Causes damage of body organs.

Impact on Environment BOF gas is toxic for fish.

## **Ammonia**

### Impact on Humans

Flammable. Toxic when inhaled. Contains gas under pressure, when heated may explode. Causes serious burns and eye damage. Very toxic for water organisms.

### Impact on Environment

May change pH of water ecology systems. Very toxic for water organisms.

## **Natural gas**

### Impact on Humans

Does not possess toxic or poisonous characteristics. Under imperfect combustion may develop poisonous CO gas.

High concentration of natural gas replaces air Oxygen, while lack of Oxygen may cause sudden loss of consciousness and death. High concentrations of the gas or vapors may result in narcotic or anesthetic influence that may lead to undesirable impact of ones' judgement and lead to CNS depression.

### Impact on Environment

Natural gas (methane) and its combustion products are Green House Gases.