



Health, Safety & Environment fact sheet

Yara Ravenna, 2009



Location: Ravenna, Italy

Number of employees: 149

Annual production capacity (ton)

Nitric acid: 500,000

Nitrates: 400,000

NPK: 300,000

Certification:

ISO 9001, ISO 14001

Other systems:

HACCP, EFMA Product Stewardship

Health and safety indicators	
Employee sickness rate (%)	4.4
LTI-rate for own employees	0
LTI-rate for contractors	0
LTI-rate for employees and contractors	0
TRF-rate for own employees	0
Major accidents during the year	0

Plant energy and water consumption	
Energy consumption (MWh)	67,472
Water consumption (m ³)	1,553,593

Emissions and waste	Ton per year	% of permit	Possible impacts
CO ₂ to air	8456.9	-	Climate change, global warming effects
N ₂ O to air	809	-	Climate change, global warming effects
NO _x to air	262	33	Regional acid precipitation and local haze formation
NH ₃ to air	84	35	Regional acid precipitation and local haze formation
F to air	1.5	17	Regional acid precipitation and local haze formation
Dust to air	195	47	Local nuisance and haze formation
N to water	* 217	47	Eutrophication (excess nutrients in waterways and algae blooming)
P to water	* 0.7	2	Eutrophication (excess nutrients in waterways and algae blooming)
Hazardous waste	56	-	
Non-hazardous waste	1995	-	

*Amounts delivered to external treatment plant

Actions for further improvements

- SIL analysis in nitric acid, ammonium nitrate and NPK plants
- Conformance with Yara standards
- OHSAS 18001 certification process
- Project to reduce dust emission from CAN prilling tower and NPK granulation unit
- Optimization of rainwater collection system

LTI (Lost-Time Injury) rate: Number of injuries with absence from work in excess of day of injury, per million hours worked

TRF (Total Recordable Injury) rate: Number of injuries with absence from work + temporary lighter work tasks + medical treatment, per million hours worked

Major accident: Accident leading to fatality, property damage or loss of production in excess of €10 million, significant environmental incident

"Ton" in this document refers to metric ton, equal to 1000 kilograms.