



Health, Safety & Environment fact sheet

Yara Siilinjärvi, 2009



Location: Siilinjärvi, Finland

Number of employees: 326

Annual production capacity (ton)

Nitric acid: 200,000

Phosphoric acid: 300,000

NPK: 500,000

Certification:

ISO 9001, ISO 14001, ISO 18001

Other systems:

HACCP, EFMA Product Stewardship

Health and safety indicators	
Employee sickness rate (%)	5.2
LTI-rate for own employees	0
LTI-rate for contractors	4.5
LTI-rate for employees and contractors	1.3
TRF-rate for own employees	7.1
Major accidents during the year	0

Plant energy and water consumption	
Electricity, own generation (TJ)	553
Electricity, purchased (TJ)	622
District heat production (TJ)	509
Water consumption (m ³)	59,482,000

Emissions and waste	Ton per year	% of permit	Possible impacts
N ₂ O to air	524	-	Climate change, global warming effects
CO ₂ to air	47,704	-	Climate change, global warming effects
NH ₄ -N to air	284	49	Regional acid precipitation and local haze formation
NO ₃ -N to air	111	64	Regional acid precipitation and local haze formation
F to air	4.6	47	Regional acid precipitation and local haze formation
SO ₂ to air	1,306	77	Regional acid precipitation and local haze formation
NO _x to air	143	84	Regional acid precipitation and local haze formation
Dust to air	42	74	Local nuisance and haze formation
P to water	0.6	60	Eutrophication (excess nutrients in waterways and algae blooming)
NH ₄ -N to water	16	180	Eutrophication (excess nutrients in waterways and algae blooming)
Hazardous waste	135	-	
Non-hazardous waste	5,263	-	
On-site landfilling *)	10,164,000	-	

*) gypsum, calcine, rock, sand

Actions for further improvements

- Conformance with Yara standards (TOPS), targets and upper level procedures
- Implementation of behavior-based safety program
- Renovation of NPK circulation water pond in 2010 to reduce NH₄-N emissions to water
- Fertilizer plant emissions root cause analysis ongoing

Community activities

- Plant fire brigade acts a part of local emergency services
- Sponsoring of company sports association and hunting association
- Siilinjärvi has received composted municipal waste for landscaping the landfilling areas

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.