

Project 6F - Manufacture of pharmaceuticals, medicinal chemicals and botanical products

Comments:

CATEGORY	FACTOR	COMMENTS
AIR	aldehydes	poisonous
	ammonia	hazardous substance, aquatic life, human health, water quality, reference 3
	aniline	hazardous substance, hazardous waste, human health
	arsenic	carcinogen, hazardous substance, hazardous waste, priority toxic pollutant, flora, fauna, human health, aquatic life
	ethylene oxide	potential occupational carcinogen, reference 3
	heavy metals	human health, flora, fauna, soil, reference 2
	non methane volatile organic carbons (NMVOC)	greenhouse gases, volatile, flora, reference 1
	persistent organic pollutants	reference 4
	dioxins	priority pollutant, possible carcinogen, human health, aquatic life, soil
	phosgene	hazardous substance, hazardous waste, poison gas, human health, reference 3
	other hazardous substances	
	particle emissions	climate change, human health, historical sites
	odour	human health
WATER	alcohols	
	methyl alcohol	hazardous waste, human health, aquatic life
	aldehydes	
	formaldehyde	Poisonous
	ammonia	hazardous substance, aquatic life, human health, water quality, reference 3
	aniline	hazardous substance, hazardous waste, human health, no criteria set for water
	arsenic	carcinogen, hazardous substance, hazardous waste, priority toxic pollutant, flora, fauna, human health, aquatic life
	dichloroethylene	hazardous waste, priority toxic pollutant, human health, aquatic life
	heavy metals	
	persistent organic pollutants	reference 4 & 5
	dioxins	priority toxic pollutant, human health, aquatic life, possible carcinogen, soil
	organohalogen compounds	reference 5
	chloroform	carcinogen, hazardous substance, hazardous waste, priority toxic pollutant, human health, aquatic life
	1,2-dichloroethane (ethylene dichloride)	carcinogen, hazardous substance, hazardous waste, priority toxic pollutant, flammable, human health, fauna, aquatic life, water
	tetrachloroethylene	carcinogen, hazardous waste, priority toxic pollutant, human health, fauna, aquatic life, water
	nutrients C/N/P	water quality, aquatic life
	other hazardous substances	
	biological oxygen demand (BOD)	
	chemical oxygen demand (COD)	
	dissolved oxygen	
total organic carbon (TOC)		
suspended solids		

CATEGORY	FACTOR	COMMENTS
	dissolved solids	water quality, aquatic life
	total solids	
	temperature	
	change in pH	
	colour	water quality
	odour	
CLIMATE	changes in ambient air temperature	
	particle emissions	
	greenhouse gas emissions	
FLORA	changes in natural vegetation	pollutants, project location
	disturbance of aquatic habitat	
	disturbance of plant habitat	
	disturbance of natural vegetation	
	decrease in biodiversity	
	impact of threatened species	
	changes in species population	
	changes in aquatic food web	
	changes in mammal food web	
	impact on protected areas	
FAUNA	disturbance of wildlife habitat	pollutants, project location
	decrease in biodiversity	
	impact on threatened species	
	changes in species population	
	impact on threatened area	
	changes in mammal food web	
SOIL	soil acidification	heavy metals, other pollutants
	soil contamination	
LANDSCAPE	land use changes	
	visual aspects	
	physical composition	
	impact on sensitive lands	
HISTORICAL MONUMENTS	changes to historical sites	acid rain pollution
HUMAN HEALTH & SAFETY	changes in ambient noise levels	
	changes in disease incidence	
	risk of spills	
	risk of surface water contamination	
	risk of ground water contamination	
CULTURAL HERITAGE	risk of explosions	
	cultural changes	
	land use changes	
SOCIO-ECONOMIC	way of life	
	changes to well being of life	
	changes to quality of life	
	quality of recreational facilities	
	quantity of recreational facilities	
	present use of natural resources	
	potential use of natural resources	
	employment opportunity	
economic development - transboundary		

References

1. Proceedings of the EMEP Workshop on Emission Inventory Techniques, Regensburg, Germany, 2-5 July, 1991, EMEP/CCC-Report 1/91
2. Economic Commission for Europe Convention of Long-range Transboundary Air Pollution, Task Force on Heavy Metal Emissions, June 1994
3. Economic Commission for Europe, Convention on the Transboundary Effects of Industrial Accidents
4. Economic Commission for Europe, State of Knowledge Report of the UN ECE Task Force on Persistent Organic Pollutants
5. Recommendations to ECE Governments on the Prevention of Water Pollution from Hazardous Substances