

Project 2B - Nuclear Power Stations

Comments: Consideration should be given to de-commissioning of plants and disposal of spent fuel.

CATEGORY	FACTOR	COMMENTS
AIR	heavy metals:	reference 2
	cadmium (Cd)	toxic pollutant, hazardous substance, human health and aquatic life
	beryllium (Be)	carcinogen, hazardous substance, priority toxic pollutant, soil, flora, fauna, human
	radioactive isotopes	human health, fauna
	radioactive actinides	
	water vapour	climate change
WATER	heavy metals:	reference 2
	cadmium (Cd)	toxic pollutant, hazardous substance, human health and aquatic life
	beryllium (Be)	carcinogen, hazardous substance, priority toxic pollutant, soil, flora, fauna, human
	iodine	human health, aquatic life, water quality
	radioactive isotopes	
	wastes / by-products	human health, aquatic life, water quality, fauna, flora, soil
	temperature change	water quality, aquatic life, climate
CLIMATE	changes in ambient air temperature	
	changes in surface water temperature	
	changes in humidity	
FLORA	disturbance of aquatic habitat	project location, changes in water temperature
	disturbance of plant habitat	project location
	disturbance of natural vegetation	project location, emissions
	decrease in biodiversity	emissions
	impact of threatened species	
	impact on protected areas	project location, emissions
FAUNA	disturbance of wildlife habitat	after accidents - deformation
	decrease in biodiversity	emissions
	impact on threatened species	
	impact on threatened area	
SOIL	soil contamination	radio-isotopes
	wastes / by-products	disposal sites, spent fuel
LANDSCAPE	land use changes	
	visual aspects	negative connotations when one sees nuclear power plants
	physical composition	
	impact on sensitive lands	
	wastes / by-products	disposal sites, spent fuel
HUMAN HEALTH & SAFETY	changes in disease incidence	
	increase risk of thyroid cancer	radioactive emissions
	increase risk of leukaemia	
	risk of surface water contamination	
	risk of ground water contamination	
	risk of nuclear accidents	
	risk of explosions	
CULTURAL HERITAGE	cultural changes	acceptance of nuclear power
	land use changes	
	way of life	
	acceptance of nuclear power plant	not in my back-yard syndrome

CATEGORY	FACTOR	COMMENTS
SOCIO-ECONOMIC	changes to well being of life	
	changes to quality of life	
	wastes / by-products	economic and social costs of safe disposal
	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