

## ECONOMIC ACTIVITY ON THE ARCTIC SHELF OF RUSSIA AND POSSIBLE THREATS FOR ECOLOGICAL EQUILIBRIUM

Kinds of activity		Possible ecological damage and its reasons												
		sea transport operations		specific activities for development of hydrocarbon resources										
		pollution from vessels (MARPOL/NSRA)		emergency oil spills	emissions in the atmosphere of polluting substances and black carbon*	additional damage to a biodiversity								
Exploration, appraisal and development of oil and gas fields	Seismoprospecting works	pollution by oil	pollution by noxious liquid substances in bulk	pollution by harmful substances carried by sea in packaged form	pollution by sewage from ships	pollution by garbage from ships	air pollution from ships			hydroblows: defeat of bodies and fabrics		poaching	concern factors	
	Engineering-geological researches on the drilling sites													
	Drilling							emergency spouting (fountain)		technological waste of drilling	drilling slime			migratory barriers
											used drilling technological liquids			
											boring sewage			
	Construction of field infrastructure									dredging and soil dumping	change of a hydrological mode			
	Oil production							emergency spouting (fountain)	burning of associated oil gas	dumping of reservoir waters				
	Oil storage							damage of capacities of storages						
	Oil transportation							loading and unloading operations		dumping of ballast waters with alien organisms				
								collisions						
grounding														
Liquidating works	damage of capacities of storages		remains of installations											
Freight transportation, including transit across the Northern Sea Route														

Compiled by JSC Gecon with participation of WWF, Greenpeace, Akvaplan-niva, Administration of the Northern Sea Route, ABS (The American Bureau of Shipping), Sovcomflot Analytical center

\* Without fires of the upper elements of platforms and vessels