

Russian Nuclear activities in the Arctic

-Past, present and the future

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- Environmental NGO with organizations in Norway, Belgium and Russia
- Worked with Russia since late 1980's
- Office in Murmansk since 1994, and later St. Petersburg
- Important to be on the ground in Russia
- Several reports about nuclear challenges in Russia

Russian Nuclear Activity

- 10 NPPs, uranium mining and production of nuclear fuel
- Nuclear icebreakers and floating NPPs
- Nuclear weapons, nuclear submarines and legacy waste



Russia in the 1990s

- Laid up submarines
- Run down NPPs
- Dumping of radioactive waste
- Submarines accidents
- Legacy waste



Improvements since 1990s

- RTG's replaced with solar panels
- All 120 nuclear submarines decommissioned
- Dumping ended
- Safety for NPPs improved, but lifetime prolonged
- On-shore facility for reactor compartments



Nuclear submarines today

- **~25 nuclear submarines in service**
- **8 new nuclear submarines under construction**



Nuclear icebreakers

- 5 in service
- Several fires and coolant leak recent years
- 3 under construction
- Plans for giant icebreakers



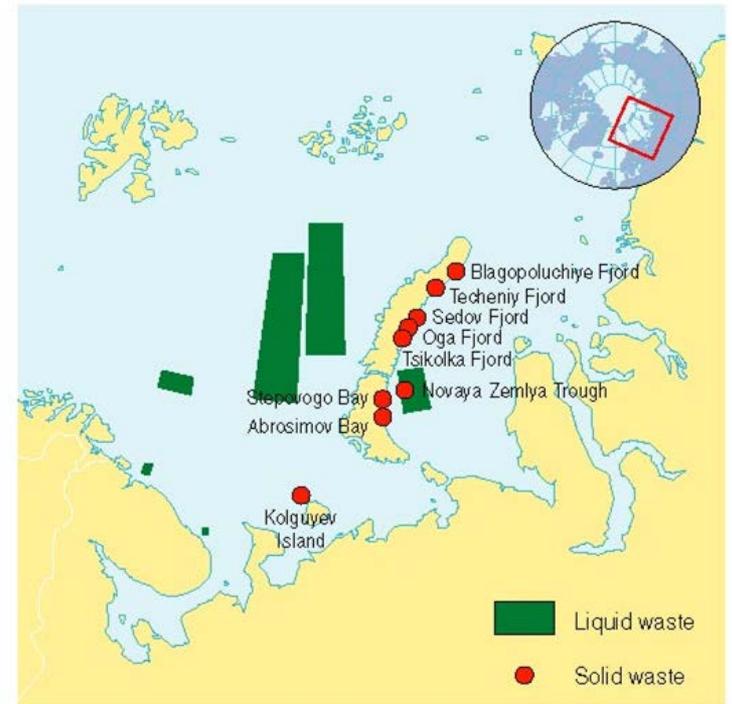
Remaining work

- Remove SNF from 100 reactor cores from storage at Andreeva bay
- Dismantle nuclear icebreakers and service ships



Dumped material

- 17,000 RW containers
- 19 ships with RW
- 14 reactors "stored"
- Focus on recovery of the submarines K-27 and K-159



Arctic threats

- Accidents nuclear vessel
- Leaks from dumped material
- Conflict with oil and gas activity in the Kara Sea

