# The Radioactive Contamination of the Baltic Sea

Per Hegelund coordinated a workshop on the radioactive contamination of the Baltic Sea at the latest "Baltic Sea NGO Forum 2006" and is active in the Swedish Anti-Nuclear Movement (FMKK)



#### The narrow straits of Denmark!

Only about 1% "refreshment" of Baltic Sea water per year...

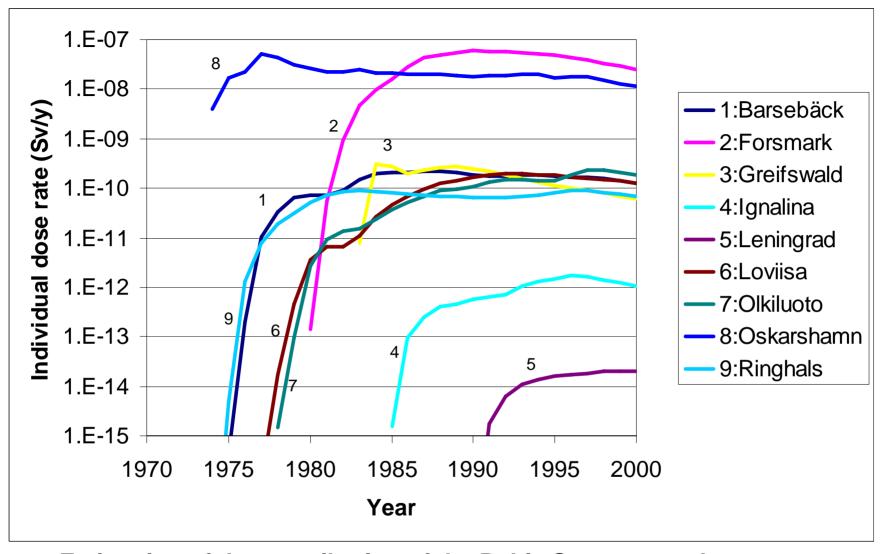


"The collective doses of the European countries population from nuclear power plants:

As it is shown in the illustrations, the <u>Swedish plants</u> give the largest contribution in the collective doses of the population, headed by <u>Oskarshamn</u>. The population of Denmark and Sweden receive the highest collective doses from this source category."

#### Reference 1:

Modelling and Assessment of Doses to Man - Sven P. Nielsen, Riso National Laboratory - Denmark. European Communities, 2000



Estimation of the contribution of the Baltic Sea area nuclear power plants to the annual individual doses of the critical groups of population (from reference 1).

Helcom says: 'The levels of antropogenic radionuclides are higher in the Baltic Sea than in any other water bodies around the world."

Quote from 'Hazardous Substances in the Baltic Sea –
 Draft HELCOM Thematic Assessment in 2006'

#### From Fish to Humans

 Eating fish is the major way that people absorbs radioactivity:

'The dominating exposure pathway is that of fish ingestion, which contributes about 94% - while the other pathways yield the rest..'

 'Modelling and Assessment of doses' from the Riso laboratory, Sven P Nielsen.

# Nordic Council Member Proposal

A 1379/environment

# Member Proposal on Measures to Prevent Radioactive Pollution of the Baltic Sea

(Proposed by the Left-wing Socialist Green Group in the Nordic Council)

The Baltic Sea, our *mare nostrum*, is exposed to severe environmental impacts. So far, attention has mainly been paid to discharges of chemicals, one consequence of which is a shortage of oxygen, which constitutes a risk to life under the water surface. However, **a serious risk of radioactive contamination** is growing ever more threatening.

On 15 June 2005, the Helsinki Commission (HELCOM) decided to prepare a strategic action plan for the Baltic Sea to counteract harmful impacts on the marine environment before the year 2007. It is the opinion of the Left-wing Socialist Green Group that this initiative should also encompass measures to combat continuing radioactive pollution of the Baltic Sea, which is threatening to grow more severe in the future.

#### **Increases Long After Chernobyl**

According to information provided by Danish experts in the field of radioactivity at the Risø-Laboratory, Swedish nuclear plants deliver most of the collective doses to the people living on the Baltic Rim. Since the decommissioning of Barsebäck, Oskarshamn leads the field. The countries that sustain the highest doses are Sweden, Finland, Poland, Denmark, Russia, and Latvia in that order.

The Gulf of Bothnia and the eastern part of the Gulf of Finland are the areas most severely exposed.

### Nordic Council members' Proposals:

#### The Nordic Council

recommends to the governments of the Nordic countries

that they act to introduce a moratorium on the location of new nuclear plants including uranium extraction activities adjacent to the Baltic Sea or lakes and streams that flow to the Baltic Sea.

**The Nordic Council** 

recommends to the Danish, the Swedish, and the Finish governments that they work to ensure that in its strategic planning for the Baltic Sea, the HELCOM includes radioactive pollution

the Nordic Council resolves

that the Nordic Council shall continue to work on issues relating to the state of the Baltic Sea in relation to radioactivity

#### and Finnish

## "THE SWEDISH / SOLUTION?"

- "Final" depositories for spent nuclear fuel
  at (and under) the BALTIC SEA?
  - In january 2002 the headline in the swedish newspaper Dagens Nyheter says:

"The worst possible <u>location</u> has been chosen..!".

# 300,000 tonnes of CHEMICAL WEAPONS were dumped in the BALTIC SEA after the Second World War!

- Now there are plans to build a gas-pipeline between Russia
   (Viborg) and Germany (Greifswald) which will need to tear up and
   clear a 500 km long and 400 meters wide track across the ocean
   bottom. Is that really wise? Even very small amounts of the stuff we
   dumped there can still (and does still!) hurt people...
- Sweden (and who knows which other countries?) has also dumped radioactive waste into the Baltic Sea...
  - are we sure it is a good idea, to disturb the stuff?Did anybody investigate... The stuff is still down there!

### Dangerous radioactive Seatransports

- Studsvik's local director in the UK, Mark Lyons promises to "<u>reduce</u> the volume of scrap metal going to the low level waste repository in West Cumbria <u>by 95 per</u> <u>cent</u> – and to <u>recycle it into the</u> <u>international metal market</u>."
- Even more spectacularly, Mark Lyons explains that some metal which "...may need further treatment will be transported overseas to Studsvik's facilities in Sweden."

# Depleted uranium ship reaches St Petersburg - 07.03.2007

The Dutch ship MV Doggersbank with 1000 to depleted uranium on board will reach the Russian port of St Petersburg today. It left Rotterdam harbour last Friday after it took the depleted uranium from the German uranium enrichment plant Gronau on board.

In Russia the nuclear waste will be stored on surface. (one of many such transports...)



We demand a <u>moratorium</u>, a stop for any new nuclear establishments

at the Baltic Sea!