

**Eighth HELCOM PITF Regional Workshop
Stockholm, Sweden
27-28 May 2002**

CONCLUSIONS

Introduction

1. HELCOM PITF is reconsidering its focus on activities. The Preparatory Group has been arranging Regional Workshops in most of the Baltic Sea countries during the last two years. A preliminary evaluation of the Workshops has been prepared and the conclusions and positive experiences have been reported to PITF.

PITF has encouraged the Preparatory Group (PG) to continue arranging Workshops in collaboration with governments and representatives from the local, regional and national level and the International Financial Institutions (IFIs). The aim is to finalise the round of Regional Workshops before 1 September 2002.

2. At the invitation of the Swedish Environmental Protection Agency the Eighth PITF Regional Workshop was held in Stockholm on 27-28 May 2002.
3. In accordance with the discussions at the HELCOM PITF 18/2001 meeting the Workshop was a joint workshop, where both Finnish and Swedish Hot Spots were considered. The Agenda of the Workshop as well as the List of Participants are attached as Annexes 1 and 2, respectively.
4. The Workshop was opened by Mr. Lars Ekecrantz, Ministry of Environment, Sweden. Mr. Ekecrantz welcomed the participants and highlighted briefly the main pollution problems of the Baltic Sea and the importance of the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) and the activities related to the JCP Hot Spots.
5. The Meeting elected Mr. Göte Svenson, Chairman of HELCOM PITF, as Chairman of the Workshop. Ms. Ulla-Britta Fallenius was elected as Vice-chairman.
6. Mr. Claus Hagebro from the Secretariat of the Helsinki Commission acted as the Rapporteur and prepared the draft Conclusions of the Workshop to be agreed upon at the end of the Meeting. Furthermore, Ms. Ulla-Britta Fallenius and Mr. Hagebro prepared a press release for the press conference after the Workshop.
7. In total 22 Finnish and Swedish Hot Spots were discussed in the Workshop. The presentation of the Hot Spots was organised according to sectors. Information on each of the Hot Spots was provided during the presentations. The history and the recent development and implementation of environmental measures were described. The investments have been substantial at most of the presented Hot Spots. The Workshop also considered the development at several previously deleted Hot Spots, where measures to abate pollution have been accomplished.

8. Hot Spot presentations

METAL SMELTERS

Hot Spot No. 1: Rönnskär Smelter (Boliden)

Mr. Michael Borell (Boliden Mineral AB) gave a comprehensive presentation of the administrative regulations, technical investments and monitoring data regarding the Rönnskär smelter. More than 95% reduction of metal emissions and 90% reduction of sulphur dioxide have been obtained since 1970. The environmental monitoring programme indicated that the metal emissions today have no major impact on the environment. The impact observed seems to be determined by the historic discharges.

There are no HELCOM Recommendations for metal smelters and the plant complies with the national permit. Sweden aims to prepare a proposal for deletion for the next PITF meeting.

Hot Spot No. 7: Harjavalta (Outokumpu Group)

Ms. Eeva Ruokonen (Outokumpu Harjavalta Oy) presented the information. Today the smelter only produces copper and sulphur products because the nickel production was sold off some years ago to OMG Harjavalta Nickel Oy. The two plants have common water emissions. There have been some problems with copper and nickel emissions to water during the last quarter of 2001. Now the emission has gone down after the recent investments in enhanced water treatment.

Finland will consider a proposal for deletion to PITF.

FISH FARMING

Hot Spot No. 9: Fish farming - Archipelago and Åland Sea

Mr. Osmo Purhonen (South-West Finland Environment Authority) described the fish farming problems in the Finnish Archipelago. Permits are given for 5-year periods. The fish farms comply with the HELCOM Recommendation. The Finnish Water Protection Programme establishes stricter limit values and it seems that it is easy to reach the 7g total-P goal but more difficult to comply with the 44g total-N limit value. Further reductions will be enforced under the newly established Finnish Baltic Sea Programme. The fish farms contribute relatively little to the overall nutrient load in the Archipelago and mostly phosphorus.

Mr. Michael Wennström (Ålands Landskapsstyrelse) presented the fish farms in Åland. Locally the load can be rather high – overall the load is about 50% for total-N and about 66% for total-P of the load. Compared to the atmospheric input of nitrogen-compounds the contribution from fish farms is small. The farms comply with the HELCOM Recommendation.

Finland will consider a proposal for deletion of the Hot Spot to PITF.

AGRICULTURAL HOT SPOTS

Hot Spot Nos 125, 128 and 132: The Sound, Kattegat/Laholm Bight and Bornholm Basin

Ms. Ingrid Svedinger (Ministry of Agriculture, Sweden) gave a comprehensive presentation of the Swedish programmes aiming to reduce plant nutrient losses from agriculture. The Hot Spot area is within the Vulnerable Zones under the Nitrate Directive. Swedish farms,

depending on the size, need a permit or to register by the relevant authority in order to operate. The measures presented in detail were: legislation, environmental taxes, voluntary instruments, extensions service and information, research and development, and monitoring.

The overall use of nitrogen fertilizers has decreased about 20% since 1985 and phosphorus fertilizers by 70% since the 1970'ies. Computer programme calculations show no clear overall reduction of nitrogen leaching or nitrogen load. In some areas of Götaland the load has increased slightly due to increased livestock density. The ammonia emissions have been reduced by 12% in 1999 compared to 1995, and the amount is lower than the national maximum amount agreed for 2010.

There will be no proposal for Hot Spot deletion in the nearest future.

Hot Spot No. 10: Archipelago Sea

Mr. Osmo Purhonen presented the Finnish agricultural Hot Spot – the Archipelago Sea. There is no specific programme for the area in spite of the fact that the Finnish coastal waters south from the Quark and the whole Gulf of Finland are considered as nitrogen sensitive areas. The Water Protection Target Programme 1998-2005 aims at a 50% reduction in nutrient discharge from agriculture but it is not expected that the target will be reached. Anyhow, some positive results have been reached regarding pollution from livestock.

The Finnish Agri-Environmental Programme will continue under the new Baltic Sea Programme and strong water protection measures will be implemented in future in the catchment of the Archipelago Sea. Lowered nutrient levels in soil, decreased erosion and more buffer zones are expected to result in reduced nutrient discharges in the long term.

There will be no proposal for Hot Spot deletion in the nearest future.

MUNICIPAL WASTEWATER TREATMENT PLANTS

Hot Spot No. 127: Göteborg

Mr. Anders Höjlund (Swedish Environmental Protection Agency) presented the Hot Spot. The plant is the largest in Sweden and there are still some problems with the nitrogen discharge. For the moment two alternative methods are being tested in order to solve the problem. There will be no proposal for deletion for the moment.

Hot Spot No. 130: Stockholm Region

Ms. Gunilla Brattberg (Stockholm Water) gave a clear presentation of the three plants operated by Stockholm Water. The plants have one common outlet. Together the plants comply with the HELCOM requirements. There are good results regarding the reduction of blue-green algae due to the reduced P discharge.

Mr. Anders Höjlund presented the Käppala plant and Mr. Jan Bosander (SYVAB) the Himmerfjärd plant. Experiments in the Himmerfjärd plant with increased N discharge aim to reduce the blue-green algae. When problems with the fluidized bed are solved it is expected to further increase the nitrogen and phosphorus reduction.

This Hot Spot (Stockholm) is under scrutiny by the LAND meeting with the view of deletion at the next PITF meeting.

Hot Spot No. 17: Helsinki Region

Mr. Tapani Kohonen (Ministry of Environment, Finland) presented the activities at the Helsinki wastewater treatment plant where there is an enlargement project under implementation. The wastewater treatment plant will possibly be ready for deletion within the next few years after completion of the ongoing investments increasing the nitrogen removal efficiency.

MINE WASTE

Hot Spot No. 6: Dalälven – Falun/Garpenberg Areas

Ms. Ann-Marie Fällman (Swedish Environmental Protection Agency) gave a comprehensive presentation of the mine waste problem in Falun which forms a very special and complicated issue. It is the question of balancing the conflict between pollution reduction and the cultural value of the site. The mine has been active for many hundred years, and the waste heaps constitute an important part of the city environment.

The metal pollution from the mine area is of the same range as that from the total Pulp & Paper industry in Sweden. The ongoing remediation programme will end in 2006 after investment of 100 MSEK. Some reduction of the metal discharge has been obtained during the last ten years.

It is a very difficult Hot Spot and it will take a long time before deletion can be considered.

PULP AND PAPER INDUSTRIES (previously deleted Hot Spots)

Hot Spot Nos 3, 4, 5, 126 and 131: Husum, Östrand, Vallvik, Skoghall and Nymölla

Mr. Erik Nyström (Swedish Environmental Protection Agency) gave a good and comparative presentation of these previously deleted Hot Spots. The work on emission reductions has continued since the deletion in 1994 and the AOX emissions are low. Still, the Pulp & Paper industries account for 95% of all AOX emissions in Sweden. Nymölla was deleted in 1996 and the nutrient removal has been further increased.

Hot Spot Nos 2, 11, 12, 13 and 16: Metsä-Bothnia Oy Kemi, YPT Joutseno, Kaukas Lappeenranta, E-G Kaukopää and Sunila Oy - Kotka

Mr. Tapani Kohonen presented a useful overview of these Hot Spots. Several of the Hot Spots have changed name since the deletion. The performance is still satisfactory.

CHEMICAL INDUSTRY (previously deleted Hot Spot)

Hot Spot No. 8: Kemira Oy Vuorikemia

Mr. Tapani Kohonen presented data on this former Hot Spot (deleted in 1996). The plant is doing well and the metal emissions are well under the limit values in the HELCOM Recommendation.

9. Presentation by an IFI

Mr. Roland Randefelt from the Nordic Investment Bank (NIB) explained that NIB and EIB are the only IFIs within HELCOM PITF which can finance projects in Finland and Sweden. NIB has provided financing for about 14 out of total 17 industrial and municipal Hot Spots

in Sweden and Finland. The Hot Spots in which NIB has not participated are the four agricultural Hot Spots, the fish farming, the mine waste in Falun, the Harjavalta smelter and the Nymölla pulp & paper factory. The loan amount committed from NIB for these 14 Hot Spots has been in the order of half a billion euro in total.

The shortcomings in the financing from IFIs are that they are not able to handle small scattered projects like agricultural Hot Spots for fish farms, unless a commercial bank or the State or another financial intermediary is involved - in which case a credit line can be opened.

As regards the mine waste in Falun the problem is the lack of the project's cash flow and the unclear ownership. The only possibility for IFI loans is if the Swedish state would take over the responsibility for the Hot Spot and guarantee the loan.

10. Final evaluation

The Workshop Participants took note of the information given and the assessment of the present state of the Hot Spots. The Workshop reflected progress in the development of the Hot Spots in Finland and Sweden. Major results have been achieved and the development is encouraging.

One important outcome of the Workshop was that several Hot Spots might be ready for deletion from the List of Hot Spots. HELCOM looks forward to the Finnish and Swedish decisions and possible presentation to the next meeting of the PITF.

At the moment it is difficult to assess if the comprehensive measures to reduce the nitrogen pollution from the agricultural Hot Spots are sufficient. The agriculture environment problems within Finland and Sweden are difficult to handle - like in other countries surrounding the Baltic Sea. The sector contributes with the largest input of nitrogen to the Baltic Sea, which gives rise to eutrophication. As an example, the agriculture in Sweden is responsible for 40% of the anthropogenic load of nitrogen. Solving this problem will take a long time.

During the final discussion it was mentioned that the EU Water Framework Directive may help solving the problem with agriculture. The Directive is expected to play a major role for the future environmental investments. Also the EU Marine Strategy now being developed was mentioned as important for the future development in relation to the Baltic Sea and the Hot Spots.

The Workshop expressed the wish that the organizers of the Workshop in cooperation with the HELCOM Secretariat and the PG, should compile a Thematic Report with an assessment of the Hot Spots as well as a presentation of the findings at the Workshop.

The Chairman thanked the organisers from Naturvårdsverket for organising and hosting the Workshop.

Eight HELCOM PITF Regional Workshop

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- Agenda and Timetable -**Monday, 27 May 2002**

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|-------------|---|
| 1000 | Welcome address by Mr Lars Ekecrantz, Ministry of Environment
Election of Chairman
Adoption of the Agenda |
| 1020 - 1100 | Report on metal smelters Boliden (Hot Spot No 1) and
Outokumpu Group/Harjavalta (Hot Spot No 7) |
| 1100 - 1120 | Report on Archipelago and Åland Sea - fish farming (Hot Spot No 9) |
| 1120 - 1230 | Report on agricultural Hot Spots - Bornholm Basin (No 132),
The Sound (No 125), Laholm Bight (No 128) and
Archipelago Sea (No 10) |
| 1230 - 1330 | Welcome luncheon at the meeting venue |
| 1330 - 1445 | Report on municipal waste water treatment plants
Gothenburg (Hot Spot No 127), Stockholm Region (Hot Spot
No 130) and Helsinki Region (Hot Spot No 17) |
| 1445 - 1510 | Coffee break |
| 1510 - 1540 | Report on mine waste at Dalälven - Falun/Garpenberg Areas
(Hot Spot No 6) |
| 1540 - 1700 | Report on deleted pulp and paper industries in Finland and
in Sweden
(Swedish Hot Spot No 3 Husum, No 4 Östrand,
No 5 Vallvik, No 126 Skoghall, No 131 Nymölla; and
Finnish Hot Spot No 2 Metsä-Bothnia, No 11 YPT Joutseno,
No 12 Kaukas Lappeenranta, No 13 E-G Kaukopää,
No 16 Sunila Oy Kotka)
Report on deleted chemical industry Hot Spot No 8 Kemira Oy
Vuorikemia |
| 1700 - 1730 | Discussion |
| 1900 - | Dinner |

Tuesday, 28 May 2002

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| 1000 - 1100 | Draft Conclusions of the Workshop |
| 1100 | Press Conference |

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