# **OPENING SPEECH**

*Governor Sven Lindgren Administrative Board of Kalmar County, Sweden* 

The Swedish Parliament has established 15 environmental quality objectives to guide Sweden towards a sustainable society. The 15 environmental objectives will function as benchmarks for all environment-related development in Sweden. The overriding aim is to solve all the major environmental problems within one generation.

Three objectives are of special interest for this conference:

A Non-Toxic Environment - The environment must be free from man-made substances and metals that represent a threat to human health or biological diversity.

Flourishing Lakes and Streams - Lakes and watercourses must be ecologically sustainable and their great variety of habitats must be preserved. Natural production capacity, biological diversity, cultural values and the environment's ecological and water-regulating function must be preserved at the same time as recreational values are to be safeguarded.

A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos – The North Sea and the Baltic Sea must have a long-term sustainable production capacity and their biological diversity must be protected. Coastal areas and archipelagos must have a high degree of biological diversity, opportunities for aesthetic experiences and natural and cultural values. Industrial activity, recreation and other uses must be carried out in a way that promotes sustainable development. Especially valuable areas are to be protected against intrusions and other disturbances.

The County of Kalmar has established regional objectives in accordance to the Swedish objectives. Concerning polluted areas, the objectives are the following:

- up to 2005, all the polluted areas will have been identified, and at least at five of the areas, the cleanup and remediation operations will have been completed;

- up to 2010, the remediation of five more areas will have been completed;

- up to 2020, 30 polluted areas that pose high risk to human health and the environment, will have been remediated.

Today three areas in Kalmar County have been cleaned up. We will get more information about it on this conference. The costs for these works are some 25 million euro. To clean up all polluted areas in Kalmar County, we calculate the costs to 210 million euro.

### KALMAR ECO-TECH'03 Bioremediation and Leachate Treatment KALMAR, SWEDEN, November 25-27, 2003

## Unfortunately the Baltic Sea is turning into the northern Cloacae Maxima.

Why is this?

An important contributory factor would be the increased amounts of pollutants entering the system, such as human waste containing nutrients, contaminants and medical residues.

Since the end of World War II there has been an enormous increase in the number of installed water closets within the catchment area of the Baltic Sea. This has mainly been due to an expansion of urban and suburban areas and to increased demands on standards of hygiene and comfort. A large number of pleasure boats, an increase in the number of houses on islands and coastal area with often very primitive toilets, the sometimes exceedingly irresponsibly managed latrine from larger vessels, are all contributing to the escalating levels of contamination of the Baltic Sea. With pollution and consumption on the rise, water purification becomes increasingly costly and effective.

Also, in our well watered part of the world, the supply of clean, drinking water is declining. Considering that millions of people are in need for drinking water, and that millions of people die from diseases transmitted through contaminated water does not appear consistent with common sense that we use our most valuable and important means of staying alive, to flush away own waste. The water closet, our largest, most expensive, environmentally and vulnerable technical system is indeed only a transport system for the waste and not a solution of our sanitary problems. The rest product, contaminated sludge, is one of our greatest environmental problems.

What can be done to change the current state of affairs? The situation is not hopeless. Following a number of attempts to find solutions, which, due to a variety of reasons, have not been feasible alternatives, a Swedish engineer has succeeded in inventing a now patented system, which after five years of development and trial operation represents the first and definite solution to the global toilet problems. The system has only positive impacts on environment, it operates without water, and does not emit any pollutants.

The method emanates from "better than cleaning up is to keep clean", and complies with the European community policy on waste management, which includes the strategies:

- eliminating waste at source by improving product design
- encouraging the recycling and re-use of waste.

The system, called *Terra Munda* -"the good earth", is a result of a completely new approach to the problems of sanitation. The experimentation during the trial period has been indispensable for coming to an understanding of what can and should be demanded of a toilet system with a complete environmental responsibility. Terra Munda meets all these demands head-on! The capacity of the system is without limits, it reduces transmissions of infections diseases and makes a complete recycling of waste possible. The decomposed matter is an excellent fertilizer which can be put to good use within the agriculture. *Terra Munda* accomplishes its task without any use of water or chemicals!

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*Terra Munda* has already been in operation for five years in Sweden, Austria, Finland, Kosovo and Afghanistan, without any reports of functional disorders, operational disorders or harmful emissions. The system can be used globally, without any demands on supply or infrastructure.

A fully developed organisation for production is already established in Sweden, here in the county (in Gamleby and Fliseryd). Licensed production is possible in any country.

Pilot units may be set up in a very short time, whilst the production and distribution is being organised. The agricultural sector will always by necessity be the recipient of organic waste which is not incinerated. It would therefore be most convenient that the agricultural organisations manage the service and logistics.

## Let us waste no more! Let us set up a committee of experts with the representatives from such fields as ecology and environmental research, agriculture, the mechanical industry, trade, and medicine for detailed analyses of the system and its enormous potential.

Maybe there are some other similar solutions as good as that of **Terra Munda**. But so far, I have not heard of any. And that is why I dare to speak so frankly about it here today. But, if there are any, we should welcome them as well!

Thank you for listening!