



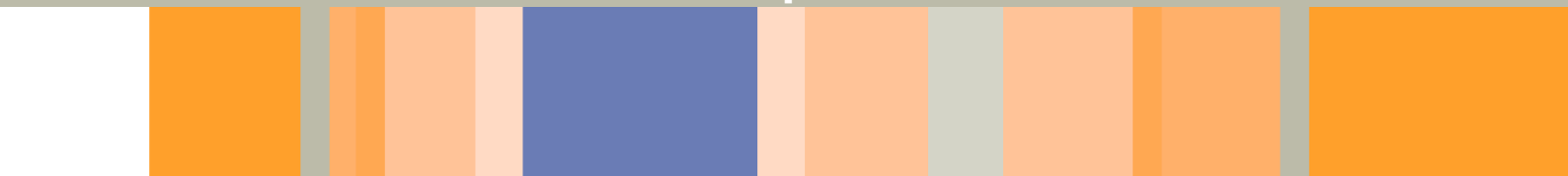
Natural Cap Conference

Green rehabilitation opportunities for hazardous waste sites
"The Example of Volgermeerpolder in the Netherlands"

SECOND ANNOUNCEMENT AND INVITATION TO REGISTER



Amsterdam, The Netherlands
Volgermeerpolder
19 - 21 April 2011



Introduction:

The remediation work at the Volgermeerpolder chemical dump site will officially end on Tuesday, 19 April 2011. A ceremony will mark the completion of two decades of dedicated work to control the threats that the dump site posed to public health and the environment. During the ceremony the City of Amsterdam will officially return the polder to the neighbouring village of Broek in Waterland and the natural landscape of Noord-Holland province. The residents of Broek in Waterland were the most directly affected group facing threats to health from hazardous waste at the site. With the remediation works completed these threats are under control. The City of Amsterdam has great plans for the Volgermeerpolder area and as early as April 2011 the site will be opened as a wetland nature reserve open to the public. The local authorities financed 10 percent of the total remediation costs, while the Ministry of Housing, Spatial Planning and the Environment covered the remaining 90 percent.

Growing fear of a looming environmental and social disaster resulted in a complete halt to waste disposal at the site in 1980. It was thought to be only a matter of time before toxic waste from the heavily polluted Volgermeerpolder site would spread uncontrollably into the environment – a true chemical time bomb. Plans were made and measures were taken over a period of two decades, but no comprehensive approach was designed and adopted and thus the time bomb continued to tick. Today, the situation looks far healthier. Under the name of Adviescombinatie Volgermeerpolder (ACV), consulting engineers Tauw and Witteveen+Bos joined forces in 2001 to design and supervise remediation of the site. During the remediation they developed the 'natural cap' concept, a sustainable solution with huge potential for dump site remediation, both in the Netherlands and in other countries.

Since Tauw and Witteveen+Bos were commissioned to design a top cover for the Volgermeerpolder site, an intricate process of design, study, testing and construction has evolved. Gradually, traditional approaches to isolation and remediation of the disposal site were revised. This process was enhanced by the ongoing discovery of the unique features of the local soils and the power of natural processes. Insight was generated into the principles and processes at play, and over time this knowledge was used in shaping and re-shaping the design of safe waste isolation at the site.

Situations like the one at Volgermeerpolder exist in many countries across the globe. Countries struggle with the legacy of industrial development. Technological advance has been tremendous over the past centuries. But government policymakers and modern industries only recently started to develop ecologically sound strategies to minimise and handle industrial waste caused by production processes. Extensive remediation programmes got underway in the 1970s to remove the threats of

hazardous dump sites. Relatively new trends in waste management are Green Remediation and Natural Cap. Natural resources offer great potential to contain and even decompose chemical waste. In the remediation work at Volgermeerpolder, for instance, local peat lands exhibited excellent containment capabilities. Using peat instead of expensive construction materials in the remediation design resulted in significant reductions in public expenditure. The concept of the 'natural cap' means that the pollutants are contained by natural vegetation and associated processes. In the case of the Volgermeerpolder site, this is accomplished by creating a living peatland (moors and bogs) on top of the plastic foil that is used to cover the dump site. By the time the foil deteriorates, the newly formed peat bog will assume the functions of the foil. The project adopted a more integrated approach of nature development, wetland ecology and dump site remediation, in which remediation specialists worked together with hydrological, biogeochemical and ecological experts. Also, the project has become a very interesting national research site for peat development and recovery. This is very important for the low-lying Netherlands, where oxidating and vanishing peat soils accelerate lowering surface levels.

To mark the completion of the Volgermeerpolder remediation works and to focus on future Green Rehabilitation opportunities, ACV has pleasure in inviting international experts and stakeholders to take part in the 2011 Amsterdam Natural Cap conference and submit their conference papers. The main themes of the conference are:

1. Sustainable waste management
2. Green rehabilitation
3. Wetland ecology
4. Innovative techniques in remediation projects
5. Sustainable management of Persistent Organic Pollutants (POPs)

Scope of the conference

The aim of the Natural Cap conference is to bring together international experts (scientists, consultants, NGOs etc.) in the field of sustainable remediation of landfill sites.

A sustainable and climate-friendly approach for redevelopment of polluted areas is in increasing demand. Land reclamation by the removal of contaminated soil is often not a desirable option, particularly not for large polluted areas. Conventional remediation by excavation and landfilling or ex-situ treatment of polluted soil at such a large site is very expensive and would have a major impact on the local community and environment.

A successful and sustainable remediation design requires a thorough understanding of natural cycles (transport

of water and substances) and processes (degradation and precipitation) in relation to the functions of the site. The main goal of sustainable remediation is prevention of contact risks and controlling the spread of the contamination. This can be achieved by a range of measures including:

- making use of existing biological and chemical processes like degradation or precipitation, or stimulating such processes;
- ensuring that highly contaminated areas cannot be entered by humans or animals by incorporating specific landscape design features (footpaths, vegetation, creation of a natural barrier or cover);
- reuse of contaminated soil or sludge and other residues like grass, reed or wood;
- smart monitoring of the processes that play a role in this approach.

Registration – via www.moorga.com –

The conference fee covers attendance at the conference sessions, meet and greet, conference documentation, conference dinner on Wednesday evening 20th April 2011, morning and afternoon coffee/teas and lunch.

Fee € 600,-
Day rate € 450,-

Cancellation: If you cancel before 15 March 2011, a complete refund minus 100,- euro administration charges will be issued. If you cancel between 15 March and 1 April 2011 a 50% refund will be issued. **No refunds will be issued for cancellations received after 1 April 2011.**

Refunds of registration fees must be applied for in writing and will be settled after the conference.

Conference venue

The Volgermeer is an area of approximately 105 hectares, which in the twentieth century was used as a dump site for large quantities of chemical waste. The waste included 30,000 barrels of pesticide residues, making the Volgermeer the most heavily contaminated area in Western Europe. In the eighties of the last century local authorities took the initiative towards remediation. The conference will take place in a luxury tent built on the Volgermeer.

Conference Dinner

The conference dinner will take place on Wednesday 20 April from 6 to 11 p.m. at the Volgermeerpolder. The dinner is included in the conference fee. More information will be made available later.

Hotel reservations

To make a hotel reservation please visit www.moorga.com and select the Natural Cap conference. The website provides information on a wide range of hotels in the city, and allows you to make bookings. The organizing committee has pre-selected four hotels to allow all participants to stay in the vicinity.

Parallel to the conference a small information market will be organised, where innovative remediation techniques can be presented by means of posters and/or stands.

Meet and greet (Conference reception)

Participants and their guests are invited to attend the conference reception on Tuesday 19 April from 5 to 7 p.m. in Grand Cafe L'Opera (Rembrandt square Amsterdam). Drinks and refreshments will be provided.

Activities for participants' guests

Hotels in Amsterdam organise a wide range of tourist activities in the city and the surrounding towns and countryside. Participants' guests are also welcome to attend the conference dinner, which will be held on Wednesday 20 April from 6:30 to 9:30 p.m. The fee for participants' guests is 125 euro. Please indicate clearly on your registration form if you wish to make use of this option.

General Information

Conference venue

The conference will be held at the Volgermeerpolder, Broekergouw 38, 1027 AM Amsterdam, the Netherlands.

Transport

Transport from Amsterdam Schiphol Airport to Volgermeerpolder site: The only way to travel to the Volgermeer is by taxi. You can also go by train to the central station of Amsterdam. From here you can take the shuttle bus to the Volgermeerpolder.

Transport from Amsterdam to Conference venue: There will be a shuttle service from Amsterdam Central station to the Volgermeerpolder site.

Visa

Participants should check if they require visa for entry to the Netherlands. Participants who experience difficulty obtaining a visa may contact the Moorga Conference Secretariat for assistance.

Climate

The Netherlands has a maritime climate. Weather conditions in April are generally mild, with an average day-time temperature of 15 to 18 degrees Celsius. It is advisable to bring a raincoat.

Conference language

The conference will be conducted in English. All papers and posters must be in English. No translation facilities will be available.

Insurance

Participants are advised to check whether they have insurance coverage during their stay in the Netherlands. Although every effort will be made to take good care of the participants, the organisers cannot be held responsible for any loss, damage or personal injury.

Publication

The papers and posters will be published in CD-ROM format.

Surprising Amsterdam

Amsterdam is the capital and largest city of the Netherlands and is situated on the river Amstel. The heart of the old city has been beating since approximately 1275, and some three centuries later the citizens of Amsterdam could claim to be the most prosperous in Europe. In the 17th century (the Dutch 'Golden Age'), the famous canal system was dug outside the medieval city walls. Along the banks of the three main canals, merchants built richly decorated houses to flaunt their wealth.

More than 7,000 historical houses and buildings have been converted, creating a fascinating contrast between old and new. Within the city's modern, cosmopolitan centre,

visitors will find the Royal Palace on Dam Square, the Westerkerk church spire and numerous other old churches and monumental buildings. Amsterdam is often called the 'Gateway to Europe', not only because it is an important commercial and industrial centre on the North Sea, but also because of its rich social and cultural life. The city is a melting pot of nationalities.

Things to do and see in Amsterdam

A canal trip is the best way to see the most picturesque parts of Amsterdam. In April, the canals are illuminated with thousands of lights. Visitors will find wonderful collections of classical and modern art at the Van Gogh Museum, the Amsterdam Museum and the Amsterdam Municipal Museum. The house where Rembrandt lived and worked is also open to visitors.

Programme of Natural Cap Conference 19 – 21 April 2011 The Netherlands

Tuesday 19 April 2011

17.00 – 19.00 Conference reception at " L' Opera " Grand cafe Rembrandt square Amsterdam

Wednesday 20 April 2011

08.00 – 9.15 Registration

Session 1: Sustainable waste management at the Volgermeerpolder site
Chair: Ruud Cino, Ministry of Infrastructure and the Environment

09.15 – 09.30 *Introduction to the programme and the thematic thrust of the conference*
 M. van der Wijk, Witteveen+Bos

09.30 – 09.45 *Welcome speech*
 C. Diepenveen, Municipal Councillor, City of Amsterdam

09.45 – 10.15 *Remediation of the Volgermeerpolder: History, facts and figures*
 H. van der Pal, City of Amsterdam
 G. Buijs, Citizens Committee Dumpsite Volgermeerpolder

10.15 – 10.45 *Application of the Volgermeer experience; Lessons in sustainability*
 P. Stook, Tauw

10.45 – 11.15 **Coffee Break**

11.15 – 11.45 *Towards sustainable solutions for mine waste*
 Aleksandar Budjelan, Head of the Local Implementation Unit of the World Bank Regional Development Project in Bor Serbia

11.45 – 12.15 *Amsterdam policy for large scale remediation sites*
 R.R. Kruize, CEO Waternet

12.15 – 12.45 *Landscaping of Volgermeerpolder landfill site*
 K. Waardenaar, Vista Landscape Architects
 R. De Visser, Vista Landscape Architects

12.45 – 13.00 **Wrap-up by session chair**

13.00 – 14.00 **Lunch**

Session 2: Green rehabilitation
Chair: Willem Hendriks, Witteveen+Bos

14.00 – 14.30 *Peat and landfills; unraveling the mysterious world of peat and contaminants*
 A. Langehoff / H. Groot, Deltares

- 14.30 – 15.00 *Lifting up Lowlands - upgrading natural materials and methods for sustainable elevation of low-lying polder areas*
T. Grotenhuis, Wageningen University
- 15.00 – 15.30 **Tea Break**
- 15.30 – 16.00 *The Volgermeerpolder site - from waste dump to research area for peat development*
J. Verhoeven, Utrecht University
L. Lamers, Radboud University Nijmegen
- 16.00 – 16.30 *Ecology of the Natural Cap and the use of this concept for ecological repaludification (restoration of fens)*
B. van de Riet, Landscape North Holland Foundation
N. Hogeweg, Landscape North Holland Foundation
- 16.30 – 17.30 **Field visit and onsite discussion / wrap up by session chair**
- 17.30 – 20.00 **Conference dinner**

Thursday April 21st 2011

- Session 3: Landfill management and POP's**
Chair: Bram de Borst, CEO Tauw Group
- 09.00 – 09.30 *Strategic approaches to contaminated land reclamation in Poland - Current practice and perspectives*
Janusz Krupanek, Mariusz Kalisz, Institute For Ecology of Industrial Areas, Katowice Poland
- 09.30 - 10.00 *The Stockholm Convention and international obsolete pesticides projects in Central Asia*
J. Donner, Milieukontakt International
- 10.00 - 10.30 *Pragmatic approaches to tackling the problems of obsolete pesticides in the context of the African stockpile programme*
J. Harmsen, Alterra WUR
- 10.30 - 11.00 **Wrap-up by session chair**
- 11.00 - 13.30 **Stand visits and lunch**
Adventus, Ecoflight, Geocopter, Hansje Brinker, Medusa, Séché Environnement, Trisoplast, Ten Cate (Geodetect), (tbc)
- Session 4 Case studies**
Chair: Dietmar Müller, Austrian Environment Agency
- 13.30 - 14.00 *Policy developments on sustainable land filling Ministry of Infrastructure and the Environment*
H. Scharff, NV Afvalzorg
- 14.30 – 15.00 *Implementing sustainable aftercare at the former landfill site IJperveld, Landsmeer, (The Netherlands)*
M. Rozing, NV Afvalzorg
M. Hensens, AT Osborne
C. Vraudeunt, Province Noord-Holland
- 15.00 – 15.30 **Tea Break**
- 15.30 – 16.00 *Natural Catch - Green rehabilitation of the Rhoonse Grienden and Philippine landfill sites and prospects for future applications*
R. Dijcker, Witteveen+Bos
W. den Hengst, Province Zuid-Holland
- 16.00 - 16.30 *Management of the Georgswerder Landfill, City of Hamburg*
S. Melchior, Melchior + Wittpohl Ingenieurgesellschaft
- 16.30 – 17.30 **Conference wrap-up by all session chairs**
- 17.30 - 18.00 **Drinks**



Organizing Committee

<i>Marten v/d Wijk</i>	Witteveen+Bos, the Netherlands
<i>Paul Stook</i>	Tauw, the Netherlands
<i>Jan-Willem Knegt</i>	Tauw, the Netherlands
<i>Wouter Pronk</i>	Witteveen+Bos, the Netherlands
<i>Rob Dijcker</i>	Witteveen+Bos, the Netherlands

<i>John Vijgen</i>	Director, IHPA, Denmark
<i>Ab Vos</i>	Project Director Volgermeer, City of Amsterdam, the Netherlands
<i>Jan Roelofs</i>	Centre for Wetland Ecology, the Netherlands
<i>Jan Kuiper</i>	Director of Landscape North Holland Foundation, The Netherlands
<i>Stephan Robinson</i>	Green Cross, Switzerland
<i>Michael Valentine</i>	International Science & Technology Centre, Moscow

Programme Committee

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<i>Bram de Borst</i>	CEO, Tauw Group, the Netherlands
<i>Dietmar Müller</i>	EURODEMO+ secretariat, Environment Agency Austria
<i>Thomas Liljedahl</i>	MCN – Northern Sweden Soil Remediation Center, Umeå University, Sweden
<i>Ruud Cino</i>	Ministry of Infrastructure and Environment, the Netherlands

All information can be obtained from:

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