

NDEP News

October 2008, Issue 17

In this issue:

- NDEP Steering Group gathers in London (6 October 2008)
- St Petersburg Vodokanal celebrates its 150th Anniversary (10 October 2008)
- Interview with Mr Feliks Karmazinov, Director General of St Petersburg Vodokanal
- St Petersburg Vodokanal inaugurated the first line of the Northern Tunnel Collector (10 October 2008)
- Key Part of the St Petersburg Flood Protection Barrier has been completed (8 October 2008)
- Vologda Vodokanal upgrades its wastewater facilities with the help of NDEP
- Northern Dimension Steering Group meeting (23 September 2008)

Plus:

- NDEP projects in brief
- Also note...

NDEP Steering Group gathers in London on 6 October 2008



Steering Group meeting (from left) Jaakko Henttonen, NDEP Manager, Horst Reichenbach, EBRD Vice President and SG Chair, Alistair Clark, EBRD Corporate Director, Environment & Sustainability Department, Vince Novak, EBRD Director, Nuclear Safety Department

The NDEP Steering Group gathered in London on 6 October 2008 in the offices of the EBRD. The Group members comprising: the European Commission, Russia, the EBRD, EIB, NEFCO and NIB welcomed the representatives of Finland, Poland, Sweden and Vnesheconombank who attended the meeting as observers. The rotating chair of the Steering Group is now with the EBRD till July 2009.

The purpose of the meeting was to prepare recommendations to the forthcoming Assembly of Contributors and to take stock of the progress achieved so far.

At the start of the meeting, Horst Reichenbach, as the Steering Group Chair and on behalf of the EBRD was pleased to confirm the Bank's decision to allocate €6 million in grant funding from the EBRD's Shareholder Special Fund to the St Petersburg Neva Closure of Discharges of Untreated Wastewater. As a result, the NDEP grant required to finance the project is now €24 million.

The members unanimously approved NEFCO's new project proposal for the Municipal Water and Wastewater Rehabilitation in Sosnovyi Bor to be recommended to the Assembly for €0.5 million grant funding. Other NEFCO's proposals for water, wastewater and solid waste improvements in Petrozavodsk and for an agricultural project in Leningrad oblast were positively received and will be developed further.

The EBRD and NIB as the Implementing Agencies reported on the progress of projects under implementation. All the NDEP projects are on schedule apart from the Kaliningrad and Murmansk District Heating projects which are still affected by delays.

Looking into the future, the NDEP Manager presented an orientation paper for the Group members comprising ideas and directions for new project development. Current regional initiatives such as HELCOM's Baltic Sea Action Plan, the new EU Strategy for the Baltic Sea were mentioned and the IFIs were encouraged to co-operate with them within their respective mandates. The Russian Ministry of Natural Resources and Ecology joined the NDEP meeting for the first time with new proposals for the Northern Dimension Area. Also Vnesheconombank (VEB) made a presentation on their structure and project portfolio and will seek to find ways of cooperating with the NDEP Steering Group.





Steering Group meeting (from left) Dmitry Bukin, Head of Division, Russian Ministry of Foreign Affairs, Igor Zotov, Chief Expert, Russian Ministry of Natural Resources and Ecology

The EBRD Nuclear Safety Department on behalf of the NDEP Nuclear Operating Committee reported to the Group on the good progress in the nuclear window. Most of the activities since the last Steering Group on 4 June 2008 have concentrated on the follow-up of ongoing projects and preparation of the procurement process under the newly signed Grant Implementing Agreements in June 2008.

The next Steering Group meeting is planned for 17th March 2009.

150th Anniversary of SUE “St Petersburg Vodokanal”

10 October 2008 marked the 150th Anniversary of State Unitary Enterprise “St Petersburg Vodokanal”. The city’s permanently functioning water supply system traces its origin back to the year 1858 when the Joint-Stock Company of St Petersburg Waterworks was created and its charter endorsed by Tsar Alexander II.

Back in 19th century the lives of the St Petersburg population were transformed with the arrival of tap water replacing buckets and barrels as previous modes of transportation. The first network provided around 5,500 m³ of water (or equivalent of 450,000 buckets) a day. Now the utility supplies about 2.5 million m³ of water daily to its 5 million inhabitants.

In the history of St Petersburg Vodokanal the achievements of the last 20 years have been equally remarkable and life changing. The utility has managed to modernise its inefficient Soviet water supply system and wastewater treatment facilities in line with modern European standard. By 2011 the city will achieve 98% efficiency in wastewater treatment. St Petersburg Vodokanal is the leading company in the Russian water sector and has received a number of national and international awards. It employs about 8,000 people.

On the occasion of the 150th Anniversary, we are very pleased to share with our readers the following interview with Feliks Karmazinov, Director General of SUE St Petersburg Vodokanal (pictured right).



• In your opinion what are Vodokanal’s greatest achievements since you became the Director General of the company in 1987?

SUE St. Petersburg Vodokanal has come to occupy a recognised leading position in the Russian Federation’s housing and utilities system. The many awards for our

contribution to the development of the city’s engineering infrastructure, to mitigating the city’s environmental impact and to environmental awareness serve as eloquent evidence of our achievements. We have been awarded the Grand Prix and Diploma as the winner of the all-Russian 2004 competition for the housing and utilities company that had shown the greatest efficiency in the new economic environment. We have also received a RF Government Quality Prize (2006), and are the holders of the title of the Most Socially Effective Organisation and of the National Environmental Prize (2007). We have also been nominated for the Environmental Efficiency – Ecology in Industry and the International Environmental Initiatives prizes. Vodokanal has been honoured with the European Standard international prize for its international collaboration and for bringing Russian social and economic standards into closer convergence with European standards, as well as with the Swedish Baltic Sea Water Award (2005).

St. Petersburg is the first Russian city and the first international city of its size to introduce UV treatment of all its tap water. New York has also adopted this programme, but it will only be completed in 2010. UV treatment provides reliable antiviral protection of drinking water. Our water is treated with sodium hypochlorite and ultraviolet radiation, and we can thus guarantee that it will be free from bacterial and viral contamination. The Federal consumer protection agency, Rospotrebnadzor, has calculated the benefit from disease prevention brought about by our innovations, including UV treatment, and found that it amounts RUR 700 million per year.

In the area of effluent disposal, last year we put into operation two new sewage sludge incinerators. The one at the Northern Wastewater Treatment plant was completed within the framework of NDEP while the second one at the Southwest Wastewater Treatment plant was co-financed by the European Commission and the EIB. These plants, together with an existing one built 11 years ago at the Central Wastewater Treatment Plant, now incinerate all sewage sludge. St. Petersburg is the only city of its size to have fully resolved this challenging problem: it must be remembered that even quite recently sewage sludge was simply accumulated in landfills around the city. The two new plants are very different from the first one, not only due to their ultra-modern gas scrubbing system, but also because they use their waste heat for heating and power generation.

On 10 October, the day when St. Petersburg Vodokanal celebrated its 150th anniversary, we opened the first section of the Northern Tunnel Collector. The Governor

of St. Petersburg, Ms V.I. Matvienko, was present at the opening ceremony. Two more sections will be phased-in by 2010, and a few years later St. Petersburg will be treating virtually all of its wastewater. In this context, it is worth noting that till 1978 all municipal wastewater was discharged directly into the Neva. Since then, we have put enormous effort into the creation of wastewater treatment system. We took 30 years to achieve what other cities have done in 100-150 years.

• How important was international cooperation for strengthening the company?

It is hard to overestimate its importance. We would never have become the Vodokanal of today if it were not for the support of St. Petersburg as a whole, of its government, its NGOs and, it goes without saying, our Russian and foreign partners. I would like to extend our special thanks to our northern neighbours and our Finnish colleagues. Next year, we plan to mark 20 years of our cooperation with a special celebration. Our Finnish colleagues proved not to be afraid of the scale of the work we were facing. They were with us every step of the way. Together with them, we obtained the first loan from the EBRD and completed a multitude of projects.

The Finnish Ministry of Environment invited the Helsinki Water Supply and Sewage Disposal Utility to start bilateral cooperation with St. Petersburg Vodokanal. The first cooperation agreement was signed at the end of 1995. A large proportion of joint projects, including technical assistance projects, were co-funded by the Finnish Ministry of Environment.

As a major component and prerequisite for the EBRD loan, a special Corporate Development Programme (CDP) was prepared by the specialists of St Petersburg Vodokanal and consultants financed by Finland, Sweden, Denmark and the United Kingdom. The CDP was successfully implemented in 1998-2002; it is now renewed annually and remains one of the high priorities for St Petersburg Vodokanal.

Among Vodokanal's major international projects was the completion of the South-West Wastewater Treatment Plant, a facility of the greatest environmental importance to the region. On 22 September 2005, the plant was officially put into operation in a ceremony attended by President Putin, the President of Finland, Tarja Halonen and the Swedish Prime Minister Goran Persson. The commissioning of the South-West Wastewater Treatment Plant virtually halved the quantity of untreated effluent discharged into the Gulf of Finland and increased the percentage of wastewater treatment in St. Petersburg to 85%.

The project became the first one in Russia to involve the use of private capital as well as public money and donor funds. 15 funding organisations of different levels participated in it. The South-West Wastewater Treatment Plant was built under a new public-private partnership programme involving the participation of international financial institutions. The main foreign lending came from the NIB, EBRD, NEFCO and EIB, while for the latter it was their first ever loan Russia. The unique aspect of the financing package consisted in bringing together several different Western European sources of finance, including loans from foreign banks, European government grants and donor organisations.

Nowadays, we receive no complaints from the regulators, and this is largely due to our foreign partners.

• What are Vodokanal's targets and goals for the future?

While congratulating Vodokanal on its 150th anniversary, which we celebrated on 10 October, and offering us much warm praise, the city fathers and our friends advised us not to rest on our laurels. They were right, of course, since we have much work ahead of us.

St. Petersburg Vodokanal places much emphasis on improving the Baltic Sea environment. St. Petersburg is a major point source of the Baltic Region's environmental burden. While addressing the issue of connecting the whole city to the sewerage system, we are also extremely aware of the need to ensure efficient wastewater treatment by removing the phosphorus and nitrogen which are the agents of eutrophication – the proliferation of blue-green algae, causing significant damage to the Baltic biomass in the Gulf of Finland. The Finnish John Nurminen Foundation, which studies the Baltic environment and its problems, has set up a special fund to find a practical solution to this problem. As part of Clean Baltic, a joint Russo-Finnish project, on 1 October 2007 we held an official ceremony to mark the opening of the reconstructed St. Petersburg Activated Sludge Plant. Modern wastewater treatment methods enable us to reach the HELCOM and EC standards of nitrogen and phosphorus removal. The President of Finland, Tarja Halonen, who attended the ceremony, noted that St. Petersburg was in many ways a trailblazer in Russia and was an example of how to achieve world standards of wastewater treatment. The deep treatment technology allowing removal of biogens from wastewater will now be introduced at other treatment plants.

Vodokanal's other plans include the introduction of UV treatment for all wastewater, recycling the ash which remains after the incineration of sewage sludge and increasing the capacity of water supply plants. We need to continue educating the new generation, by developing our Children's Environmental Centre, the St. Petersburg Water World museum and our new multimedia complex, the Universe of Water. It is only by changing awareness that we will be able to change attitudes to the planet's natural resources and foster truly careful attitudes to them, and to clean water in particular.

• What would be your personal message to NDEP? How do we reflect the success of St Petersburg Vodokanal in other regions in north-west Russia?

The Environmental Partnership is a highly progressive organisation, which has proved to be an effective tool working for the benefit of people, for the improvement of the environment and for the conservation of natural resources. I would wish it to continue to act as a connecting link in a cause important for the entire global community – the conservation of natural resources, careful environmental management and the introduction of new environmental protection technologies. St. Petersburg Vodokanal welcomes cooperation and experience sharing. Our resources can be called upon both at the regional and the international level.

St Petersburg Vodokanal opens the first line of the Northern Tunnel Collector



Opening ceremony of the first line of the Northern Tunnel Collector, (in the centre) Feliks Karmazinov, Director General of SUE St Petersburg Vodokanal instructing the operator (screen on the left) to open the tunnel



Governor of St Petersburg, Valentina Matvienko and Feliks Karmazinov, Director General of SUE St Petersburg Vodokanal at the opening ceremony

To coincide with the 150th Anniversary of the SUE St Petersburg Vodokanal, the first line of the Northern Tunnel Collector was inaugurated by the City Governor, Valentina Matvienko.

This time all the action was underground. A single push opening the valves enabled to close off 31 points of direct discharges located along the underground tunnel. As a result, the volume of untreated wastewater has been reduced by 97,000 m³ per day.

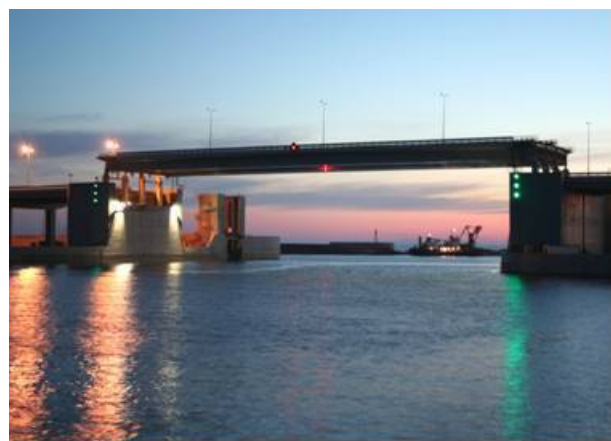
This is the first stage of the overall construction of the Northern Tunnel Collector. The second line is to be opened in 2009 which will close off 18 points and reduce the amount of untreated wastewater by 54,000 m³ per day. The final stage planned for 2010 will eliminate 23 points of direct discharges which so far pump about 118,500 m³ of municipal and industrial wastewater directly into the River Neva. The NDEP financed Okhta Tunnel Collector is part of the overall investment.

In brief the construction of the Northern Tunnel Collector consists of two tunnels measuring 12.2 km each with an inner diameter of 3.3 meters and outside diameter of 4.1 meters. The maximum depth the tunnel will reach is

about 90 m below ground. Once completed more than 300,000 m³ of untreated municipal and industrial wastewater will be eliminated.

On a humorous note, a letter wrapped in the old Soviet Sports newspaper was found by the construction workers inside the tunnel collector. This "message in a bottle" left for posterity in 1980s documented not only the progress on the tunnelling work but also the price of alcohol in those days. The letter is now on show in the St Petersburg Water World Museum.

Main Part of the St Petersburg Flood Barrier Completed



Testing of the new lifting bridge during white nights in August 2008 (photo courtesy of David Edwards of Halcrow Ltd)

A key part of the St Petersburg Flood Protection Barrier was completed on 8 October 2008 with the opening of the barrier's shipping canal. The first vessel to sail through the canal was the "Georg Ots", a ferry en route to Kaliningrad.

The construction of the Flood Protection Barrier is the 3rd largest infrastructure project of its kind in Europe and the largest in Russia. It stretches for 25 km and incorporates 11 dams and 6 floodgates. Earlier, in April this year, following the completion of the underwater tunnel, the canal was filled with water in an official flooding ceremony. The barrier is due to be fully completed by the end of 2010.

Vologda Vodokanal upgrades its wastewater facilities with the help of NDEP

Following the signing of the NDEP grant agreement between the EBRD and the Municipal Unitary Enterprise for Housing and Communal Services "Vologda GorVodokanal" on 17 July 2008, the first contract for technical cooperation was signed in September 2008. The Consultant which is now on board will assist the PIU to implement the wastewater component of the project on time and within budget.



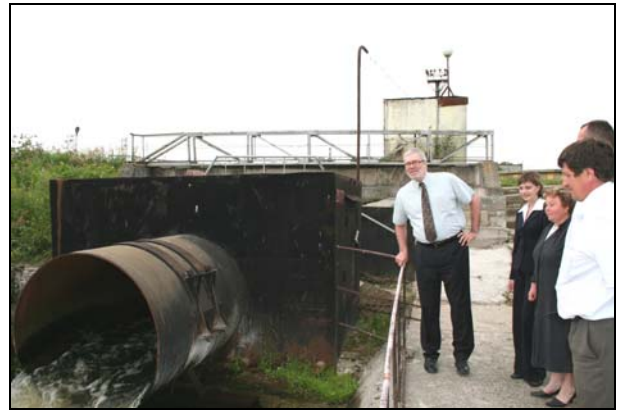
*The signing of the NDEP Grant Agreement on 17 July 2008
(from right) Director General of VologdaGorVodokanal
Mikhail V. Elyukov and Jaakko Henttonen, NDEP Manager*

After the grant signing in summer, the NDEP Manager visited the existing water and wastewater facilities at Vologda Vodokanal. The plant was built in 1977 and is in dire need of modernisation. Most of its mechanical and electrical equipment is outdated, corroded and the facilities lack the sufficient capacity to handle the demands of the city. Consequently, the plant does not meet the EU or local standards for water treatment and the direct discharges of phosphate and nitrate in particular threaten the ecological balance of the city and the Northern Dvina River. The €3 million NDEP grant will be used to reconstruct the wastewater treatment plant which will be tendered on a design and build basis. The remaining €0.5 million - now contracted – is for technical assistance.

The EBRD loan of 367 million roubles will be used for the water supply component. The recipient of the loan and grant is the VologdaGorVodokanal, a local state owned water utility.



(above) current outdated facilities at VologdaGorVodokanal



(above) Site visit to VologdaGorVodokanal in July 2008

Recent ND Events

The 6th meeting of the Northern Dimension Steering Group took place in Brussels on 23 September 2008. It was chaired by Maxime Lefebvre, Chairman of COEST Working Group, representing the French Presidency of the European Union. Michael Webb, Acting Head of Unit of DG RELEX was the co-Chair representing European Commission.

The Nordic Council of Ministers (NCM) underlined the importance of the ND Policy and the crucial need for the four equal partners – EU, Russia, Iceland and Norway – to cooperate. The NCM noted that they are already involved in the NDEP environmental activities through NEFCO which focuses on small scale energy efficiency projects.

The Group discussed amongst others the possibility of establishing a new partnership on Transport and Logistics. A special Working Group was set up to work out the financial and legal aspects with a plan for such partnership to become operational in 2010.

Energy and efficiency was also on the agenda in the context of a new set of proposals prepared by Norway. The EU proposed to discuss these initiatives at the next meeting of NDEP as energy efficiency is part of partnership's mandate.

Regarding the new EU strategy for the Baltic Sea Region, the first major stakeholder event took place in Stockholm on 30 September 2008. The first Ministerial ND meeting is planned for 28 October 2008 in St Petersburg.

NDEP Projects in brief

Project	Lead IFI	Total cost	NDEP grant	Progress
1. St. Petersburg Southwest Wastewater Treatment Plant	NIB	€193.6 million	€5.8 million	Project completed - plant in operation
2. St. Petersburg Flood Protection Barrier	EBRD	€2000 million	€1 million	Under construction
3. St. Petersburg Northern Wastewater Treatment Plant Incinerator	EBRD	€90.4 million	€6.35 million	Project completed - plant in operation
4. Municipal Environment Investment Programme in the Leningrad Oblast, Phase 1	NIB	€23.2 million	€4 million	Under construction
5. Komi Municipal Services Improvement Project	EBRD	€31.8 million	€6.035 million	Under construction
6. Kaliningrad District Heating Rehabilitation	EBRD	€21.8 million	€7.3 million	Approved by Assembly Grant yet to be signed
7. Archangelsk Municipal Water Services Project	EBRD	€25.5 million	€8.2 million	Under construction
8. Murmansk District Heating Project	NIB	€29.6 million	€5 million	Approved by Assembly Grant yet to be signed
9. Novgorod Cross Municipal Rehabilitation	NIB	€14 million	€2 million	Approved by Assembly Grant yet to be signed
10. Kaliningrad Solid Waste Management Project	NIB	€49.2 million	€10.1 million	In preparation
11. St. Petersburg Neva Closure of Direct Discharges of Untreated Wastewater	NIB	€890 million	€30 million	In preparation
12. Ladoga Environmental Programme	NIB	€100 million	n/a	Under construction
13. Kaliningrad Water and Environmental Services	EBRD	€110 million	€10 million	Under construction
14. Vologda Municipal Water Services	EBRD	€18.4 million	€3.5 million	Grant signed Implementation started
15. Kaliningrad Project Implementation Unit	EBRD	€3.8 million	€3 million	Grant signed Implementation started
16. Sosnovyi Bor Municipal Water Services	NEFCO	€2.9 million	€0.5 million	In preparation

Also note...

- 28 October 2008 – first ND Ministerial meeting in St Petersburg
- 24 November 2008 – Clean Baltic Sea Conference in Helsinki organised by John Nurminen Foundation
- 1 December 2008 – NDEP Assembly of Contributors will be held in London at the EBRD
- 2-3 December 2008 - 4th meeting of the HELCOM BSAP Implementation Group in Helsinki
- 16-17 December 2008 – Conference on “Financing Infrastructure, Municipalities and Regional Development in 2009 Russia” in St Petersburg
- The NDEP brochure is available on request. Write to info@ndep.org with your name, organisation and postal address to receive a copy.

The **Northern Dimension Environmental Partnership** was developed in response to calls from the Russian Federation and the international community for a concerted effort to address environmental problems in Northwest Russia. The most pressing relate to water, waste-water, solid waste, energy efficiency and nuclear waste.

The NDEP evolved from this initial idea into a fully established partnership whose Support Fund, managed by the EBRD, provides grant co-financing to key investments in environmental and nuclear safety projects in this area. NDEP projects are implemented by the EBRD, the NIB, NEFCO, the EIB and the World Bank.

The European Union, the Russian Federation, Belgium, Canada, Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden and the United Kingdom are the sponsors of the NDEP Support Fund, which currently stands at close to €274 million.

For more information, visit www.ndep.org, or contact Jaakko Henttonen at Henttonj@ebrd.com or NDEP Secretariat at Manike@ebrd.com