EFQM Good Practice Competition 2015
Achieving Sustainable Excellence

Registration form

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The registration form and submission report have to be returned together with the video to Vinciane Beauduin at EFQM (Vinciane.beauduin@efqm.org) by 15 May 2015 at the latest.

Should you have any queries, feel free to contact Vinciane Beauduin via email at Vinciane.beauduin@efqm.org, or by phone on +32 2 775 3510.

Good Practice - Submission Report

Good Practice Title	**"Vodokanal St.Petersburg: Rescuing Marine Mammals"** (to ensure compliance with the UN Global Compact 8th principle "Undertake initiatives to promote greater environmental responsibility")

Link to the video: https://www.dropbox.com/s/m777zhke4afv346/EFQM-1.mov?dl=0

Organisation overview

The State Unitary Enterprise "Vodokanal of St. Petersburg" dates back to 1858. Today, Vodokanal supplies potable water to 5 Mio. inhabitants and tens of thousands of enterprises in the second largest city of the Russian Federation, and ensures wastewater collection, transportation and treatment.

St. Petersburg is the biggest city at the Baltic Sea coast, therefore, Vodokanal bears a special responsibility for environmental well-being of the Baltic.

Just three and a half dozen years ago St. Petersburg was regarded as a "hot spot" on the Baltic Sea map: the city with population exceeding one million had no treatment facilities, and all wastewater was discharged into the Gulf of Finland untreated.

The first wastewater treatment plant was put into operation in 1978. Then the first stage of Central WWTP began to function, and 27 % of municipal wastewaters were sent to treatment. In 1987, the first stage of Northern WWTP was put into operation. On 22 September 2005, South-West WWTP was inaugurated in the presence of the Russian President Vladimir Putin, the Finnish President Tarja Halonen and the Swedish Prime-Minister Göran Persson. The South-West WWTP construction is an example of international environmental and financial cooperation, a large-scale investment project. Dozens of companies were involved in the project implementation. It is here that a public-private partnership scheme was used in Russia for the first time ever. The project was supported by the governments of the Nordic countries, international financial institutions and donor

organizations.

In 2013, Vodokanal completed a huge environmental project directly related to the improvement of the Baltic Sea condition: the Northern Tunnel Collector was built in Petersburg. With the Collector in place, 76 direct discharges could be closed and 334,000 m3/day of wastewater were no longer discharged into the Neva and the Gulf of Finland.

Today, Petersburg is an example of successful solving of environmental problems. As much as 98.5 % of the city wastewater undergoes treatment. Vodokanal treats wastewater at its 13 WWTPs where the treatment processes fully meet the international requirements. Petersburg complies with the HELCOM Recommendations to the full extent: phosphorus concentrations in the total volume of the city effluent are under 0.5 mg/l, and nitrogen concentrations do not exceed 10 mg/l.

A special focus is on removal of phosphorus and nitrogen because it is they that cause intensive growth of blue-green algae which pose a grave threat to the health of the Baltic Sea and its inhabitants. Satellite observations show that the Gulf of Finland is practically free from the blue-green algae.

The treated effluent quality is monitored not only by special devices, but also by biomonitoring systems. South-West WWTP has a bio-electronic toxicological monitoring system to check the safety of treated effluent where crayfish are used as bio-indicator animals. Scientists and process engineers monitor the effluent from South-West WWTP by the physical condition and heartbeats of the animals before discharging it into the Neva Bay. Should the effluent quality deteriorate, sensitive crayfish would feel it at once; the scientists would notice changes in their behavior and, moreover, receive a signal from special optical fibre sensors fixed to their carapaces. The sensor reads cardiac activity of the animals in real time.

Another important element of the wastewater treatment system created in Petersburg is sewage sludge incineration plants. Petersburg is the world's first megalopolis to fully solve the sludge disposal problem. There are three sludge incineration plants in the city. In addition to their main task, sewage sludge incineration, the plants produce heat and electricity enabling Vodokanal to reduce its demand for purchased energy.

The sludge incineration plants meet all requirements of the Russian and European sanitary and environmental laws. One of the incineration plants (at South-West WWTP) has an unprecedented snail-based biomonitoring system implemented in 2011 to check the quality of flue gases. The snails breathe the air admixed with the smoke emitted from the plant's chimney. The optical fibre heartbeat and behavior sensors fixed to their carapaces enable the specialists to assess the physical condition of the molluscs, i.e. their general state, in an automatic mode.

Traditionally, Vodokanal is strongly focused on social projects aimed to develop careful and responsible attitude to water in the society.

The development of water consumption culture and the preservation of the Baltic Sea basin are inherent in Vodokanal's mission, while responsibility to future generations and to the society is one of its basic values.

Vodokanal has its Youth Environmental Centre (it works to develop skills of careful attitude to water among the children, and through them – among their parents) and the Universe of Water museum complex (the museum programmes demonstrating the value of water are targeted to the family audience); the website Da-Voda dedicated to careful water use has been created and is developing with the support from Vodokanal (da-voda.com; Vodokanal could organize interaction with active Internet audience due to this website).

Vodokanal activities in the field of the Baltic Sea protection were followed up by its participation in a project aimed to preserve marine mammals of the Baltic Sea: ringed seals and grey seals. Vodokanal began to work towards this goal in 2013 in cooperation with the zoologists who already had a huge experience of saving the Baltic pinnipeds at that time.

Desired Results

Two species of marine mammals, (Ladoga and Baltic) ringed seals and Baltic grey seals, are found in Petersburg and the Leningrad Region. Mild winters, insufficient ice sheet in Lake Ladoga and the Gulf of Finland, human activities in the seals' habitats and many other factors create a situation where the pups are detached from their mothers too early and cannot survive without a professional assistance.

The Russian sub-population of Baltic ringed seal is on the verge of extinction: about two hundred animals only remain in the Gulf of Finland. No effort to preserve this species has been taken up to now. According to specialists, Baltic ringed seals may vanish if no immediate action is taken. Their population is only 200 animals now.

The Ladoga ringed seal living in Lake Ladoga is also listed in the Red Book of the Russian Federation. Over the recent years the population has been stable: 6,000-8,000 animals.

The Baltic grey seal living in the Gulf of Finland is also listed in the national Red Book of RF. 600-700 animals are found in the Russian part of the Gulf of Finland.

In 2013, Vodokanal launched a new social project: in cooperation with the Not-For-Profit Partnership "Leningrad Oblast Marine Mammal Rehabilitation Centre" and 2PR Public Relations Agency, the company participated in the rescuing of rare species in the Baltic Sea Region – ringed seals and grey seals.

The project objective is to support conservation of rare marine mammals in the Baltic Sea Region. For this purpose, we should, on the one hand, help the seal pups in a tough situation (when they get detached from their mothers too early): give them treatment, food, teach how to behave and hunt in the wild, and release to the natural environment. On the other hand, awareness-raising actions are needed for the target audience, such as the inhabitants of coastal areas, fishermen, and port service staff. Actually, successful rescuing of animals much depends on how quickly the information about seal pups in trouble is communicated. Moreover, the purpose of awareness-raising effort is to draw the public attention to the need to rescue seal pups and to the environmental challenges threatening their habitats: Lake Ladoga, the Gulf of Finland and the Baltic Sea.

Approach

In 2013, a pinnipedian rehabilitation centre was established at the premises of Vodokanal's treatment plant in Repino. The centre specialists, Vyacheslav Alexeyev and Elena Andrievskaya, have developed Russia's first rescue system to help rare species of marine mammals and gained experience in rehabilitation of the pinnipeds that got into trouble. Before the cooperation with Vodokanal began, the main problem was the lack of permanent place for rehabilitation. The pups had to be grown at a mountain skiing base, a forest security cordon, in a country house, in the Zoo, or just on the Gulf of Finland shore.

Vodokanal has created conditions for most effective rehabilitation of animals.

During the 2013 and 2014 seasons, the former administrative rooms at the treatment plant were used to accommodate animals. In parallel, a reconstruction project was designed to convert the rooms in Repino into a new Marine Mammals Research and Conservation Centre equipped in compliance with all modern requirements.

When the 2014 season was over, the rehabilitation rooms were reconstructed in a very short time. As a result, a unique facility, unparalleled anywhere in Russia or in the Baltic countries, was created. The Marine Mammals Research and Conservation Centre can accommodate up to 40 animals at a time. The Centre inauguration ceremony in September 2014 was attended by the Governor of St. Petersburg Georgiy Poltavchenko.

The Marine Mammals Research and Conservation Centre consists of three blocks:

- a quarantine block for new arrivals (with individual airtight isolation wards where marine mammals are kept in quarantine;
- physical rehabilitation rooms (the animals are transferred there after they recover and put on enough weight);
- adaptation cages (these are located outside: the animals get prepared to the release into the wild there. The seals usually attach themselves to humans during 1.5-2 months of rehabilitation, and it is undesirable: a wild animal must remain wild. It is for this reason that, practically, no people come in sight of the seals at the adaptation site).

Moreover, the Marine Mammals Research and Conservation Centre now has a base for field studies of mammals in North-West Russia. The main focus is on the research and restoration of Baltic ringed seal population in the Gulf of Finland. A drone with a camera is used to watch the animals in haul-outs; binoculars, a spyglass, a photocamera, trail cameras, etc. are available.

Deployment

Instructions on what to do when you find an endangered seal pup are communicated through the mass media, social networks and Internet sites. The Hot Line phone, 699 23 99, receives calls around-the-clock. Moreover, meetings with coastal inhabitants, fishermen, port service staff, border guards and different rescue teams are organized just before the start of the season. Leaflets describing what to do when you see a ringed or grey seal are issued and distributed. When the Centre specialists receive a call, they arrive at the scene, give first aid to the animal, take it to the Centre, treat and nurse to health using their own unique methodology.

In the first rehabilitation season 2013, five animals (three Ladoga ringed seals and two Baltic grey seals) were under medical treatment. All of them were successfully treated, put on enough weight, and were released into their natural habitat.

In the year 2014 that had been announced "the Gulf of Finland Year" in Russia, Finland and Estonia, the "seal kindergarten" in Repino admitted 29 nurselings: 23 Baltic grey seals and 6 ringed seals (5 of them – Baltic ringed seals) in the period from mid-March to late April. The Petersburg zoologists could save more animals than similar centres in Latvia, Lithuania, Estonia, Finland and Poland could, all put together. By mid-July, all Centre patients had improved in strength, put on weight, and returned to their natural habitat.

In 2015 (as of 12.05.2015), 14 animals are rehabilitated at the Centre. All of them were admitted with a weight deficit, many had wounds. For example, the Baltic ringed seal pup admitted to the rehabilitation centre on 21 April has a crushed lower jaw-bone and major phlegmons (acute inflammation of soft tissues) on its snout, as well as a strong corneal haze on its right eye. The zoologists are fighting for the animal's life.

A special section dedicated to the Help the Pinnipeds Project, www.vodokanal.spb.ru/pomogaem_lastonogim, is created on Vodokanal's website.

Additionally, the project is supported by the Da-Voda portal, and its main character, the Neva Crayfish – through its pages in the social networks.

Any information on the Marine Mammals Research and Conservation Centre activities is widely covered in mass media and social networks. Press releases about new patients and the Centre campaigns are regularly issued and distributed, Information about the Centre patients is posted on Vodokanal's and the Neva Crayfish's (main character of Da-Voda website) pages in social networks. Press tours to the Centre and to ceremonial releases of rehabilitated animals into the wild are organized for mass media representatives.

In autumn 2014, the Baltic Seal Friends Fund (www.balticseal.org) was established with active participation of Vodokanal to involve wide public and business in the rescuing of marine mammals in the Baltic Sea Region. The Director General of the Fund is V.A. Alexeyev, a zoologist and veterinarian having a unique experience in the rehabilitation of pups of Ladoga ringed seals, Baltic ringed seals and grey seals. The members of the Fund's Public Council are, among others, the Governor of St. Petersburg Georgiy Poltavchenko, the Director General of Vodokanal St. Petersburg Felix Karmazinov, and the Chairman of the Union of Journalists of St. Petersburg and Leningrad Region Lyudmila Fomicheva.

In 2015, the Fund and Vodokanal launched a wide-scale campaign "Towels for Baby Seals" to collect towels and plush robes for the Centre patients. The towels and plush robes for baby seals can be used as diapers, toys and materials for "home" improvement.

Assessment

During two seasons in 2013 and 2014, thirty-four babies of marine mammals including 5 pups of very rare Baltic ringed seals could be saved.

The activities of the Marine Mammals Research and Conservation Centre spark wide public interest. In 2013-2014, over 500 publications dedicated to seal rescue matters were issued.

Hundreds of Petersburg citizens, different hotels, fitness clubs and other businesses took part in the towel collection campaign in 2015. As a result, the required number of towels for the whole season was collected in three days, and even after the official closure of the campaign people kept bringing towels and plush robes for the pinnipedian patients of the Marine Mammals Research and Conservation Centre.

VIII International Scientific and Practical Conference "Marine Mammals of Holarctic" organized by the Marine Mammal Council was hosted by Vodokanal on 22-27 September 2014. The Conference participants were the leading experts from Russia, Norway, Canada, the USA, and other countries, who study seals, white porpoises, grampuses, whales, walruses, white bears and other faunal forms of the Holarctic. The Chairman of the Marine Mammal Council, Vice-Chairman of RAN Scientific Council for Environmental Challenges and Extraordinary Situations, Advisor to RAN (Russian Academy of Sciences), Professor A.V. Yablokov remarked in his speech at the conference that, by opening the Marine Mammals Research and Conservation Centre, Vodokanal has written a new page in the history of marine mammals research and conservation in Russia.

In December 2013, the jury of the international award PROBA-IPRA GWA 2013 announced Vodokanal's Help the Pinnipeds Project the winner in the nomination "Best Social PR Project".

In December 2014, Vodokanal's Marine Mammals Research and Conservation Centre Project won the All-Russian National Environmental Prize named after V.I. Vernadskiy in the nomination "Environmental Initiatives".

Refinement

The activities of the Marine Mammals Research and Conservation Centre will be followed up. In March 2015, the Russian Minister of Natural Resources Sergey Donskoy and officials from the Ministries of Environment of Finland and Estonia visited the Marine Mammals Research and Conservation Centre in the framework of the Forum dedicated to the closure of the Gulf of Finland Year. The Minister Sergey Donskoy came with a proposal to raise the Centre activities to the international level in future. “The Centre leaves a profound impression as every aspect of animal treatment and eventual release into the wild is given in-depth scrutiny here”, - opined the Minister after his visit to the Centre.

When the rehabilitation season is over, the Centre performance will be assessed and, if necessary, updates will be made to the list of equipment, consumables, etc., on the basis of the conclusions. Moreover, further research activities and awareness-raising projects (in cooperation with Vodokanal's Youth Environmental Centre) are contemplated.

Awareness-raising activities will move to a new level by the beginning of the next season: social advertizing in coastal areas will be organized, relevant brochures and leaflets will be issued, a package of lectures will be given, etc.

In the off-season period, a package of actions is planned to promote and develop the Baltic Seal Friends Fund in order to wider disseminate any information about the existing problems of indigenous species in the Baltic Sea and potential solutions, as well as to attract more friends for the Fund.

In parallel, Vodokanal will implement process-related projects aimed to improve the condition of the Baltic Sea and, hence, improving the living environment of marine mammals (this refers to the closure of the remaining untreated wastewater discharges, the upgrading of wastewater treatment processes, etc.).