



## Final Report – Summary –

of the project

# "Elaboration of a Guideline for Sustainable Regeneration of Industrial Brownfield Sites in the Russian Federation by example of St. Petersburg"

supported by the  
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety  
(FKZ 380 01 075)



**Contracting Authority:** Federal Environmental Agency  
Postbox 1406  
06813 Dessau

**Contractor:** WTTC – Werkstoffe & Technologien, Transfer & Consulting  
Rudower Chaussee 29  
D-12489 BERLIN

Responsible Editors: Dr. Dalik Sojref  
Dr. Hans-Georg Weinig

Berlin, 20 December 2005

## **Summary**

The fundamental economical and political changes during the last decades have reinforced the problem of an appropriate sustainable redesignation and remediation of brownfields in the Russian Federation – especially in inner-city areas.

Reasons for that are amongst others:

- on the one hand, floor space required for offices, habitation and service centers in predestined centrality of large cities is increased
- and, on the other hand
- former industrially used areas, that were shut down or replaced for economic and/or environmental reasons, dispose of relevant potential.

At the same time, the existing legal, methodological, organizational, and technological framework in the Russian Federation does not exhibit an adequate basis for sustainable land regeneration. The current situation concerning the acquaintance with brownfields is alarming. This applies also for the city of St. Petersburg, that was the pilot for the project, and where many centrally located industrial sites are subjected to redesignation.

Within the European Union and in Germany particularly, experiences are available concerning remediation and redesignation of brownfields including compliance with sustainability criteria.

The presentation of these experiences and correlated frameworks, the examination of a possible implementation while taking into consideration the particularities of the economic, environmental and legislative situation in the Russian Federation were the most important tasks of the co-operation project, as well as the elaboration of recommendations for sustainable land regeneration in Russia by example of St. Petersburg.

The platform for the efficient mediation of EU and especially German experiences and frameworks was represented by:

- the project „Regeneration of European Sites in Cities and Urban Environments – RESCUE“, which was realised within the 5<sup>th</sup> EU framework program

- contributions of German experts and discussions during seminars and workshops held in St. Petersburg, presentations of case-studies, as well as site visits during an informational trip for Russian experts and representatives of responsible authorities to Germany
- German documents which were translated into Russian language, e.g. the work tool "remediation investigation" of the engineering technical registered association contaminated sites (ITVA), and the communication no. 20 of the federal working group waste (LAGA) „Requirements for re-use/utilization of mineral residues/wastes"

The detailed analysis of the existing general framework and current practice in brownfield recycling in St. Petersburg, and the examination of the practicability of existing frameworks and practical experiences in the EU and in Germany led to:

- „Methodological recommendations for assessment of the ecological situation of brownfields in St. Petersburg and elaboration of a remediation plan"
- and to
- „Manual for sustainable brownfield regeneration for the city of St. Petersburg" based on the final document of the RESCUE-project „Best Practice Guidance for Sustainable Brownfield Regeneration"

These documents were presented during the final conference of the project in November 2005 in St. Petersburg. Beside experts and representatives of the responsible authorities and institutions of St. Petersburg, also representatives from the Leningrad region and from the cities Moscow, Irkutsk and Novosibirsk participated in the conference.

The technical supervision for the project was conducted by the International Centre for Soils and Contaminated Sites (ICSS) within the Federal Environmental Agency (Umweltbundesamt UBA). The project was financially supported by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in frame of the helpdesk consulting program for the Middle and Eastern European countries.

## **Analysis of the legal framework & existing problems with the redesignation of brownfields in St. Petersburg**

At the beginning of the project the analysis of the legal framework and existing problems concerning the redesignation of brownfields in St. Petersburg was accomplished. This analysis was one of the fundamentals for the guideline elaboration.

All the workings were performed by the members of the working group (co-workers of WTTC, RGEC, Committees for urban development and architecture, environmental administration and sanitation inspectorate of St. Petersburg), and documented in a findings report. The report entitled "Problems on the redesignation of brownfields on the territory of St. Petersburg and analysis of the existing legal framework" is available at the ICSS in UBA.

The increasing relevance of a sustainable development of the historical city centre and an amelioration of life quality for the citizens are the main focus of the new draft master plan for conservation and development of the historical city centre of St. Petersburg (the valid master plan originates from 1987 without any update).

Contemporaneously, it has to be noted that the actual St. Petersburg master plan for urban development takes already into account some queries concerning redesignation and remediation of inner-city areas (esp. the remediation of the central industrial zone). Thus, the redesignation of a major part of the existing industrial sites is one of the foreseen main directions in urban development. Due to the economical changes in the last decade, the redesignation of industrially utilized sites (e.g. meantime closed production facilities) has distinctively increased interest.

Fulfilling these guidelines in practice is hampered because of a lacking interdisciplinary methodology for the remediation of brownfields (incl. definition of re-use, and elaboration of remediation plans) on federal as well as on regional level.

Within this context, the exchange of experiences in accomplishing brownfield recycling projects in Germany and other EU countries was of special interest for the Russian colleagues.

## **Information on general conditions and experiences in brownfield recycling in Germany and other EU countries**

The information on experiences in the field of redesignation of brownfield sites – regarding the existing framework in Germany, as well as in other EU countries – was one of the most important project issues. Hence, correlating matters were part of practically all project activities. This included workshops, an informational trip to Germany, as well as the participation in workshops of the RESCUE project.

The topics of the workshops held in St. Petersburg were on the one hand, the analysis of the current situation in the field of brownfield recycling in St. Petersburg, on the other hand the information exchange on experiences concerning legal framework and practical work, which have been already achieved in Germany and in the EU.

In April 2004 an informational trip for Russian experts and representatives of the authorities has been organized, which helped to provide a detailed presentation of experiences of different German cities, authorities and enterprises in realization of brownfield regeneration projects. Within the scope of this informational trip the cities Erfurt, Essen, Hamburg and Berlin were visited.

With the aim to intensify the experience and information exchange between EU countries and Russia in the field of sustainable brownfield regeneration, and to assure an adequate allowance of the RESCUE results for the elaboration of the guideline for brownfield regeneration in St. Petersburg, the project partners RGEC and WTTC participated in different workshops and the final conference of the RESCUE consortium. In addition, a case study regarding model objects in St. Petersburg for the application, respectively the transferability of the RESCUE findings towards the urban situation was accomplished.

## **Manual for sustainable brownfield regeneration for the city of St. Petersburg on basis of the RESCUE manual.**

The elaboration of the manual for St. Petersburg was effected by the RESCUE manuscript. Special focus was laid on the topics project management, remediation investigation/plan, and environmental protection. Therefore, the most important results from the exchange of

experiences that have been realized during the project proceedings, have been integrated into the St. Petersburg manual.

Furthermore, for the mentioned topics the findings of the case study and of the comparison between European and Russian approaches and legislative regulations have been likening incorporated. The document consequently allows a simplified handling for a comparison of long-termed EU experiences, that have been implemented in daily brownfield regeneration practice, with the actual valid regulations in the Russian Federation. This belongs to mutualities in several approaches, and to domains where EU practice clashes with applicable Russian law.

### **Methodological recommendations for assessment of the ecological situation of brownfields in St. Petersburg and elaboration of a remediation plan**

From the German and European documents used for the elaboration of the methodological recommendations, especially the federal soil protection and contamination ordinance BBodSchV, the ITVA work tool remediation investigation, the LAGA communication no. 20, and the ICSS manual for management and handling of contaminated sites were taken into consideration. The compilation of the methodological recommendations was accomplished in close accordance with the Russian legal framework and communal ordinances of St. Petersburg.

The document describes methods and procedures for the investigation of brownfields with the aim of an ecological assessment and the elaboration of necessary measures while taking into consideration their future use. The methodological recommendations take these questions into account mainly from an ecological point of view. Questions concerning urban development, technical and juridical problems of brownfield redesignation and remediation are not purpose of these recommendations.

The present recommendations address to private enterprises and the public authorities in St. Petersburg that are involved in the ecologic and sanitary assessment of sites, evaluations of approvals by experts, pre-project and project documentations. The final version is the result of an iterative process that has taken into account advises and coordination of the

communal committees in St. Petersburg. Acceptance of the document was already recommended by the committee for the environment, nature use and ecological safety.

Both documents developed within the project are of outstanding high interest for the administration of St. Petersburg. Furthermore, during the final conference representatives of the Leningrad region, the cities of Moscow, Irkutsk and Novosibirsk have underlined their major interest in the project deliveries and referred once more to the enormous actuality of sustainable brownfield regeneration, also for other regions of the Russian Federation. By this means, maximum potential multiplication of the project results is secured, and at the same time the harmonization of approaches in brownfield recycling in whole Russia is strongly affected.

### **German Russian co-operation project for the compilation of a remediation plan for the pilot brownfield site in St. Petersburg**

The project description already pointed out the importance of the ICSS within UBA as gateway to the RESCUE project, and to succeed the long-term objective to implement the manual in concrete examples. Therefore, the possible implementation was discussed as topic during the whole project duration. The workings completed now represent an excellent basement for the realization of a German Russian follow-up project for the common elaboration of an exemplary remediation plan for a selected brownfield in St. Petersburg.

New Holland with its prominent riverside location in the city centre and its great historic value is virtually suited as lighthouse project for the remediation and development of a brownfield site. The municipality is intensively working on a concept for the sustainable development of the site, and recently put out to tender an ideas/architectural competition for its future use. The co-operation with experienced colleagues from Germany could have positive impact and significantly accelerate the project delivery. For this reason, a succeeding project on the elaboration of an exemplary remediation plan for New Holland has already begun. Significantly involved in this German Russian co-operation project are the environmental administration department Hamburg, the ICSS within UBA, and the municipality of St. Petersburg.