

Marius Gedgaudas
Component Leader, Strategy Development
U.S.EPA

“It is my hope that another development stemming from the strategy development will be the creation of a steering committee that will be responsible for bringing the Volgograd experience to the rest of Russia.”

BACKGROUND

The overall goal of the strategy development component was to craft recommendations and implementation schedules for cost effective control measures leading to the most significant reductions in air pollution in the Volgograd area. The strategy was confined to an area of approximately 22km² in Volgograd, termed the “Triangle” - an area bordered by three large particulate matter sources: Red October Steel Mill, the silica brick and the aluminum reduction plant. The coordination among a myriad of different components and Russian/US organizations was critical to this effort. As an example, the emission inventory, compliance monitoring, low cost measures and ambient air monitoring components all funneled into the strategy development effort. Participants from VESA, IA, SRI AAP, and the Main Geophysical Observatory (MGO) all had important roles in the development of an overall strategy.

ACCOMPLISHMENTS

The strategy development component became more active as other RAMP components completed their work and results became available. The strategy component was then ready to identify control strategies for sources that were the major contributors to air pollution through examination of the completed emission inventory and the saturation monitoring studies. At the March 1996 workshop held in the US, it was decided that the results from the emission inventory and ambient air monitoring studies would be used in conjunction with the Russian dispersion model developed by Institute Agroproject to predict the effect of low cost measures and higher cost control strategies on ambient air pollution levels in the Triangle. Furthermore, short-term and long-term strategies would be selected and prioritized and the costs associated with the respective strategies estimated. The work of the strategy development component culminated in a final report with recommendations and implementation schedules in September 1996. The most significant findings of the report were:

- Virtually all of the northern Triangle area exceeds the maximum permissible concentration (MPC) for particulate matter. Most of the areas around the three enterprises exceed the MPC by a factor of five or more (based on the 1994 emission inventory data).
- Low cost measures reduced particulate matter levels dramatically near the silica brick plant, but had minor impacts near Red October and the aluminum plant.
- High cost measures (reconstruction of the entire facilities) are necessary to eliminate most exceedances of the MPC around Red October and the aluminum plant.

“The efficacy of the strategy will prove even more effective when the results from the monitoring studies and source attribution can be factored in . . .”

**Larisa Vishnevetskaya
Chief Engineer, IA
Volgograd, Russia**

- Model results for PM-10 show no exceedances at the silica brick factory, far fewer exceedances at Red October, and virtually the same results as total particulate matter at the aluminum plant.

IMPACTS

The strategy development component integrated many of the other components in order to quantify the impact and cost of control strategies and to make future decisions more effectively. Further, the Russian technical staff now know how to integrate most of the tools that were provided, especially low cost measures and short-term modeling. Whether they utilize them will probably depend more on politics and finances, rather than technical capabilities. Delays in delivery of sampling equipment from the Commodities Import Program (CIP) did not allow for the coordinated study that was originally anticipated.

DOCUMENTATION

“The Atmospheric Contamination Dispersion Model (Northern Triangle of Volgograd),” Institute Agroproject, Larisa Vishnevetskaya, September 1996.

Principals Involved in Strategy Development

Sergei Chicherin, MGO
Marius Gedgaudas, US EPA
Thompson Pace, US EPA
Jon Schweiss, US EPA
Anna Trashilova, IA
Larisa Vishnevetskaya, IA

Laura Neuwirth
Legal Component Leader
U.S.EPA Office of General Counsel

“...identifying and resolving legal issues openly promotes a more democratic process as well as better understanding of the project.”

BACKGROUND

The goal of the Legal Task Force was to assure that the RAMP project was conducted in a manner consistent with Russian legal requirements and to assist in the institutionalization of RAMP successes. To accomplish these goals, the Legal Task Force did three things: (1) developed a lawyer/client relationship with the RAMP project; (2) identified, researched and addressed legal issues related to the implementation and enforcement of the RAMP objectives; and (3) researched and drafted legal documents necessary to the implementation of opacity readings in Russian practice and the broader institutionalization of these methods in Volgograd and the Russian Federation.

The Legal Task Force was formed following visits to Russia by legal teams from the US EPA, starting in February 1993. In these visits, US EPA identified counterparts and established the framework of cooperation that led to the development of the Task Force. The first formal meeting of the Legal Task Force was held in February 1995. The Legal Task Force was initially implemented with the cooperation of the Center for International Environmental Law (CIEL) which received funds from US EPA for task force management. Air was only one of several environmental issues considered by the Legal Task Force.

ACCOMPLISHMENTS

The Legal Task Force included an ensemble of law experts from a wide range of Russian and American interest groups, including the government, non-governmental organizations, and the private sector. The Task Force addressed several legal issues related to RAMP, drafted the legal documents necessary to incorporate RAMP activities into Russian law, and supported efforts to increase public participation in Russia’s environmental policy formulation process.

The Task Force’s activities were critical for incorporating the Method 9 approach to opacity readings (visible emissions) into the Russian compliance and enforcement system. The first formal meeting of the Task Force was held in February 1995 when its participants established an air subcommittee to focus on certification of Method 9, developing opacity standards, and related issues. The Task Force recognized that an appropriate legal basis would be the foundation for visible emission certification in Volgograd, as well as throughout Russia.

The impact of the Legal Task Force’s activities extended beyond Volgograd by addressing issues that affect Russia’s federal enforcement and compliance system. In a February 1996 Task Force meeting, the participants addressed the need for a federal

decree ordering the Volgograd City Environmental Committee to establish opacity limits and mechanisms to ensure the adoption of the federal decree. A federal draft order was reviewed by the Legal Task Force and was presented to the Environment Ministry. By submitting the order, the Legal Task Force openly played a key role in the State Committee's issuance of a decree approving the experimental use of Method 9 throughout Russia in June 1997.

“Our systems are entirely different and thus our priorities are often in conflict.”

**Vladimir Kostov
Russian Legal Consultant
U.S.AID**

Apart from the need for federal authorization, the Volgograd City Administration needed to adopt a local ordinance providing for the establishment of opacity limits by the VESA. A local ordinance would authorize the VESA to include opacity specifications and limits in the documents necessary to operate an enterprise. The Legal Task Force prepared two drafts of a local ordinance and submitted these drafts for adoption by the appropriate local authority. Once the federal order was signed authorizing the implementation of the experimental use of opacity standards, the local order was adopted.

OBSERVATIONS

While the creation of interaction between lawyers and technical experts and written documentation enabled the provision of legal support in a transparent manner, the lessons learned in this project should be examined to encourage more successful approaches in any subsequent efforts.

From the outset of the project, there was an awareness of the deeply embedded view in Russian society that laws did not play an important role in environmental protection. While it is difficult to identify the exact source of this perspective, it is tied to the fact that lawyers are often removed from practical implementation and therefore the laws they draft reflect a more abstract ideal rather than a realistic goal. While the use of an attorney-client relationship in this project was aimed at addressing this issue, the view that laws were not important seemed to prevail in the minds of some Russian officials. This view seemed to relate both to the need for legal authorization for the project as well as the usefulness of realistic laws to encourage compliance. As a result, it was difficult for the legal component to reach goals that seemed relatively administrative and procedural, such as obtaining the attention of officials to ensure signature on key documents, such as the federal decree. As importantly, suggestions regarding public participation and enforcement/compliance mechanisms were never considered seriously by key Russian officials.

These institutional perspectives need to be addressed more directly in the future. In particular, a closer nexus between the legal and technical issues should be applied at the outset of any project. The legal issues need to be presented as an integral part of the project, rather than as an added component, to demonstrate their interdependence in terms of achieving effective compliance. In RAMP, such a close nexus was not achieved until midway through the project. This timing may have contributed to the view by the Russian partners that the legal issues were of lesser significance. Legal issues are likely to be more fully addressed to the benefit of the demonstration project if they are viewed as a critical ingredient of the project from the outset.

Ensuring the involvement of appropriate, actively involved individuals also requires identifying whether all appropriate levels of government have been involved from the outset. In the case of RAMP, legal advice from the Russian Task Force members indicated that the oblast level should have been involved. Unfortunately, the matter came to the notice of the Task Force rather late in the life of the project, after

decisions had been made about whom to involve and at what level. The Russian members of the Legal Task Force suggested that support from oblast officials would be helpful to obtain a Federal decree authorizing the project. For a variety of reasons, however, such officials were never actively involved in the project. While it is unclear whether or not this impacted the project itself, in the future, individuals at all relevant levels of government should be involved from the outset.

DOCUMENTATION

“Federal Decree for Opacity Reading in the Russian Federation.”

Principals in the Legal Component

Ruth Bell, US EPA/Office of General Counsel (OGC)

Deborah Dalton, US EPA/OGC

Vladimir Kostov, US AID

Laura Neuwirth, US EPA/OGC

Rich Ossias, US EPA/OGC

Ron Rutherford, US EPA, Denver, CO

Claudia Saladin, CIEL

Robert Teets, CIEL