STATEMENT OF WORK

for

Joint Russian-American Project on
The Mayak Regional Model Calibration

Basis for work:


2. Protocol of the Joint Coordinating Committee for Environmental Restoration and Waste management CEM meeting dated September 11, 1998 signed by Dr. Gerald Boyd and Dr. Victor Gubanov.


Executors:

From Russia – JCSC “Company Geospetzecologiya”, SGE «Hydrospetzgeologiya»; Mayak PA

From the USA – PNNL

1. Objectives of work

1.1. Calibrate Mayak hydrogeologic model for use in long-term groundwater plume migration based on historical plume development.

2. Scope of work

2.1. Collect/develop historical site characterisation data for long-term operation period (e.g., 1951 to present).

2.2. Develop approaches of accounting for the transient conditions of infilling of water bodies (Reservoirs 9 [Karachai], 10, and 11) and ash dump (i.e., variable changes over time impacting model geometry).
2.3. Mayak model calibration using longer-term period.

2.4. Test transient inverse model calibration methodologies. Evaluate UCODE (Hill and Poeter) and Zinin’s approach.

2.5. Prepare report based on analysis of results obtained.

3. Anticipated results

Evaluation of transient inverse modeling techniques and applicability of these techniques for development of models used in long-term predictions.

This project will be conducted over 9 months. The beginning of the contract is January 1, 2000. The completion of the project is September 30, 2000.

The contract was signed by:

For the American side:                                                                                           For the Russian side:

A. Hutter, Technical Program Director DOE/EML                                                                 E. Drozhko  
                                                                                             Deputy Director
                                                                                             Mayak PA

M. Foley  
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                                                                                             Leading Expert
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Contract Manager:                                                                                                 
M. Glinsky, Deputy Director  
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