

## Customer name: PVK Prague (a member of VEOLIA group)

### Company:

Pražské vodovody a kanalizace (PVK) – a division of the Veolia group is a stable company with a long tradition. It provides reliable services in water supply and wastewater removal and treatment in the City of Prague.

PVK supplies drinking water to 1.3 mil. Prague residents and another approximately 180,000 residents of the Central Bohemia Region. Drinking water comes from the Káraný and Želivka water treatment plants. PVK also operates a sewerage network in Prague. The central part of the city uses a combined sewerage system, which drains sewage together with rain water to the Central Waste Water Treatment Plant (CWWTP). PVK operates 20 branch waste water treatment plants (BWWTP) in addition to the CWWTP.

The company's laboratories provide regular analyses of both drinking water and wastewater. The laboratories operate under the ISO 17025 standard and are regularly inspected by the Czech Accreditation Institute. Accreditation covers the entire range of the laboratory activities: sampling and analyses of drinking, bottled, surface, raw, ground, and waste water, water from intermediary process stage, sludge, and water for swimming, including waste sampling and analyses of process chemicals used in water treatment.

### Business Challenge:

As a company with a long history and strong quality focus, PVK has always been a pioneer in implementing new, efficient solutions in their labs. As early as the year 2000, the company concluded that it needed to improve its method validation processes and replace the existing "paper-and Excel-based" system with a more modern, electronic system. Furthermore, the company identified the need for sharing validation and uncertainty data between different sites in order to learn from each other and uniformize work processes via a client-server network setup; all while meeting the increasing regulatory requirements on software validation and data security.

### Selection and Implementation

PVK contacted EffiChem in the year 2000 with the idea of implementing one user license - EffiValidation version 2.0, at the Karany laboratory. Within two years, it was clear that the system met PVK's scalability and flexibility needs for the future and version 2.0 was migrated to version 2.1, and then 3.0 and the number of licenses was increased to 12 in total, in use in all labs that PVK runs. Since then, EffiValidation has proven its ability to act as a centralized system to automate validation processes across the company and archive data from validations for hundreds of methods.

In 2015, the system was upgraded to version 4.0, bringing more configurability and flexibility, and adding more data security, traceability, and integrity, including the robust audit trail functionality.

*"We chose EffiChem because the solution fulfilled everything we needed for our method validation and estimation of uncertainties of test results, it was easy to implement and could run in a client-network setup, enabling us to share the data and results in a way we wanted. It was a solution that was and remains sustainable for many years to come, as PVK's quality and compliance needs evolve,"* said Mrs. Lenka Vavruskova, head of the Water Quality Control PVK.

## Results

At present, EffiValidation is used across all PVK sites, in five laboratories, and provides PVK with a centralized system to manage and report on all of its method validation and uncertainty estimation activities, as well as to track the status and history of activities in real time and analyze and show any trends as they can happen. Its main benefits to PVK include:

### **Alignment and Data Sharing:**

There are more collaborations, interactions and efficiencies between the individual locations because all users, across multiple sites, have access to the same system and the system was selected to allow the team to learn from each other and align the lab operation. EffiValidation provides PVK with deeper understanding of the test methods and enables gradual improvement, cutting the ambiguities down and lowering the method uncertainties in line with the customer expectations.

### **ISO 17025 Compliance and Audit Preparedness:**

By ensuring that all validation data are logged and reported in one centralized system with a reliable audit trail, the internal and third-party audits, and regulatory inspections became lot easier. In fact the method validation methodology and practices now receive less attention as auditors realized that this topic actually is a clear strength of the entire laboratory system.

EffiValidation, an industry leading provider of computerized quality and laboratory management solutions, enabling the businesses to safely and efficiently deliver their products and services to the market. Headquartered in Brno and with distributors across Europe, Americas and Asia, EffiChem maintains an extensive install base in the pharmaceutical, food and petrochemical industry, and in ISO 17025 accredited testing laboratories.