

The use of computer software tools to estimate emissions and evaluate reduction strategies is an efficient way to simplify environmental analyses. Environmental databases are an effective way to manage and query your environmental records. Levelton is a leading expert in the development of emission calculation software tools and environmental databases. Our in-house computer programming and database development team have developed: software to prepare emission inventories, customized emission calculation and reduction tools, air quality databases with built in reporting modules, and GIS spatial analyses.

Levelton staff will work with you to define your project requirements for a customized software and/or database application. We will prepare a conceptual screen layout and reporting template to give you an idea of the look and feel of the application before programming work begins.

Recent Projects

Heavy Duty Diesel Vehicle Fleet Emission Reduction Calculator

This software package estimates emissions and associated reductions from the application of diesel engine retrofit technologies for on-road and non-road fleets.

Marine Vessel Emission Calculator for Commercial Ocean-Going and Harbour Vessels

This application processes marine vessel movement data to estimate emissions. The built-in reporting module can be used to view emission results spatially, temporally, by vessel type and pollutant.

Emission Model for Petroleum Product Terminals, Bulk Plants and Service Stations

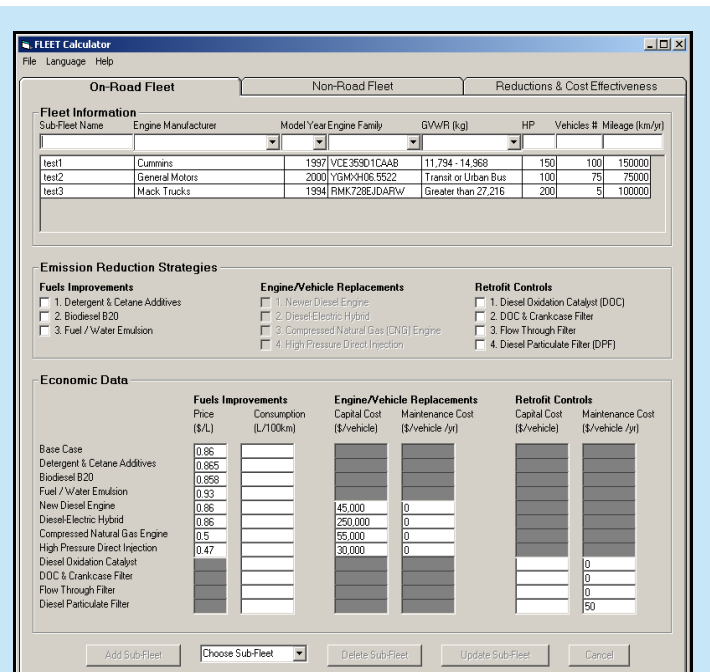
Levelton developed this model to estimate VOC emissions and their species from above ground storage tanks, pumps, loading and unloading operations, based on standard methods and the EPA Tanks model.

Regional Air Toxics Database

A database application was developed to manage air toxic emission records with a built-in report and graph generator.

Real-time Dispersion Modelling

Web applications to process forecast and real-time weather measurements and predict ambient concentrations of pollutants for specific sources.



National Pollutant Release Inventory (NPRI) Reporting Tools

Levelton has developed customized models to generate yearly NPRI reports for various industrial sectors.

Haz Mat Sampling Management Database

A customized database application was developed to manage lab sampling records for hazardous materials.

Web-Based Building Moisture Monitoring

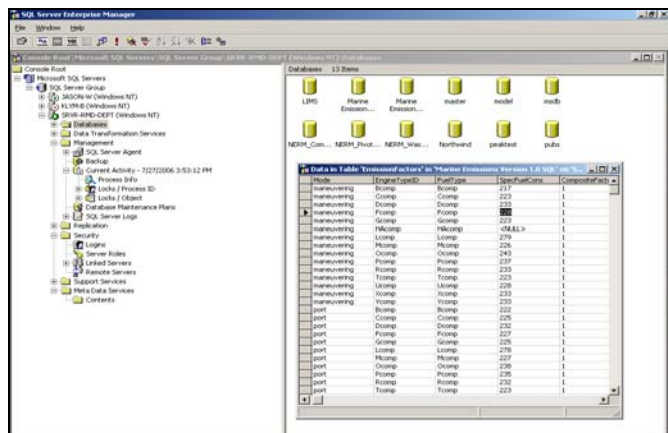
A web application was developed to allow building managers to login to a secure web site to monitor moisture monitors.

Database Development

Our professional staff has completed numerous database development projects for industrial, institutional and commercial clients. We are familiar with small to medium scale databases developed in MS Access and MySQL to enterprise scale SQL Server projects. We provide documentation and training to allow you to use your database and reports on an on-going basis.

Our programming and development expertise is supplemented by our knowledge of environmental issues in areas including:

- Emission inventories for stationary point and area sources, and mobile sources
- Dispersion modelling and ambient monitoring
- Measurement and estimation of stack and fugitive emissions from industrial processes
- Preparation of NPRI reports
- Laboratory analytical services
- Providing workshops and training on best practices



This skill set allows us to provide you with a complete turn-key solution with a strong foundation in the underlying environmental calculation methodologies and best practices.

Technical Capabilities

Levelton's development team is experienced in working with the following technologies among others:

- Programming: Visual Basic, .NET, C++, Fortran
- Databases: Access, SQL Server, MySQL
- Web: PHP, ASP, DHTML
- GIS: ESRI ArcGIS
- Platforms: Microsoft Windows, Linux

