



Proudly Operated
by **Battelle** Since 1965

Battelle Number(s):

16718, 15804, 13736, 12288

Available for licensing in all fields

Available Technologies

Visual Sample Plan (VSP) 6.0

SUMMARY

Visual Sample Plan—or VSP—is a software tool that helps users determine where sampling should be conducted and how many samples are needed based on a variety of situation-specific parameters. Specifically, it supports the development of a defensible sampling plan based on statistical sampling theory and the statistical analysis of sample results to support confident decision making. VSP couples site, building, and sample location visualization capabilities with optimal sampling design and statistical analysis strategies. It is currently focused on design and analysis for the following applications:

- * Environmental characterization and remediation
- * Environmental monitoring and stewardship
- * Footprint reduction and remediation of unexploded ordinance (UXO) sites
- * Sampling of soils, buildings, groundwater, sediment, surface water, subsurface layers.

ADVANTAGES

- * Utilizes world-class statistical and mathematical algorithms applicable to environmental statistics
- * Interacts with the user through familiar visual interfaces such as site maps and building plans
- * Provides immediate feedback of the projected results of selected statistical sampling plans by overlaying random sampling locations or grids directly onto the site map or building plan
- * Provides projected number of samples, total sampling costs, and sampling locations in appropriate coordinates
- * Provides graphic decision tools such as graphs of probability of hot spot detection vs. total sampling costs
- * Allows nonparametric and parametric sampling designs.

RELATED LINKS

» Visual Sample Plan Website

<http://vsp.pnl.gov/index.stm>

Technology Portfolio(s)

- » Modeling Tools

Potential Industry Applications

- » Aerospace & Defense
- » Agriculture & Mining
- » Chemicals
- » Consumer Products
- » Energy & Utilities
- » Food, Beverage & Tobacco
- » Healthcare, Pharma, Biotech & Medical
- » Manufacturing & Warehousing
- » Oil & Gas
- » Public Administration & Government
- » Recycling & Waste Management
- » Security
- » Wood, Paper & Forestry

John T. McEntire
Pacific Northwest National Laboratory
(509) 372-6960
john.mcentire@pnnl.gov
<http://availabletechnologies.pnnl.gov>



Proudly Operated by **Battelle** Since 1965