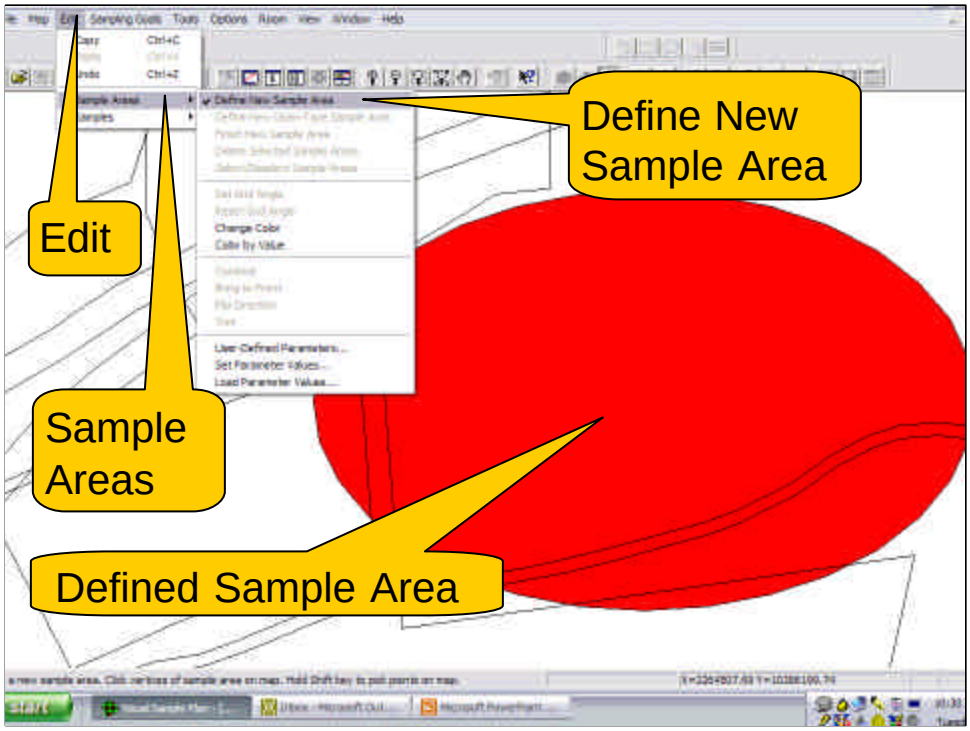
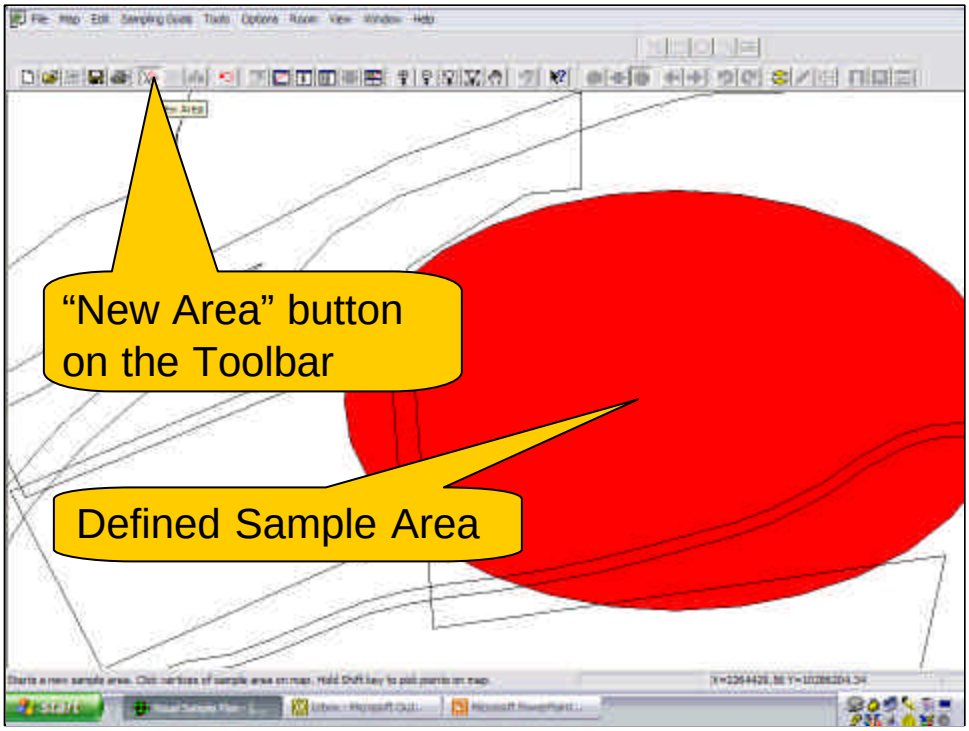

Define New Sample Area
Edit
Sample Areas
Defined Sample Area


“New Area” button on the Toolbar
Defined Sample Area

Define the Provisional Enclosing or Partial Boundary Segments

- Suppose an enclosing boundary is desired
- First click **Sampling Goals** on the VSP menu bar, then click

  Establish Boundary of Contamination > Enclosing Boundary

  to bring up a dialog box
- The next slide shows these steps and the dialog box that appears
- That slide is followed by a slide that shows the inputs to the dialog box
- When the **Apply** button at the bottom of the dialog box is clicked, VSP determines and displays the boundary segments
- Each segment shows 5 Primary Sampling Locations that are evenly spaced along the segment

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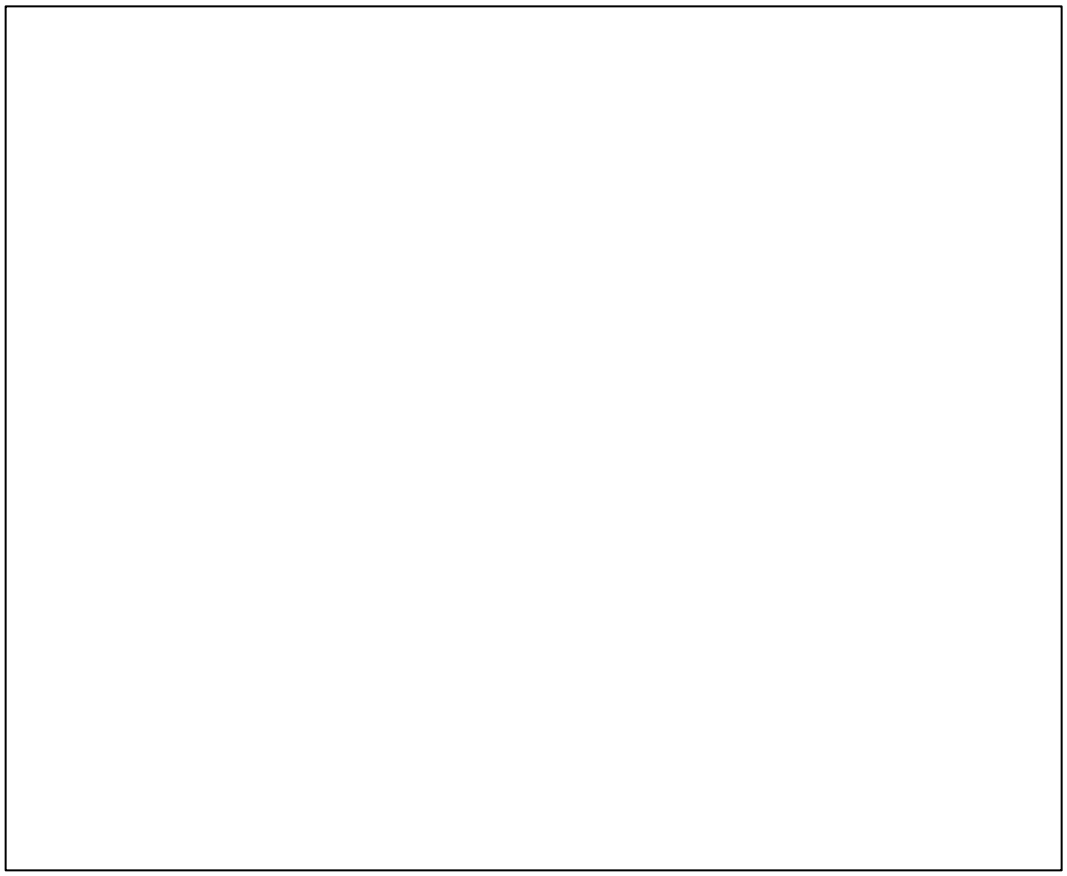
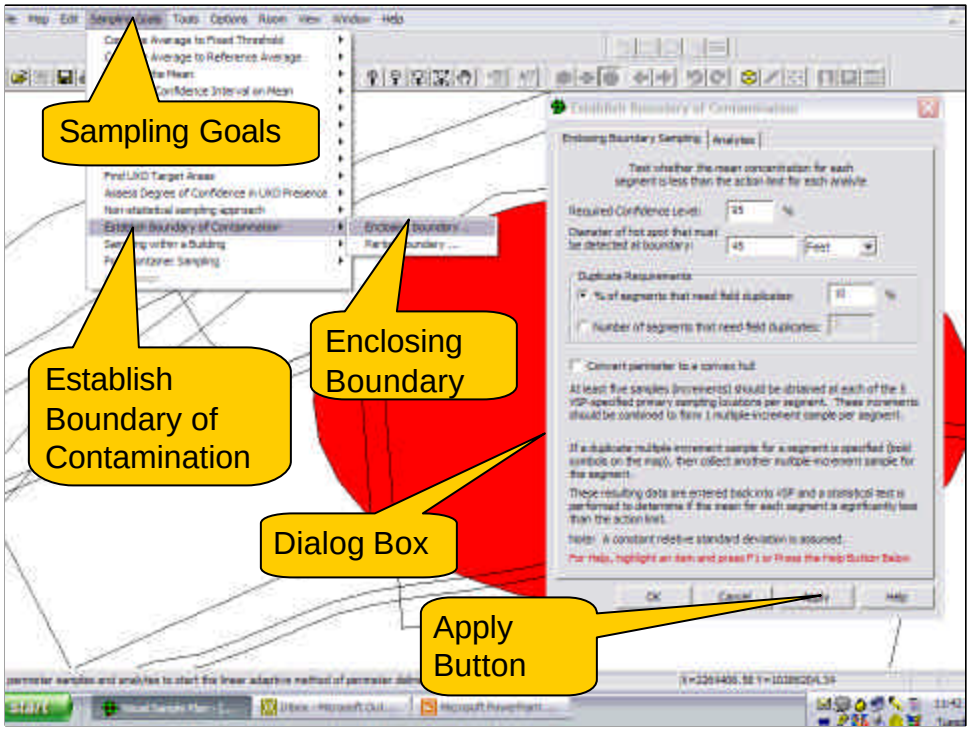
PNWD-SA-7032 / 19





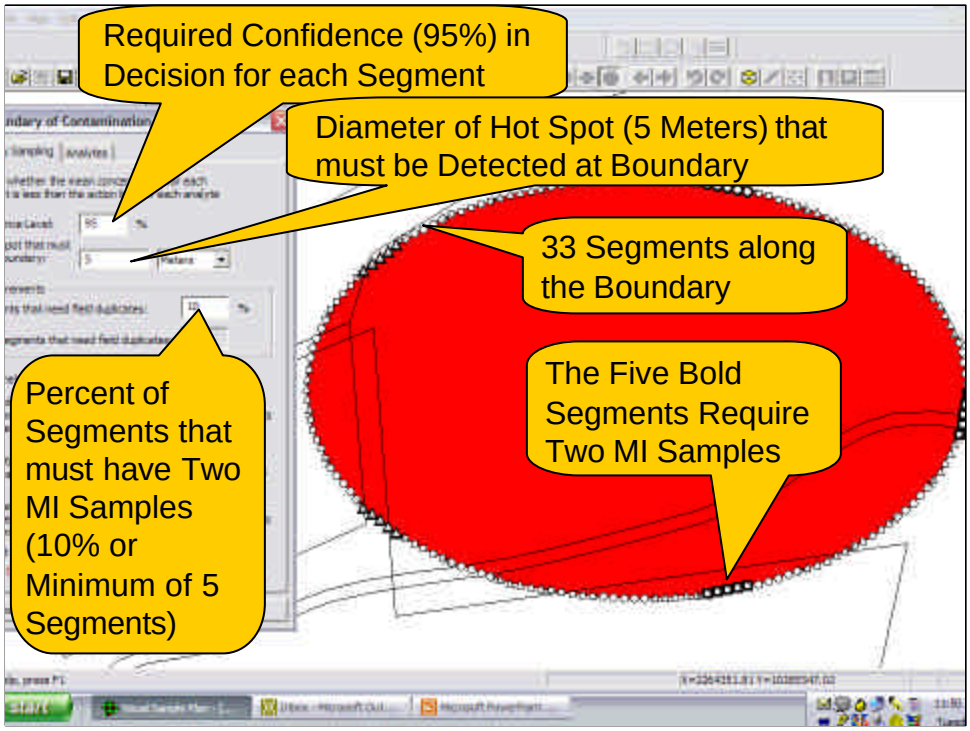
Definition of inputs in dialogue box:

Required Confidence Level: the required probability that the UCL for a segment actually exceeds the true mean for the segment.

Diameter of Hot Spot: the width of a contaminant plume or hot spot of concentrations that would be of concern if it existed at the perimeter boundary.

Percent or Number of Segments to need Field Duplicates: the VSP user can input into the dialogue box the percent or number of segments that should have two MI soil samples rather than one.

Convert the Boundary to a Convex Hull: If the boundary of the Sample Area is very irregular (has various indentations) the VSP user may specify that VSP should change the enclosing boundary to a convex hull. This smoothes out the boundary.



The number and length of segments are determined by VSP as follows:

- VSP computes the optimum segment length (OSL):

  OSL = 5 x (specified width of plume of concern)

where 5 is the number of Primary Sample Locations equally spaced along the length of each segment.

- VSP computes the number of segments along the boundary by dividing the total length of the boundary by the OSL and rounding up to the nearest whole number

- Length of Segment is computed by dividing the length of provisional boundary by the number of segments.

Define a Sample Area with a Provisional *Partial* Boundary

- If a provisional *partial* boundary is desired, first click **Edit** on the VSP menu bar, then click
  Sample Areas > Define New Open-Type Sample Area
- Then
  - Place the cursor at the starting location of the desired partial boundary and click each vertex along the desired boundary until the end of the partial boundary is reached
  - Then click the right mouse button
- The next slide shows an elliptical sample area with a provisional partial boundary on the downhill side of the Sample Area

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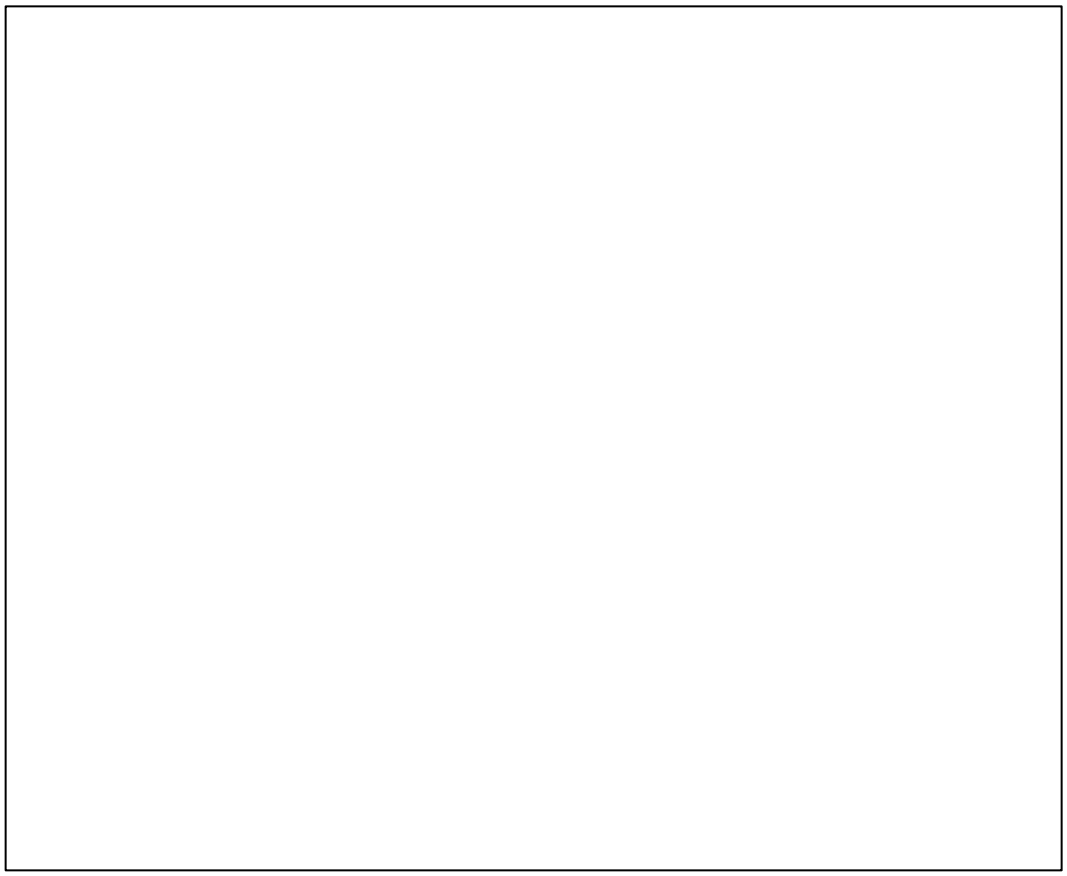
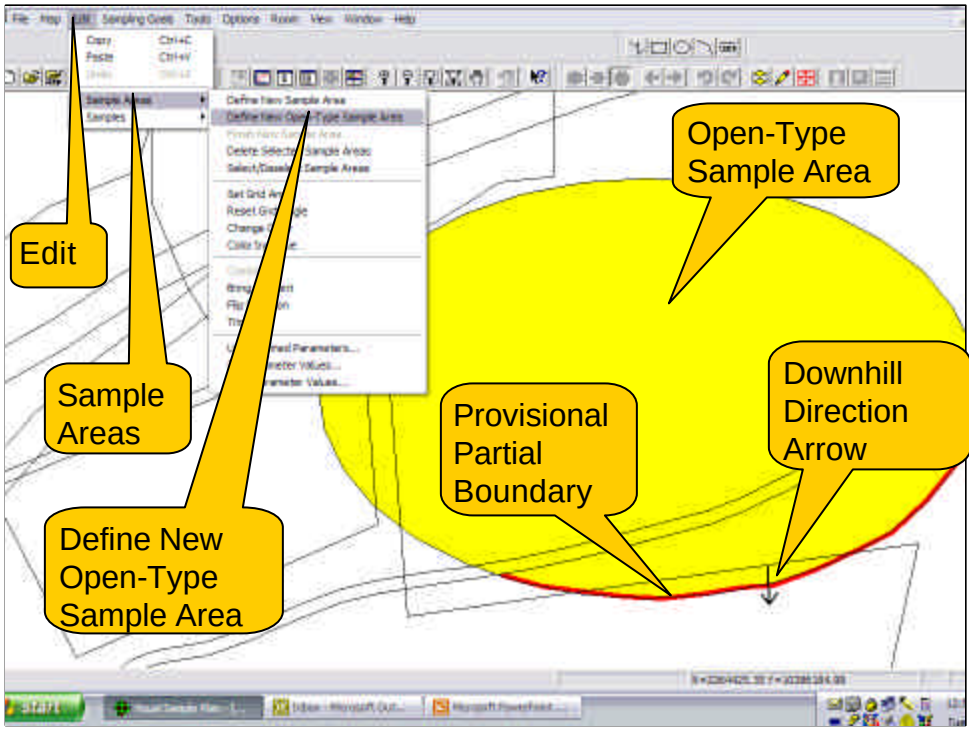
PNWD-SA-7032 / 22




Edit
Sample Areas
Define New Open-Type Sample Area
Open-Type Sample Area
Provisional Partial Boundary
Downhill Direction Arrow

Specify Sampling Design Inputs for Provisional Partial Boundary

- Supply VSP with inputs needed to compute the number of segments and identify which segments require two rather than one MI samples
- Inputs are entered into a dialog box, which is accessed by clicking **Sampling Goals** on the menu bar, then clicking

  Establish Boundary of Contamination > Partial Boundary

  as illustrated on the next two slides

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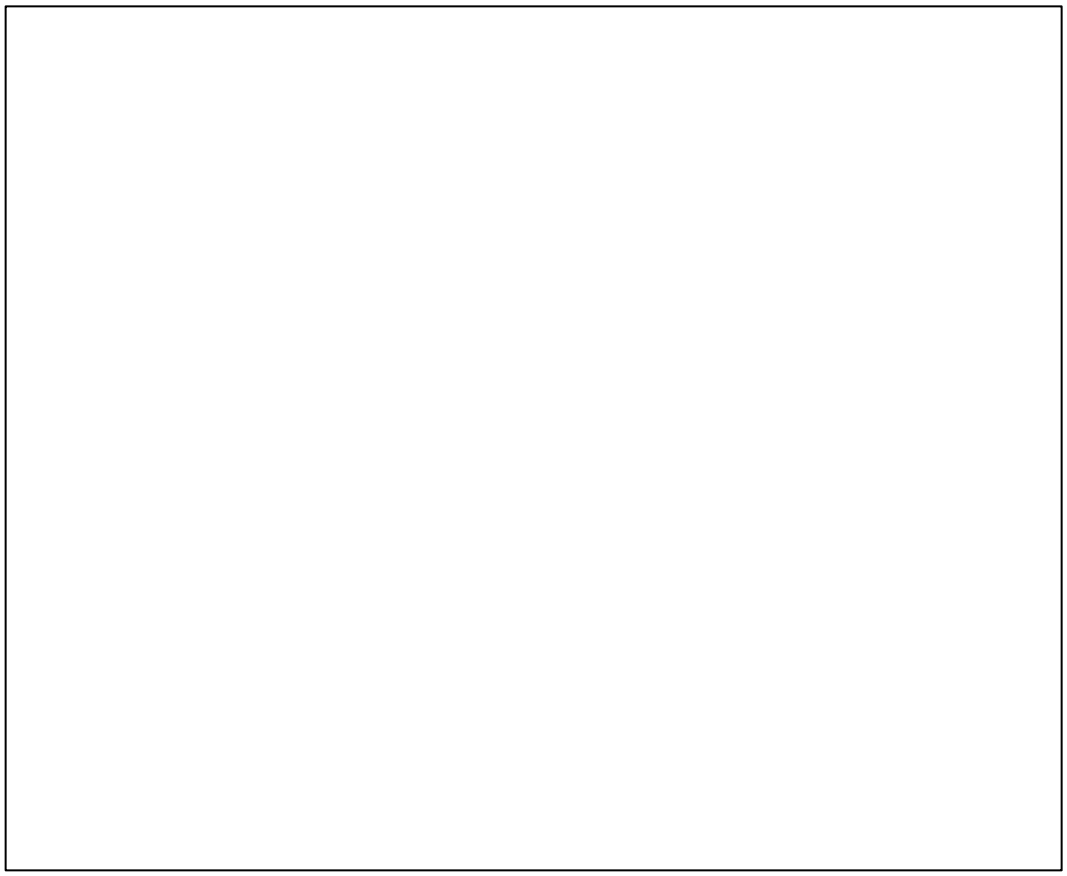
PNWD-SA-7032 / 24