## Air Emissions Modeling Plan

Air dispersion modeling will be performed to calculate ambient ground-level air concentrations of C8 emissions from the Chambers Works site.

**Modeling Methodology**
Dispersion modeling will be performed using the Industrial Source Complex 3 Model (ISC3), version 4.0.9, provided by Trinity Consultants. All modeling will be performed in accordance with the procedures in EPA's Guideline on Air Quality Models (40 CFR Part 51, Appendix W). The EPA regulatory default options and rural dispersion coefficients were used in the model.

The C8 emission sources will be evaluated for downwash effects from surrounding buildings. Trinity Consultant's BPIP model will be used to provide wind direction specific building parameters. All buildings on the site will be evaluated to determine if they could potentially impact the stack by causing building downwash effects.

A 100-meter grid extending out 4000 meters from the source will be used. In addition, discrete receptors with 100-meter spacing will be placed on the plant property line. Terrain elevations will be imported from electronic files obtained from the U.S. Geological Survey using the highest method to assign an elevation to each receptor.

Five years of meteorological data will be supplied by Trinity consultants (insert years). Upper air data will be taken from insert airport. An anemometer height of 10 meters will be used for the modeling.

**Source Information**
Source parameters including release height, dimensions, flowrate, and temperature will be provided for each individual source of C8 emissions. Emission estimates for each source will be made based on a combination of mass balancing and modeling.

**Results**
Modeling results will be included in the tabular form showing the maximum annual ambient air concentration and location for each of the 5 years of meteorological data provided. A graphical representation of the results will also be included.

When modeling is complete, a brief report detailing methodology, model inputs, and modeling results will be provided.

04/07/03