



FIRE DEPARTMENT

9 METROTECH CENTER

BROOKLYN, N.Y. 11201-3857

TAMARA SAAKIAN P.E.

Director of Engineering and Technology Management

Bureau of Fire Prevention

Room 3W-02

April 28, 2006

Mr. Kevin D. Morin, P.E.
Code Consultants Professional Engineers, PC
330 West 38th Street, Suite 905
New York, NY 10018

**Re: WTC Memorial and Memorial Museum
Fire and Egress Modeling Studies**

Dear Mr. Morin:

This office is in receipt of supplementary papers and plans regarding the above mentioned studies.

Please be informed that we have the following comments to make:

1. For the fire modeling studies carried out at the memorial hall simulating a five gallon benzene spill fire, it was seen that besides the exhaust used for smoke control, a downdraft into both pools was simulated to create the effect of air induced by the waterfall. We do not think this is realistic, as after a fire is detected the waterfall is turned off and there would not be any downdraft. Under such conditions, it is our opinion that there would be a greater lateral spread of smoke and less smoke control than envisaged in the simulation.

You should carry out the simulation without a downdraft into the pools, but with adequate emergency smoke exhaust incorporated. It is advisable that exit pressurization be also incorporated to get a more realistic simulation.

The revised input data file is to be submitted for Fire Department review.

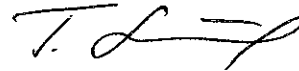
2. Indicate the vents incorporated in the +242 level simulation on smoke view.

April 28, 2006
Page 2 of 2

3. In order to complete the evaluation of the proposed WTC Memorial and Memorial Museum, please provide the results of the egress modeling studies in addition to the fire modeling for various fire scenarios.
4. No more than five gallons of flammable or combustible liquids (including any fuel for emergency generators) shall be stored below grade.

We look forward to your response, to enable us continue with our evaluation.

Very truly yours,

A handwritten signature in black ink, appearing to read 'T. Saakian', with a stylized flourish at the end.

Tamara Saakian, P.E.

TS:LS

c: Patrick McNally, Chief of Fire Prevention, Bureau of Fire Prevention, FDNY
c: Fatma M. Amer, P.E., Deputy Commissioner-Technical Affairs, NYC DOB
c: Carl Krebs, Davis Brody Bond LLP