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|-------------------------------------------------------------|--------------------|---------------------------------|---------------------------|-------------------------------|--|
| <b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>                  |                    |                                 |                           | <b>O.M.B No. 3067-0151</b>    |  |
| <b>PROJECT WORKSHEET - Narrative</b>                        |                    |                                 |                           | <b>Expires April 30, 2001</b> |  |
| <b>DECLARATION NO:</b><br>FEMA - 1391 -DR- NY               | <b>PROJECT NO.</b> | <b>FIPS NO.</b><br>061-51000-22 | <b>DATE</b><br>05/06/2002 | <b>CATEGORY</b><br>B          |  |
| <b>APPLICANT</b><br>New York City, Board of Education (BoE) |                    | <b>COUNTY</b><br>New York       |                           |                               |  |

**Indoor Air Monitoring**

A total of 9 air-monitoring stations are established throughout the interior of IS 89. A total of 10 tests are conducted per day. Each test lasts approximately four hours, and samples approximately 1,800 liters of air. The station locations, the number of tests conducted, and details of the testing are listed below.

| Location of the Air Testing Station   | Number of Samples per day | Details                                               |
|---------------------------------------|---------------------------|-------------------------------------------------------|
| First floor hallway outside cafeteria | 2                         | One sample from 8am-12pm and one sample from 12pm-4pm |
| Cafeteria                             | 1                         | One sample taken during the school day                |
| Gymnasium                             | 1                         | One sample taken during the school day                |
| Auditorium                            | 1                         | One sample taken during the school day                |
| North Classrooms                      | 1                         | One sample immediately after the last class           |
| East Classrooms                       | 1                         | One sample immediately after the last class           |
| South Classrooms                      | 1                         | One sample immediately after the last class           |
| Second floor Hallways south end       | 1                         | One sample immediately after the last class           |
| Fourth floor Hallways south end       | 1                         | One sample immediately after the last class           |
| <b>Total Tests</b>                    | <b>10</b>                 |                                                       |

**Outdoor Air Monitoring**

A total of 3 exterior air-monitoring stations are established on the exterior of IS 89. A total of 6 tests are conducted per day. Each test lasts approximately four hours, and samples approximately 1,800 liters of air. The station locations, the number of tests conducted, and the details of the testing are listed below.

| Location of the Air Testing Station | Number of Samples per day | Details                                               |
|-------------------------------------|---------------------------|-------------------------------------------------------|
| Inside playground, north side       | 2                         | One sample from 8am-12pm and one sample from 12pm-4pm |
| Inside playground, south side       | 2                         | One sample from 8am-12pm and one sample from 12pm-4pm |
| Fifth floor roof                    | 2                         | One sample from 8am-12pm and one sample from 12pm-4pm |
| <b>Total Tests</b>                  | <b>6</b>                  |                                                       |

**Parameters of Testing**

Results from the samples collected each day will be reported verbally no later than 8am the next day to the BoE. A written report will then be submitted by the end of that day that will report the analytical data collected. A plan has been devised in the case that testing results exceed the target levels that are provided below.

| Parameter                               | Target Level                                                                                                                                                  | Agency or Organization               |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Temperature (T)                         | Summer: 73-79 degrees at 50% RH<br>Winter: 68-75 degrees at 50% RH                                                                                            | ASHRAE 55                            |
| Relative Humidity (RH)                  | 30-60%                                                                                                                                                        | ASHRAE 55                            |
| Carbon Dioxide (CO2)                    | <700 parts per million (ppm) above background level                                                                                                           | ASHRAE 62                            |
| Carbon Monoxide                         | 9 ppm                                                                                                                                                         | USEPA NPAAQS (as cited in ASHRAE 62) |
| Total Volatile Organic Compounds (TVOC) | 1 ppm                                                                                                                                                         | AIHA                                 |
| Respirable Particulates (PM 25)         | 65 micrograms per cubic meter of air for general population; 40 micrograms per cubic meter of air which is recommended for sensitive individuals and children | USEPA NPAAQS-G<br><br>USEPA          |

USEPA= United States Environmental Protection Agency  
NPAAQS= National Primary Ambient-Air Quality Standard  
AIHA= American Industrial Hygiene Association  
ASHRAE= American Society of Heating, Refrigerating, and Air Conditioning Engineers

#### Contract Costs

The total contract cost from January 22, 2002 to June 30, 2002 (the end of the school year) is estimated to be \$184,203.93. A letter of explanation from the vendor and specific information pertaining to the ambient air sampling completed at IS 89 is attached to this PW. The following information from the applicant and the applicant's vendor was used to compute the total eligible cost:

The eligible costs incurred from January 22, 2002 to June 30, 2002 (160 days) = \$184,203.93 (see attached sheet)

#### Percentage of Work Completed

The percentage of work complete was calculated through May 6, 2002. As such, for 104 days of the 160 day period, the work performed by ATC Associates has been completed. The BoE has not been invoiced for these costs, and therefore the dollar amount in this PW is based on an estimate provided by the applicant's vendor, ATC Associates.

104 days/ 160 day period = 65% of the work complete.

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