August 1, 2013

Ms. Sandra Beck AIA, LEED AP
Associate Director
UCSF Capital Programs
654 Minnesota Street
San Francisco, California 94107

RE: Air Sampling Report
Mission Bay Child Care Center
San Francisco, California
Project No. 1226.04

Dear Ms. Beck:

At your request, Northgate Environmental Management, Inc. (Northgate) has prepared this letter to further discuss the formaldehyde indoor air sampling results for the Mission Bay Child Care Center (the Center). We understand that one of the parents expressed concern because the formaldehyde concentration measured in her child's classroom [Sample IA2, formaldehyde concentration of 0.0092 parts per million (ppm)] exceeded the exposure values established by the California Office of Environmental Health Hazard Assessment (OEHHA) and the United States Agency for Toxic Substances Disease Control Registry (ATSDR). The significance of these agency concentration values with respect to Sample IA2 is discussed below.

OEHHA REFERENCE EXPOSURE LEVEL

OEHHA has established a Reference Exposure Level (REL) of 0.007 ppm for chronic and eight hour/day exposure to formaldehyde. This REL is essentially the same as the 95% upper confidence level concentration calculated for nine air samples collected throughout the Center. Although the formaldehyde concentration of Sample IA2 slightly exceeded the REL, this result is still within a health-protective range considering the conservative assumptions that OEHHA applied when establishing the REL. For example, OEHHA based the REL on the "No Observed Adverse Effect Level" (NOAEL) of 0.07 ppm for office workers exposed to formaldehyde for an average duration of 10 years (eight hours per day and five days per week). OEHAA set the REL at one-tenth of the NOAEL to be protective of asthmatic children prone to respiratory irritation. Since children at the Center would likely spend only one to several years at this facility, their potential exposure to formaldehyde would be less than that assumed for the REL.

ATSDR MINIMAL RISK LEVEL

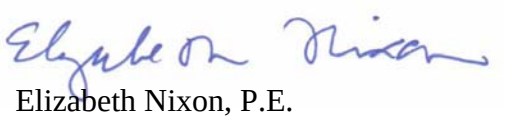
ATSDR has established a Minimal Risk Level (MRL) of 0.008 ppm for exposure to formaldehyde, marginally higher than the REL. The MRL was derived from a study of workers exposed to an average formaldehyde concentration of 0.24 ppm and average exposure duration of 10.4 years. This exposure, which resulted in mild irritation of the eyes and upper respiratory tract and mild impact to the nasal epithelium, is considered to be a minimal Lowest Adverse Effect Level (LOAEL). The ATSDR applied uncertainty factors of 3 for use of a LOAEL and 10 for human variability, resulting in a total uncertainty factor of 30. Dividing the LOAEL of 0.24 ppm by 30 results in a MRL of 0.008 ppm. As with the REL, the MRL was derived using conservative assumptions. The measured formaldehyde concentration of 0.0092 at sampling station IA2 is only slightly above the MRL. Considering the 30-fold uncertainty factor, and the assumed exposure duration of 10.4 years, the MRL likely overestimates potential exposure risks for children at the Center.

In summary, although the measured formaldehyde concentration at sampling station IA2 was slightly higher than the REL and MRL, both of these guidance levels were derived using very conservative assumptions that likely overestimate potential exposure risks to children at the Center. It is Northgate's opinion that the indoor air quality at the Center does not pose any significant health risk to children or workers at the Center.

CLOSING

Please feel welcome to contact me at (510) 839-0688, ext. 220, or via e-mail at elizabeth.nixon@ngem.com should you have any questions or would like to discuss this matter further.

Sincerely,
Northgate Environmental Management, Inc.



Elizabeth Nixon, P.E.
Associate Engineer