DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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Centers for Disease Control
and Prevention (CDC)
National Institute for Occupational
Safety and Health (NIOSH)
1095 Willowdale Road
Morgantown, WV 26505-2888

November 2, 2007
HETA 2007-0097
Interim Letter I

Sharon Moffatt, RN, MSN
Commissioner
Vermont Department of Health
108 Cherry Street
Burlington, VT 05402

Dear Commissioner Moffatt:

The National Institute for Occupational Safety and Health (NIOSH) received a request, dated January 11, 2007, for technical assistance from the Vermont Departments of Health (VDH) and Buildings and General Services (BGS) (copy enclosed). NIOSH was requested to assist VDH and BGS in supporting the diagnostic work-up for the state office building at 200 Veterans Memorial Drive, Bennington, VT. Responsibility for the diagnostic work-up and providing recommendations for building remediation was contracted to the Turner Group by VDH and BGS.

In response to the request, Dr. Mohammed Virji and I participated in a building walk-through survey and assisted in developing a sampling plan in February 2007. In addition, NIOSH loaned 10 "black boxes" and 4 DUSTTRAK™ samplers to the contractor.

In May 2007, we worked with the contractor to collect 94 plastic drainage tubes from condensate drainage systems for heat pumps and heat recovery units. At the NIOSH laboratory in Morgantown, we prepared 72 liquid samples (22 of the 94 plastic drainage tube samples had insufficient liquid for analysis) and 75 sludge samples (19 tubes had insufficient sludge) from the plastic tubes and sent sample aliquots for microbial analyses (culturable fungi, culturable bacteria, actinomycetes, and mycobacteria) to EMLab P&K in San Diego, CA, an environmental microbiology laboratory accredited by the American Industrial Hygiene Association. We also analyzed endotoxin and (1→3)-β-D-glucan in sample aliquots at the NIOSH laboratory.

In June 2007, we collected and processed 120 floor dust samples, as follows: we vacuumed floor dust from the edge(s) of the room (if a room had exterior walls) and from floor around employees' workstations; we sieved, homogenized, and prepared aliquots of each dust sample at the NIOSH laboratory; and then we sent the prepared aliquots for the same analyses as was done for the plastic tube samples.

As agreed upon during a conference call with VDH and BGS, we have been sending laboratory reports to VDH as we receive them. With this interim letter, we provide you with SAS datasets of all the Microsoft Excel® result files we have received so far from the laboratories. We converted the Excel files into these SAS data files and then checked for and corrected any errors found. We understand that VDH will analyze these environmental data in relation to health effects data you have already collected. We will send the remaining dust data on total, gram-negative, and gram-positive bacteria, actinomycetes, and mycobacteria and three predominant

bacterial genus identifications in dust, liquid, and sludge samples as soon as we receive the Excel result files, convert them to SAS datasets, and correct any potential errors in the datasets.

We look forward to your synthesis of these environmental data, your heath data, and the building diagnostic data from the contractor. As you know, we do not have the health data. The environmental data by themselves are of limited value since no relevant standards exist with which to assess potential health risks. Only by linking environmental data with health data will you be able to identify environmental risk factors for the lung disease in the investigated building. If you identify associations between environmental measurements and lung disease, you can then plan and track environmental remediation, counsel building occupants, and consider evaluating the effectiveness of environmental remediation on lowering the risks of adverse health outcomes. We are very interested in your analyses of our data and are willing to assist you in the interpretation of results from the analyses.

Thank you for the opportunity to partner in solving this public health problem of building-associated asthma and an apparent sarcoidosis cluster. If you have any questions regarding the information provided in this letter or in the accompanying enclosures, please do not hesitate to contact me at 1-800-232-2114.

Sincerely,

Park, Juhyeong

Ju-Hyeong Park, ScD, MPH, CIH
Environmental Health Scientist
Respiratory Disease Hazard Evaluation
and Technical Assistance Program
Field Studies Branch
Division of Respiratory Disease Studies

cc:
Gerry Myers (Commissioner, Vermont Buildings and General Services)
OSHA
Vermont Department of Health, Austin Sumner
HETAB file

Enclosures:

Copy of letter requesting technical assistance
CD of SAS data files, including: culturable fungi with species information in dust, liquid, and sludge; total, gram-positive, and gram-negative culturable bacteria with in liquid and sludge; culturable actinomycetes and culturable mycobacteria with identifications in liquid and sludge; endotoxin and (1→3)-β-D-glucan levels in dust, liquid and sludge; dust sample IDs and locations on a floor map.