



TO: Bennington State Office Building Stakeholder Team

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THROUGH: Charlie Gingo, Agency of Human Services
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RE: Investigation Update

DATE: September 7, 2006

Background

In early June 2006, the Vermont Department of Health initiated an investigation of health concerns among employees of the Bennington State Office Building. The primary health concern was identified as sarcoidosis – a disease characterized by inflammation in one or more organs.

Because sarcoidosis is a serious illness of unknown cause, the Health Department and the Department of Buildings & General Services have undertaken an extensive investigation including health surveys, building inspection, environmental testing, medical screening tests and review of medical and death records. Although the investigation will be thorough, it is possible we may not ultimately find the cause of sarcoidosis cases.

Following is an update on the progress of the investigation, and answers to questions raised at the August 31 meeting of the Building Stakeholders Team.

Health Survey - Current Employees

On August 15, the Health Department administered a survey to current employees of the Bennington State Office Building. The purpose of the survey is to collect information on the health status of employees, and to identify where in the building the employees work. In order to move forward with the investigation in a timely manner, a deadline was set for all surveys to be completed by August 30.

Information collected from the survey of current employees is now being analyzed by the Health Department team. One clear finding from the information collected so far is that the percentage of employees reporting physician-diagnosed asthma – and the percentage of employees reporting symptoms consistent with asthma (wheezing, coughing attacks

and shortness of breath) – is much higher than would be expected.

Health Survey - Former Employees

A health survey of former employees will also be conducted. The team of investigators from the Health Department have developed a questionnaire based on the one used for current employees. They are also working with building managers and the Department of Human Resources to compile addresses of employees who worked in this building as far back as 1994. The survey will be mailed out within the next few weeks.

Building Inspection

On August 7, investigators from the Vermont Department of Health, along with staff from Buildings and General Services (BGS), a representative from the Vermont State Employees Association (VSEA), and staff from ATC Associates, Inc. (a private consultant hired by BGS), conducted a walk-through inspection of the building. This inspection was meant to assess the condition of the building, identify locations where environmental testing should be done, and identify specific locations that could benefit from cleaning, repair or other remediation.

Environmental Testing

On August 23, ATC Associates, Inc. began to perform environmental sampling within the building. Sampling locations were determined based on preliminary findings from the health survey and input from VSEA and employee representatives. This sampling included:

- Multiple real-time air quality measurements and continuous monitoring for carbon monoxide, carbon dioxide, relative humidity, temperature and particulate matter.
- Twelve samples taken from carpeting for mold and bacteria.
- Six wipe samples for heavy metals and a pesticide.

Environmental Re-testing – September 9 - 15

Due to failure of some of the contractor's equipment used to perform environmental sampling, ATC Associates, Inc. will repeat the sampling for carbon monoxide, carbon dioxide, relative humidity, temperature and particulate matter in some locations. This repeat sampling will begin September 9 and last through September 15.

Employee Medical Screening - Weeks of September 18 and September 25

Health Department investigators, in collaboration with National Institute for Occupational Safety and Health (NIOSH) expert technicians, will be making specialized medical screening tests available on site for employees during the weeks of September 18 and September 25. The testing will be voluntary and offered at no cost to employees.

These medical tests will include spirometry, methacholine challenge, and DLCO (or diffusing capacity of the lung for carbon monoxide). All are medical screening tests to help measure various aspects of breathing and lung function.

The purpose of the tests is to confirm preliminary findings from the health survey of current employees, and to provide employees with more complete and detailed information about their own respiratory health, which they will want to discuss with their own health care provider.

Plans for making this testing available are in the process of being finalized. We will provide more detailed information about this next week.

For More Information

We will keep you updated with new information as this investigation continues. Meanwhile, if you or others in the building have questions, please continue to bring them to Building Stakeholders Team. We will do our best to answer your questions as quickly as possible.

Questions & Answers

At your August 31 meeting, the Building Stakeholders Team raised a number of questions about the investigation. Following are the questions and answers compiled by the Agency of Human Services, Department of Health, Department of Buildings & General Services and Department of Human Resources.

The questions have been grouped as they relate to health surveys, OSHA standards and relocation, environmental testing and human resources.

Health Surveys

Q. Can the Department of Human Resources provide a comprehensive list of former employees so they can be included in the health survey?

A. The Department of Human Resources has provided the Health Department with a list of former employees dating back through 1994. This list is being cross-referenced with Vermont death records. A survey will be mailed to all living former employees in the database, using the most recent address on record with Human Resources. If any surveys are returned due to incorrect address, we will attempt additional address searches (phone directories, consultation with former department, etc). We have also requested departments and sections to provide the Health Department with a list of people who have been employed as contractors, as these people are not included in the personnel records from Human Resources.

Q. Will the Health Department be looking at death certificates for primary and secondary causes of death of any employees, classified service or contractual? Will they be compared to all death certificates for all of Bennington County during the same time frame?

A. The Health Department will review the death certificates of those former employees who have died, including any contractors we can identify. There is no plan to compare

them with all death certificates for Bennington County.

Q. What is the rationale of the Health Department in only going back to one point in time to gather names of former employees? Why not gather as much information as possible and then put them in categories?

A. State employment record database only goes back to 1994, so we cannot automatically mail out the health survey to employees who ceased employment prior to that date. If these people identify themselves to us, however, we will ask them to take the survey as well.

We expect that the response rate is likely to be higher for more recently employed employees. We are also aware that those respondents who ceased employment prior to 1994 will not be a systematically representative sample, making their data statistically less reliable. Therefore, for the more recent years we may be able to determine percentages and rates of disease for comparison purposes, while — for the earlier years — we will have only anecdotal reports of disease. We will most likely categorize the survey results accordingly.

Q. Does the Health Department have plans to do a more comprehensive survey on the population of the people who have sarcoidosis?

A. Yes, the Health Department has plans to re-contact the building occupants who developed sarcoidosis and ask for permission to review portions of their medical record.

Q. What is the plan for gathering information from the community?

A. The Health Department has obtained data for Bennington County from a national health information survey to use as a comparison with the employee health survey. We are currently investigating the use of insurance data to look at Bennington-specific health claims for illnesses consistent with sarcoidosis. If this is not possible, we will consider alternative methodologies.

OSHA Standards & Relocation

Q. The August 7 walk-through, although thorough, was only a visual inspection. How can a strictly visual inspection determine whether OSHA standards for contaminants are being met?

A. The U.S. Department of Labor's website contains a long list of indoor air contaminants for which there are Occupational Health & Safety Administration (OSHA) standards. These standards identify a Permissible Exposure Limit, or PEL, for each contaminant. If any such substance is present in a given location, it is necessary to collect a breathing zone air sample to determine if its concentration is above the PEL. If it is, and

if a source of the substance can be identified, then corrective action would be indicated.

The August 7 walk-through inspection of the building determined that no corrective action was necessary at that time because we could identify no industrial processes on site that use substances with a PEL, and no source of any of the listed substances was found during the visual inspection. In other words, there is no identifiable source that could lead to possible exposure of OSHA listed contaminants. If a source had been identified, breathing-zone air samples would have been taken.

However, we will continue to aggressively investigate the situation and assess new data that comes in through the health surveys, environmental testing, medical screening tests, etc. If any information shows that this is not a safe environment for employees, the Commissioner of Health will work with the Commissioner of Buildings & General Services to relocate employees.

Q. What standards will be used in deciding if building occupants should be relocated?

A. The only quantitative standards available that can be used to help decide if building occupants should be relocated are the Permissible Exposure Limits for contaminants provided by the Occupational Safety & Health Administration (OSHA).

These can be found at OSHA's website:

www.osha.gov/pls/oshaweb/owadis.show_document?p_table=STANDARDS&p_id=9992.

The visual inspection of the building performed on August 7 did not reveal the presence of any of the contaminants for which OSHA provides exposure limits.

However, additional information—including information from the health surveys, medical screening tests and environmental sampling—will all be taken into account in determining whether to relocate employees.

Environmental Testing

Q. Three areas that were recommended for testing – soil outside the building, drinking water, and roof ballast (stone that holds the membrane down) – were not tested. Why?

A. The list of contaminants that might pose a problem in soil is extensive. It is necessary therefore to first identify those substances that might be present before deciding what can be tested for. The Health Department began by reviewing Superfund site records, local industry exhaust records, and flood plain records. From this review, no suspect contaminants could be identified that might be present in the soil around the building, or that might make this location more contaminated than any other soil in the Bennington area. In addition, it is unlikely that walking across soil or periodically eating lunch outside would result in an exposure to an environmental stressor that may cause harm.

The water has not been tested at this point because it is regularly monitored by the local water district and we have those results on record. However, we will follow up with additional testing. The Health Department will arrange to have samples taken for testing at the taps during the week of September 11.

The roof was evaluated during the visual inspection. The one cause for concern here was evidence found inside the building that suggested the roof may leak or has leaked in the past. For this reason, interior carpet samples were taken and are being tested for mold and bacteria.

Q. There was no inside swabbing or other air quality testing of the pipes hooked directly to the roof units, such as 8A in Voc Rehab. Why?

A. Air quality measures were collected in representative locations from each section of the building. The testing locations for both air quality and direct swabbing were decided with input from the building occupants and the VSEA. Upon recommendation, six direct swab samples for heavy metals were collected from the duct work near the offices of each individual who developed sarcoidosis.

Q. A request was made that there be testing inside some of the old duct work that has its insulation on the inside rather than on the exterior. The duct work is located in VR and DOC. Was that testing done?

A. Testing was carried out for respirable particulate matter in all sections of the building. This type of test measures the amount of small inhalable particles in the air. If the old duct work in VR and DOC increases the amount of inhalable particles in the air, this testing should show it. Respirable particulate matter testing was to continue for 24 hours a day for seven days. This continuous measure over time gives a trend, and enables us to see how the levels change during nights and weekends.

Q. What event/report precipitated the changing of the ducts in 2000/2001? Who has the report and what did it contain? Would like a copy of report.

A. The Department of Buildings and General Services is looking into this and will provide an answer as soon as possible.

Human Resources

Q. How do we handle recruitment of new staff members? What do we say to them during interview? Do we have any obligation to disclose the health issues to potential hire?

A. There is no reason to change recruitment practices. However, Human Resources recommends that all applicants being interviewed are informed about the situation. We

recommend that interviewees be told the following:

As you may be aware, the State Department of Health is conducting an investigation at the Bennington State Office Building because of health concerns raised by employees who have worked in the building. The employees' concerns center on reports that a number of current or former employees have developed sarcoidosis, a disease characterized by inflammation in one or more organs. The cause of sarcoidosis is not known. No link has been established that would indicate that the employees developed sarcoidosis because of the building. Employees continue to work in the building and state offices in the building continue to be open to the public. This information is being provided to you so that you may make a fully informed decision about the possibility of being employed and working in the Bennington State Office Building.

Q. Should there be a coordinated response from the employee assistance program to help people with emotional stress related to this situation?

A. The State's Employee Assistance Program (EAP) managers have been alerted about this situation. The EAP managers will be asked to contact a designated point person in order to discuss and coordinate the employee assistance services that would be available to the building's employees. It would seem reasonable to have only one EAP "point person" designated for the building, as there are a variety of different departments involved. AHS Field Director Charlie Gingo, as facilitator of the building stakeholders group, might be an appropriate point person.