

*HMS, Inc.*  
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March 6, 2009

Stan Dobbs, Interim Bond Director  
Solano County Community College  
4000 Suisun Valley Road  
Fairfield, CA 94534-3197

Dear Mr. Dobbs,

This letter reports the findings of an evaluation of the current bat population in the Theater Building 1200 on the Solano County Community College campus at 4000 Suisun Valley Road in Fairfield, CA. You requested this exercise to update a previous report you received from DGM Environmental on February 4, 2007. In that study DGM Environmental reported the presence of Mexican free-tail bats with the "high likeliness of colonies in the Theater" as well as other buildings. It reported the presence of both urine and bat and rodent droppings throughout the second floor Control Room and within the Control Room attic on top of the ceilings as well as on the ducting for the heating, air conditioning and ventilating (HVAC) system. It also reported urine odors on catwalks and in the stairwell leading to the Control Room.

The purposes of the DGM Environmental report were to assess the current population of bats, determine how the bats were accessing the building and to develop a bat exclusion plan. The DGM report also noted its significant concern about the potential for rabies developing in the cat and bat populations on campus. The entire DGM report is attached to this follow up evaluation and report.

Findings by Hazard Management Services, Inc. (HMS, Inc. Personnel)

First, HMS, Inc. personnel, (James E Sharp and Tina Markley) received verbal information from you, from Leslie McCauley, the head of the Fine Arts Department and from various stage and production personnel about seeing bats throughout the building including when audiences were present for performances. Upon our arrival on February 25, 2009 a production supervisor advised us he had seen a bat the previous day.

During our visit we inspected all accessible areas of the building including all first floor rooms. We also inspected the stairway to the Control Room, the Control Room, the Control Room attics and all three levels of the lighting and equipment areas on either side of the Control Room. We also went above the stage and out over the audience area to inspect the metal beams, the Robinson decking on the bottom of the roof and the top of the walls on either side of the stage and seating areas. We also inspected the roof and inside the access panels to the HVAC system.

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Following is a listing of our observations.

1. Three live bats were encountered. One was seen at the second level lighting and equipment area. Two were seen on the platform above the audience seating area. All three took flight when high intensity lights were shined in their roosting areas. The actual roosting area of the first bat was not found but the second two had been at the interface of the wall and the ceiling where a column was supporting the Robinson decking.
2. Odors were detected in three areas. A slight musty odor was detected in the lobby to the left side of the entrance. This area was near the public restrooms but no odors were detected inside the restrooms. A little stronger odor was detected in the Control Room attic. The strongest odor was detected in the audience attic area where the two bats were seen.
3. Bat and/or rodent droppings were seen on the tops of ventilation ducting, on top of pipe insulation and inside a duct about 10 feet inside an access panel. At the stage area a prop had a combination of rodent and bird droppings. See Picture No. 10. Droppings were not seen near where the two bats had been roosting but there are several openings in the area where droppings could have fallen, including inside of the walls. There are also several inaccessible areas in this attic area where observations could not be made due to safety concerns. Very old, dried-up droppings were also seen in the lighting and equipment areas where ropes, cords and other items were stored. See Picture No. 3.
4. The literature suggests that bat guano will distribute histoplasmosis, similar to pigeon droppings. This is a fungal disease spread by spores that become airborne as the droppings dry out. While accumulations of bat droppings were not observed during this survey, it was not possible to access several areas of the attics due to the geometry of these spores.

Histoplasmosis causes respiratory complications, reduced ability to breathe and other conditions similar to tuberculosis. As the bat population increases during the Spring and Summer the amount of bat guano will increase as will the result in fungal colonies which may result in inhalation of the disease-causing spores.

There were no concentrations of droppings and insect parts that are normally seen under their roosting areas. This may have been due to the geometry of the areas but it was more likely due to the fact that our inspection took place in February when bats are not too active. With the onset of warmer temperatures in Spring and Summer bat populations and activities will undoubtedly increase.

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Other Observations

Inside the building there were no openings found in the HVAC system. However, on the rooftop the HVAC exhausts had openings in the screened covers that were large enough for bat or rodent entry. The droppings seen from the HVAC access panel may have been due to access through this screening. See Picture No. 1.

While many of the observed droppings were of the size you would expect from rats, others were smaller and were either from mice or bats.

Conclusion

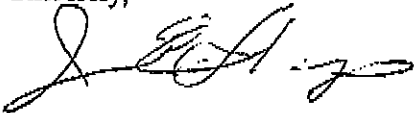
There are bats in the building although they are not too numerous or active at this time of year. With the arrival of Spring and the warming temperatures the number of the bat population will undoubtedly increase. With the numerous accesses that they have into the building, as reported in this and the DGM report, the bats will present an ongoing problem. While the problem may be limited to odors from urine and droppings, it could promote the growth of mold with its odors and the possibility of dry-rot of wood or cellulose building components. The presence of water intrusion of a number of locations also compounds these problems. Of course the presence of bats, along with a feral cat population, increases the chances of a rabies problem.

Recommendations

1. Repair all sources of water intrusion.
2. Enact the bat exclusion recommendations noted by DGM Environmental.
3. Provide better screening on the HVAC exhausts on the rooftop.
4. Educate all building occupants about the presence of bats, bat and rodent droppings and the safe work practices to be employed when these hazards are encountered.

If you have any questions please call (209) 551-2000.

Sincerely,



James E Sharp  
Cal/OSHA 05-3819

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PICTURE LOG  
THEATER BUILDING 1200

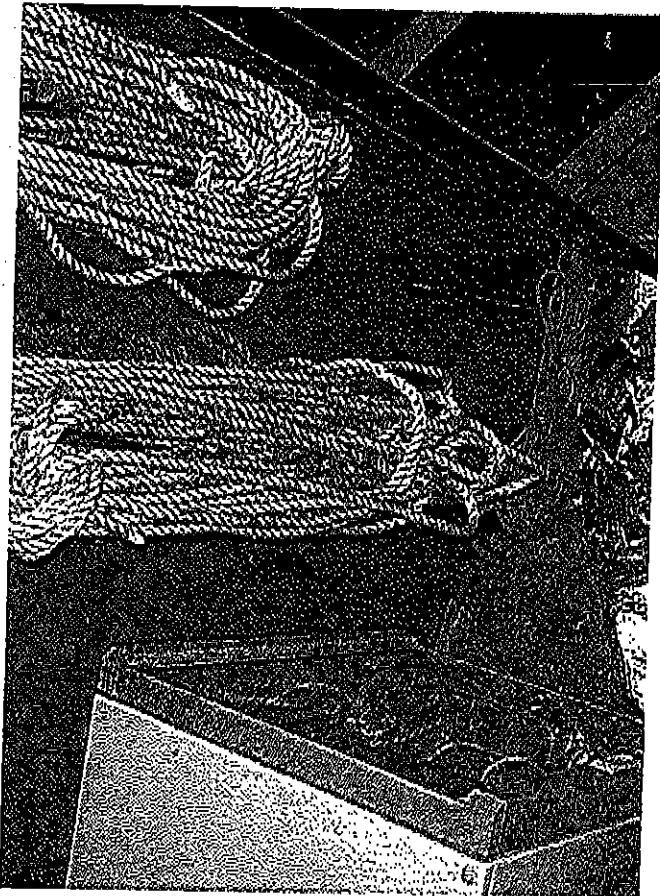
1. Interior of HVAC ducting with rodent droppings.
2. Pipe insulation with rodent droppings.
3. Rope and cord storage with dried droppings
4. Floor of stage attic
5. Ceiling (Robinson decking) of stage attic
6. HVAC rooftop exhaust
7. Screening on HVAC rooftop exhaust
8. Water intrusion - Plaster in seating area
9. Water intrusion - Ceiling panels - Green Room
10. Bird and rodent droppings at stage area



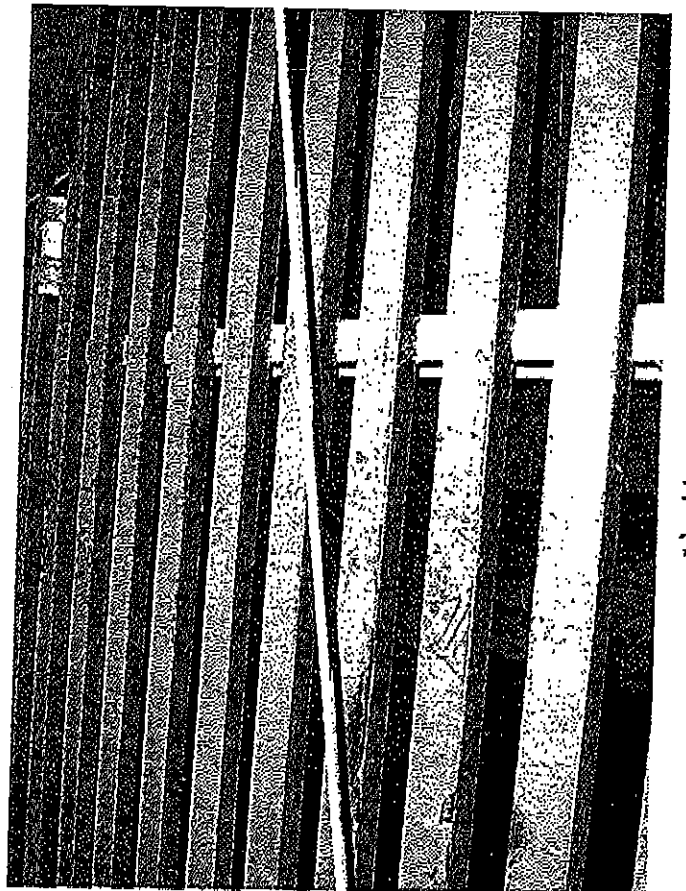
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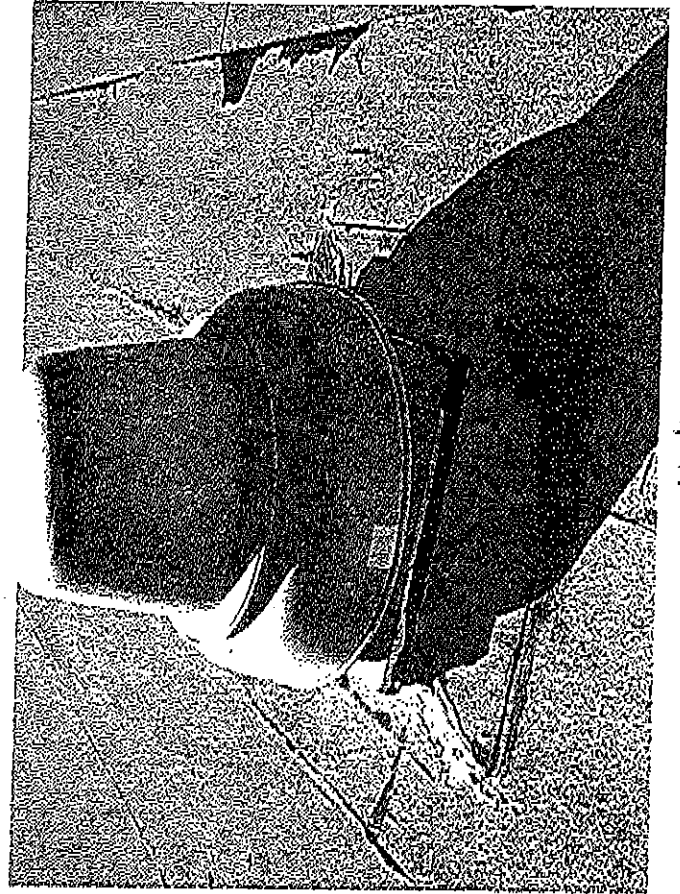
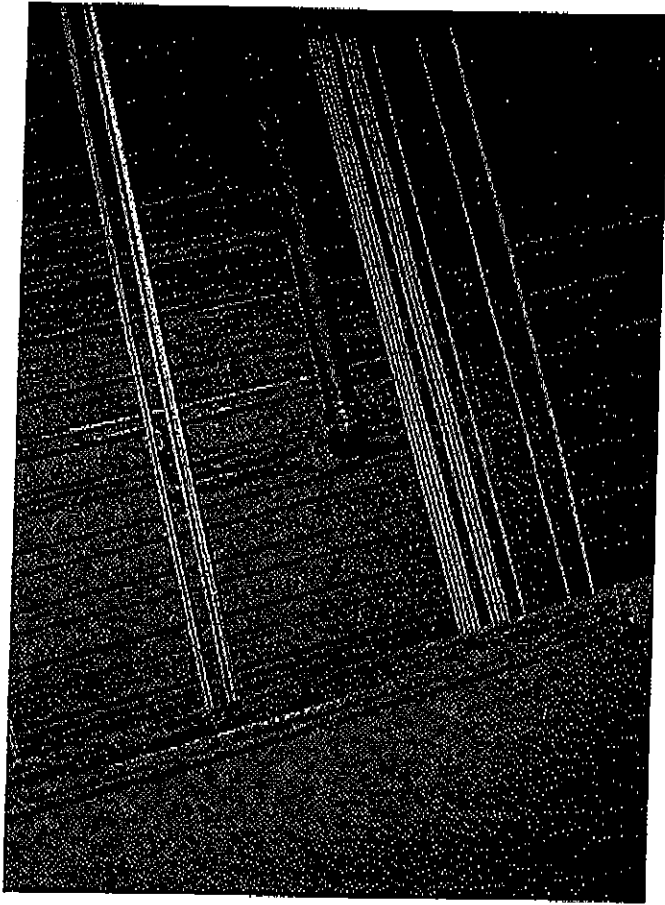
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1-3

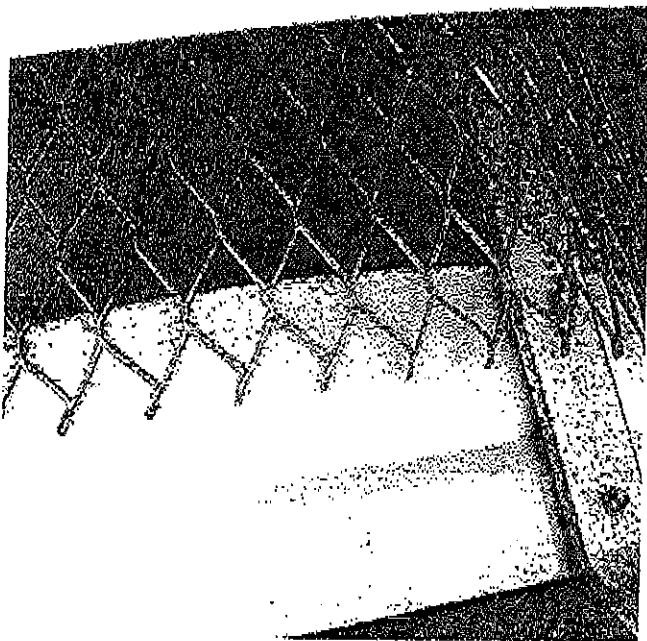


1-3

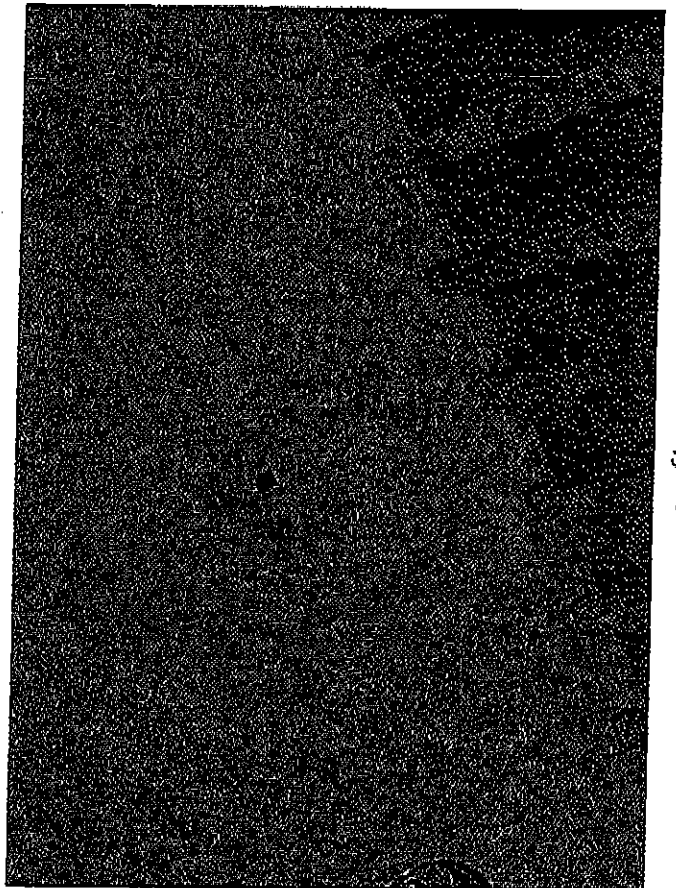


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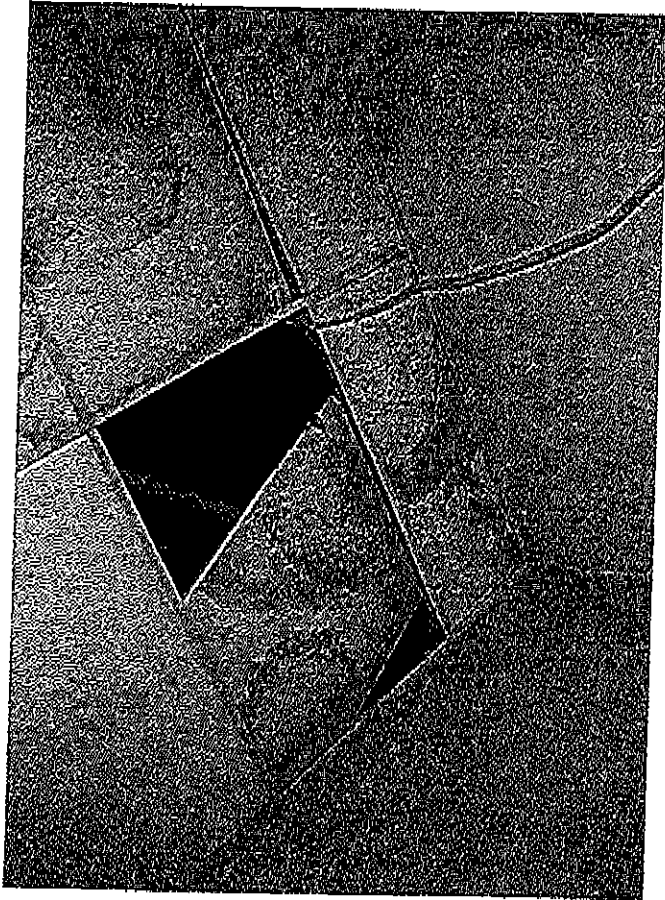
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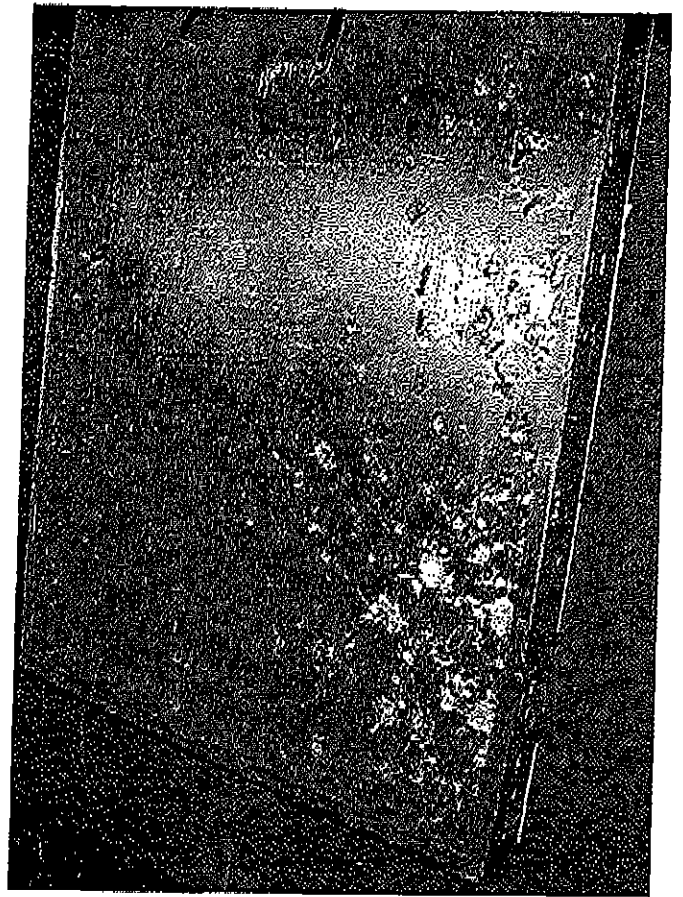
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No. 8



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