DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 96TH TEST WING (AFMC)
EGLIN AIR FORCE BASE FLORIDA

10 September 2013

MEMORANDUM FOR 96 CEG/CEAHD
Attention: MSgt Aguilar
FROM: 96 AMDS/SGPB

SUBJECT: Indoor Air Quality (IAQ) Assessment of Dorm 19

1. On 9 September 2013, Mr. Dwight Berrong from Civil Engineering (CE), Mr. Craig Bennett, 1Lt. Sievers, and SSgt LaBounty from Bioenvironmental Engineering (BE) conducted a joint IAQ assessment of Dorm 19 in response to a request from MSgt Aguilar (Dorm Manager) to survey more than 17 different rooms with possible mold growth. The results of the assessment found three issues contributing to mold growth, a broken HVAC system, poor HVAC ventilation design, and infrequent housekeeping/maintenance. The evaluation consisted of an in-depth visual survey and IAQ measurements. The IAQ measurements were taken with an Extech EasyView indoor air quality meter S/N: 080126477 and a Flir i7 infrared camera. The results of the measurements indicated the HVAC system was not adequately producing conditioned return air in the majority of the rooms throughout Dorm 19.

2. During the visual assessment there was evidence of active mold growth in many rooms. Some rooms were unoccupied for extended periods of time while others recently had tenants that were relocated due to mold issues. An infrared camera was used to search for possible moisture intrusions; none were found during the assessment. The IAQ meter readings showed several rooms had temperature readings outside the recommended ASHRAE comfort levels ranging from 79.8 to 80.2°F. These temperatures are most likely due to the broken HVAC system.

3. Several rooms in Dorm 19 had evidence of mold growth on the walls, carpet, and furniture, to include the beds and chairs. This has been an ongoing issue and will likely continue to be an issue due to the poor design of the ventilation system and the frequent malfunction of the HVAC system. The issues will continue to become more exacerbated as frequency of failure of the HVAC system increases. The unoccupied rooms are of particular concern due to lack of routine cleaning as opposed to the occupied rooms receiving regular cleaning by the occupants. MSgt Aguilar does have a monthly cleaning rotation in place but due to minimal manning and the rate of mold growth over that time period the monthly cleaning schedule is not sufficient. Surface mold should be cleaned every 3-5 days in unoccupied rooms (at a minimum of every 7-10 days). The residents have been informed to clean surface mildew with a 10% bleach solution as it appears if the growth is less than ten square feet. Maintenance repaints surface stains when needed. If the mold growth exceeds ten square feet the occupant should be moved and a request for a mold remediation should be coordinated through CE. Anything in the room with mold growth made of a porous material should be discarded if it cannot be laundered thoroughly. Examples of these items include: couches, chairs, carpet, cork board, mattress covers and/or mattresses. Dehumidifiers were recommended by CE to help reduce the moisture in rooms. The dehumidifiers should be emptied every day and cleaned weekly with a 10% bleach solutions. If

residents find they are having health concerns they should seek medical attention and follow recommendations provided by their doctor.

4. Please contact BE if the mold growth continues after the HVAC system is repaired or if you have any further questions or concerns regarding this indoor air quality assessment, please call 1Lt Katherine Sievers or Mr. Craig Bennett at 883-8607 and review the brochure published by Florida Department of Health at http://www.doh.state.fl.us/environment/community/indoor-air/Indoor_Mold_and_Health.pdf. This brochure will address the most common questions and concerns about indoor mold, how it affects human health, and ways in which you can prevent or remove mold.

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