



DEPARTMENT OF THE ARMY
UNITED STATES ARMY GARRISON RHEINLAND-PFALZ
UNIT 23152
APO AE 09067-3152

IMRP-ZA

22 JUL 2020

MEMORANDUM FOR All Personnel Working and Living within the United States Army Garrison Rheinland-Pfalz (USAG RP) Footprint

SUBJECT: Preventing Basement Mold Growth Standing Operating Procedure (SOP)

1. References.

- a. AR 40-5, Preventive Medicine, 25 May 2007.
- b. DA Pam 40-11, Medical Services, Preventive Medicine, 22 July 2005, RAR 19 October 2009.
- c. DA Pam 40-503, Army Industrial Hygiene Program, 2 April 2013.
- d. DODI 6055.1, DoD Safety and Occupational Health (SOH) Program, 19 August 1998.
- e. USACHPPM, TG 277, Army Facilities Management Information Document on Mold Remediation Issues, February 2002.
- f. NIOSH, Preventing Occupational Respiratory Disease from Exposures Caused by Dampness in Office Buildings, Schools, and Other Nonindustrial Buildings, DHHS (NIOSH) Publication No. 2013-102, November 2012.
- g. American National Standards Institute/American Society of Heating, Refrigeration and Air Conditioning Engineers ANSI/ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality, 2007.

2. Purpose. The purpose of this SOP is to reduce health hazards within the USAG RP as it is related to human exposure to airborne organic compounds such as fungi spores, i.e. mold, as well as the breakdown of building materials.

3. Scope. This SOP applies to all personnel working and living in the USAG RP area of responsibility.

4. Background. Mold and mold spores are abundant everywhere naturally, indoor and outdoor. Most cases of mold problems start in wet basements. Mold growth is destructive and constitutes a health issue when the spores become airborne in greater quantities. Basements are the ideal mold-breeding environment since they are generally dark, damp, and poorly ventilated at a constant temperature. There are no Federal

Occupational Safety and Health Administration (OSHA) regulations or National Institute for Occupational Safety and Health (NIOSH) recommended exposure limits pertaining to moisture in indoor environments or the associated microbial colonization.

Nonetheless, public health agencies (U.S. and Host Nation) recommend that indoor dampness be remedied because it creates conditions conducive to microbial growth, potentially resulting in health risks.

5. The following mold and dampness reduction strategies will be applied, as appropriate.

a. Keep the foundation dry. A damp foundation can occur due to a high water table or poorly managed rainwater drainage. The foundation should have an adequate drainage system and rainwater downspouts should slope away from a building. Gutters and drainage pipes must be kept free of debris.

b. Keep moisture-sensitive materials dry. Porous or fibrous materials such as (gypsum) wallboard, wood, cardboard, paper, books, files, carpet, clothes and foods should not be installed or stored in basements. Where storage of items in the basement is inevitable, the stored items, as well as shelving and racks must have sufficient clearances from the perimeter walls to allow an unobstructed air circulation.

c. Fix leaky plumbing and leaks in the building envelope as soon as possible. Wet or damp spots must be cleaned and dried as soon as possible.

d. Prevent moisture due to condensation. Surface temperature should be increased by wall insulation and air humidity should be reduced by increased air circulation into the basement rooms if the outdoor air is cool and dry; and dehumidifiers should be applied if outdoor air is warm and humid. In addition cold water pipes and chilled water lines should be adequately insulated.

e. Keep heating, ventilating, and air-conditioning (HVAC) drip pans clean. The HVAC systems air flow should work properly and unobstructed and the systems must be regularly inspected and maintained.

f. Apply good housekeeping practices. Basement rooms should be swept and kept clean at all times; settled dust and debris must be removed.

g. Vent moisture-generating appliances, such as dryers, to the outside. In addition, moisture generated by faucets or showers should also be vented to the outside immediately.

h. Remove plants from basement rooms. The moist soil in planters can spread molds spores and contribute air dampness.

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i. Keep doors to basement rooms open, if possible. Installation of louvers in basement doors or windows can be an alternative.

j. Cover dirty crawl spaces with heavy plastic sheeting.

6. Point of contact for this SOP is the USAG RP DPW Operations and Maintenance Division Chief, Heinz-Werner Rudolf, at DSN 493-4793.

A handwritten signature in black ink, appearing to read 'VJK', with a stylized flourish at the end.

VANCE J. KLOSINSKI
COL, SF
Commanding