



DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE GLOBAL STRIKE

06 MAY 2024

MEMORANDUM FOR THE MISSILE COMMUNITY

SUBJECT: Polychlorinated Biphenyls at Missile Wings

1. This memorandum summarizes the polychlorinated biphenyls (PCBs) sampling results at the three active missile wings (Malmstrom AFB, MT; Francis E. Warren AFB, WY; and Minot AFB, ND) as well as Vandenberg SFB, CA.
2. The United States Air Force School of Aerospace Medicine performed an environmental health survey for all forty-five missile alert facilities (MAFs) at the three missile wings. Based on findings at these bases, sampling was also conducted at Vandenberg SFB. The sampling plan included air, water, soil, and radon, targeting potential carcinogens and other hazards that could affect personnel through dermal contact, ingestion, and inhalation.
3. This health survey included evaluations of air, water, and surfaces for PCBs. PCBs are synthetic chemicals used for various industrial and commercial purposes, to include insulating electrical components like capacitors and transformers. PCBs were banned from domestic manufacturing in the late 1970s when Congress determined PCBs posed potential risks to human health and the environment. The Environmental Protection Agency's (EPA) peer reviewed cancer assessment strongly suggests PCBs are carcinogenic.
4. PCB surface swipe samples were conducted in each MAF at the 3 active missile bases, as well as at selected locations at Vandenberg SFB. Over 1,000 surface swipe samples were analyzed: seventy-one samples detected PCBs, four of which were above remediation standards set in 40 Code of Federal Regulations (C.F.R.) 761. Of the four samples above the remediation standards, two samples were taken from MAFs at Malmstrom and two were from Minot. 40 C.F.R. 761 promulgates standards for the use, disposal, storage, and marking of items containing PCBs. Air and water sampling did not detect PCBs.
5. This environmental sampling effort identified the continued presence of PCBs in the Minuteman MAFs, despite a comprehensive removal effort in the 1990s. While unable to sample decommissioned sites for the Peacekeeper and Titan weapon systems, a review of technical data showed that PCB-containing components were likely used in those alert and control facilities, given the construction timeframe.
6. If missile community members feel they have developed adverse health conditions due to an exposure during their service, they should seek advice and an evaluation from their primary care team. Retired or separated members should contact a Veterans Affairs healthcare facility; those serving on active duty should follow-up with their local Military Treatment Facility.

A handwritten signature in black ink, appearing to read "T. A. Bussiere", is positioned above the typed name.

THOMAS A. BUSSIÈRE
General, USAF
Commander

Missile Alert Facilities 1970-Current

USAF ICBM Units 1970-Present (Active & Inactive)	
Malmstrom AFB, MT 341st SMW/SW/MW (Minuteman)	Grand Forks AFB, ND 321st SMW/SW/MW (Minuteman)
10th SMS/MS - Active	446th SMS/MS - Inactivation 30 Sep 1998
12th SMS/MS - Active	447th SMS/MS - Inactivation 30 Sep 1998
490th SMS/MS - Active	448th SMS/MS - Inactivation 23 Sep 1997
564th SMS/MS (MMII) - Inactivation 15 Aug 2008	
Ellsworth AFB, SD 44th SMW/SW/MW (Minuteman)	Minot AFB, ND 91st SMW/SW/MW (Minuteman)
66th SMS/MS - Inactivation 1 Sep 1993	740th SMS/MS - Active
67th SMS/MS - Inactivation 15 Aug 1992	741st SMS/MS - Active
68th SMS/MS - Inactivation 1 Jul 1994	742d SMS/MS - Active
F.E. Warren AFB, WY 90th SMW/SW/MW (Minuteman/Peacekeeper)	Whiteman AFB, MO 351st SMW/SW/MW (Minuteman)
319th SMS/MS - Active	508th SMS/MS - Inactivation 28 Jul 1995
320th SMS/MS - Active	509th SMS/MS - Inactivation 28 Jul 1995
321st SMS/MS - Active	510th SMS/MS - Inactivation 15 Nov 1993
400th SMS/MS (MM/PK) - Inactivation 4 Oct 2005	
Davis-Monthan AFB, AZ 390th SMW (Titan II)	McConnell AFB, KS 381st SMW (Titan II)
570th SMS - Inactivation 31 Jul 1984	532d SMS - Inactivation 8 Aug 1986
571st SMS - Inactivation 2 Dec 1983	533d SMS - Inactivation 1 Nov 1985
Little Rock AFB, AR 308th SMW (Titan II)	
373d SMS - Inactivation 18 Aug 1987	
374th SMS - Inactivation 15 Aug 1986	