BACKGROUND
The Industrial Hygiene Laboratory (IH Lab) was created to provide high quality data from within the U.S. Air Force (USAF) for IH samples for all airmen throughout the world to maintain an accurate database for health records associated with work accomplished while on duty. The IH Lab is a part of the Analytical Services Division (OEA) within the Occupational and Environmental Health Department, located at the USAF School of Aerospace Medicine.

VISION
To be the Department of Defense’s foremost center of excellence for industrial hygiene chemistry analysis by providing the most reliable American Industrial Hygiene Association (AIHA) accredited laboratory services using state-of-the-art technology, cost-effective, highly efficient processes, and the best trained experts in the world.

MISSION
The mission of OEA is to serve the best interests of the USAF and the individual warfighter by providing analytical chemistry and related consultative support for USAF-wide occupational, environmental, and radiation health surveillance.

• IH Lab serves 179 worldwide bases throughout the USAF providing key occupational health risk assessment data for the Bioenvironmental Engineering career field
• AIHA accredited and a Reference Laboratory

RESPONSIBILITIES OF THE IH LAB
• Over 14K samples a year received and approximately 12K of those are completed in-house (92%+ of all samples received in OEA are performed in-house)
  o Accomplished with a combination of civilian professionals (6) and 4T enlisted military members (7) on special assignment
  o Analytical Chemistry Lab Experience: CIV: approx. 110 yr & MIL: approx. 10 yr
  o Laboratory has been set up in an efficient manner, allowing it to achieve industry-standard turn-around time (approx. 10 days)

OEA-IH PRODUCT LINES

INORGANIC LAB:
• 1/3 of total workload; workload performed on inductively coupled plasma instrumentation
• Primarily (approx. 80%) air samples from various activities around the USAF (painting, sanding, cleaning, Combat Arms Training and Maintenance (firing) ranges), remaining 20% are wipe and wipe samples and bulk (solid) of the various AF bases work areas
• Metal Fragment program
  o One of two Department of Defense laboratories completing this work
  o Come in various shapes and sizes (from spent rounds, improvised explosive devices, washers, bolts, etc.) after surgical removal from patients
  o Twice a year, results are sent electronically to the Department of Veterans Affairs

CHROMATOGRAPHY LAB:
• 1/3 of total workload performed via gas chromatography and liquid chromatography
  o Volatile and semi-volatile organic compounds
- Typically collected on tube media or passive monitors
- Benzene, jet fuel (JP-8, Jet A), formaldehyde, isocyanates, ketones, acetates, & alcohols

**HEXAVALENT CHROMIUM (Cr⁶⁺) LAB:**
- 1/3 of total workload; workload performed via ion chromatography
- Highlight Cr⁶⁺ area and emphasize the importance of hexavalent chromium
- Primarily air cassettes, but also swipe and bulk samples

**CONTACTING THE IH LAB**

Questions and requests for consultative technical support should be directed to the Environmental, Safety, and Occupational Health (ESOH) Service Center via e-mail at esoh.service.center@wpafb.af.mil or calling 1-888-232-ESOH (3764) or DSN 798-3764.