75th Air Base Wing

Effective Compliance & Recordkeeping Strategies for Refrigerant Containing Assets

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Effective Compliance & Recordkeeping Strategies for Refrigerant Containing Assets

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Outline

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Objective

- Improve compliance monitoring, record keeping, and reporting of Ozone Depleting Substances (ODS) at Hill AFB by:
  - Implementing more thorough refrigerant data management techniques
  - Reducing the risk of non-compliance involving recordkeeping for ODS
Hill AFB ODS Background

Hill AFB—a large facility:

Main Base: 6,600 acres
UTTR: 1,000,000 acres
(11,000,000 acres of military operating space)
Hill AFB ODS Background

- 16 refrigerant recycling processes
- Nearly 200 appliances 50 lbs or greater subject to 40 CFR 82
- Largest units:
  - Two 1,200 lb units supporting mission-critical applications at the Defense Information Systems Agency

Hill AFB-owned refrigerant recycling unit
Hill AFB ODS Background

- ODS Regulatory Drivers:
  - Montreal Protocol of 1987:
    - Intent to cease production of ODS
    - Incorporated into Clean Air Act (CAA)
  - Title VI of the CAA 1990 amendments, “Stratospheric Ozone Protection”:
    - Encourages using safer chemicals
    - Requirements incorporated into 40 CFR 82
Hill AFB ODS Background

- ODS Regulatory Drivers, cont’d:
    • Addresses the handling, recycling and disposal of ODS-containing appliances
  - Hill AFB Title V Air Quality Operating Permit:
    • Requires Hill AFB to adhere to 40 CFR 82 requirements
Hill AFB ODS Background

- ODS Compliance Drivers, cont’d:
- AFD-070613-041, *Air Force Refrigerant Management Handbook* does NOT address:
  - Recent Green House Gas (GHG) inventory regulations
  - EPA’s Significant New Alternatives Policy (SNAP) covering phase-out and alternative products
Hill AFB ODS Background

- Nation-wide increased focus on ODS compliance during EPA multi-media inspections
- Common ODS violations:
  - Inadequate recordkeeping associated with equipment/technician certifications
  - Inadequate recordkeeping involving servicing details, leak checks, and leak rates
- Air Force Material Command initiated Notice to Airmen (NOTAM):
  - Prompted facilities to proactively gather data to illustrate ODS compliance in case of inspection
Improving ODS Procedures

Partially in response to the NOTAM, Hill AFB data collection and management efforts include:

- Inventorying certain equipment subject to Title VI requirements
- Creating a refrigerant leak rate calculation algorithm, and archiving refrigeration technician certification documents in the AF-approved air quality data management system

Data collection methods:

- Using existing appliance information
- Conducting inspections and research
Improving ODS Procedures

- Hill AFB improvements to the existing air quality data management system include:
  - Better identification of ODS recovery/recycling equipment
  - Increased inspection frequency for refrigerant equipment from annually to semi-annually
  - Improved checklists for ODS source inspections
  - Identification of refrigerant-containing equipment maintenance contractors to ensure compliance with 40 CFR 82
  - Identification of construction projects with new equipment subject to 40 CFR 82
Improving ODS Procedures

The improved system will house:

- Equipment model numbers and serial numbers
- Charge capacities
- Service dates
- Net refrigerant loss
- Annualized leak rates
- Amounts of refrigerant recovered and added
- Types of refrigerants used
- Technicians’ names
Improving ODS Procedures

- The improvements will support:
  - Leak rate recordkeeping and reporting
  - 5-year records archive:
    - Technician credentials
    - Equipment certifications
    - Equipment maintenance logs
    - Repair reports
Lessons Learned--Risk Reduction

- ODS compliance risks:
  - Maintenance and repair contractors
  - Leak rate calculation and reporting
  - New/Modified appliances
  - Missing technician certification records

- By improving ODS recordkeeping, the AF-approved air quality data management system will reduce risk
Summary

- EPA is cracking down on ODS non-compliance
- There are many compliance risks associated with ODS
- To improve ODS data management, Hill AFB is improving their air data management system
- Hill AFB is currently inventorying ODS equipment
- The AF-approved air quality data management system will improve recordkeeping and ease reporting for ODS
Questions?