## 75th Air Base Wing



# The Hill Air Force Base Air Quality Instruction

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#### **Overview**

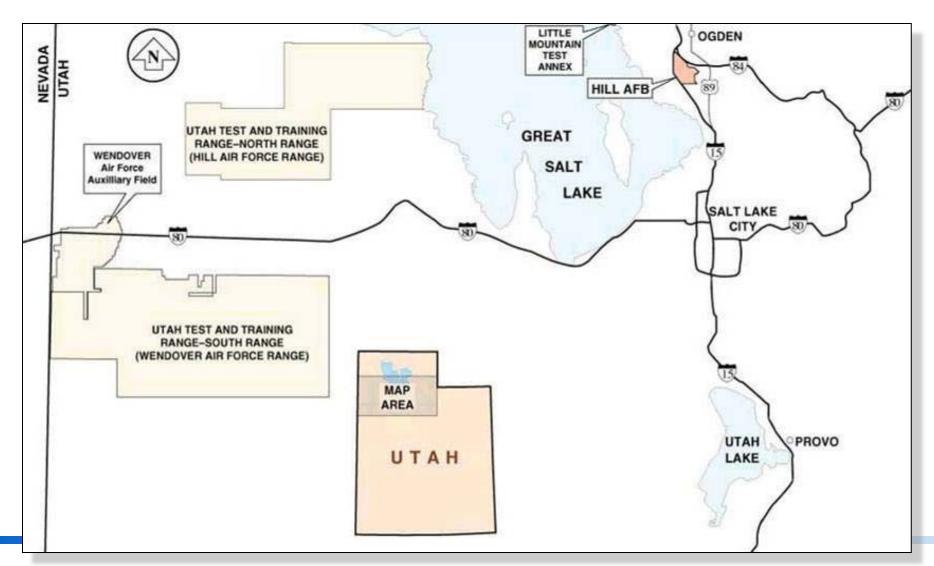


- Background
- Issue
- Solution
- Instruction
  - Development
  - Organization
  - Highlights
- Summary



## **Background**







#### Background



#### **Applicable Requirements:**

- Clean Air Act (CAA)
- Emission inventories
- **Title V permits**
- NESHAPs
- NSPSs
- NSR / PSD reviews
- GHG Mandatory reporting rule
- Title VI

- Conformity determinations
- 8-hour ozone and PM2.5 standards
- State admin codes
- Local policies
- Executive Order 13514:
  - "Federal Leadership in Environmental, Energy, and Economic Performance"



#### Issue



- Air Quality regulations do not come with instructions!
  - They are simply standards that must be met
  - No implementation guidance on how to meet the requirements at your facility





#### Solution



- Hill AFB Air Quality Instruction:
  - Explains the internal processes Hill AFB employs to meet air quality regulations
  - Establishes local duties, responsibilities, and business practices to promote air quality compliance at Hill AFB
  - Describes compliance policy at the shop-level
  - Reduces risk of non-compliance by authenticating procedures tailored to ensure compliance



#### Solution



- Not a supplement to AFI 32-7040, Air Quality Compliance and Resources Management:
  - Hill policy is a stand-alone policy not tied to, or limited by, 32-7040
  - Won't require revisions each time 32-7040 is revised
  - Won't have to wait for MAJCOM to supplement 32-7040 before releasing Hill policy



#### Development



- Most business practices were already unofficially in practice:
  - Resulting from many years of coordination between the Hill AFB Air Quality program, Federal and State regulators, and the Hill AFB production areas











#### Development



- Learning from past oversights (i.e. lessons learned) also played an important role
- Applies the environmental management system (EMS) plan, do, check and act model:
  - Continuous process of refining and improving practices until they prove most effective at ensuring compliance
- Monitoring regulatory developments and participating in regulatory development process helped Hill understand its requirements and expectations



## **Organization**



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The body of the document is divided into the following chapters:

- Planning
- Implementation and Operation
- Checking and Corrective Action
- Management Review
- Training

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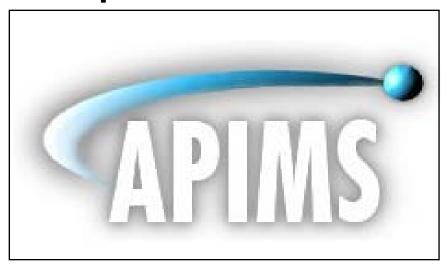
- Responsibilities section—a quick reference that briefly summarizes roles and responsibilities for the three main affected groups:
  - Air Quality program personnel
  - Industrial organizations areas owning emission equipment
  - Hill AFB environmental attorneys—coordinate on all things to ensure products, decisions, and operations adhere to environmental law

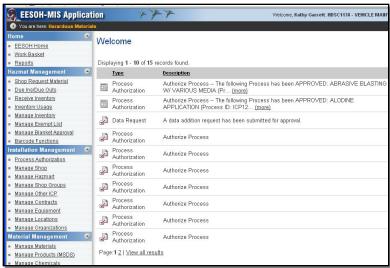






- Extensive planning and permitting activities to proactively evaluate equipment and processes prior to operation
- Specifies data systems that must be used for compliance









- Procedures for reporting deviations and implementing corrective actions
- Procedures for preparing and submitting compliance reports to regulators
  - Schedules and dates to ensure data destined for compliance reporting is received in a timely manner
- Extensive operational site protocols for preventing non-compliance at the source





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Development and maintenance of shop-specific AQ compliance policies within production areas











- Institution of self-inspection programs to identify potential compliance issue
- Required training and development of training

ABRASIVE BLASTING OPERATOR/UEC CHECKLIST AEROSPACE NESHAP											
AQUIS	AQUIS NUMBER BUILDING MONTH/YEAR OPERATOR/SUPEVISOR NAME UEC NA		UEC NAME								
	Abrasive blast media usage is recorded (in pounds) on the media usage log each time media is added to blasting equipment. II.B.2.a						Λ				
OPERATOR or SUPERVISOR	2. Equipment is maintained in good mechanical condition. (All maintenance actions performed on the equipment are documented using an AFMC Form 355, AFTO Form 244, Maintenance Log, FEMS, Trouble Call Log, or other suitable form) <i>II.B.1.b</i>							Operator/Supervisor Initials/Date/Time (Monthly)			
PERA'	<ol> <li>All abrasive biasting is done within the biast booth/enclosure and all air exits through the dust collection system. II.B.3.b (3)</li> </ol>						L				
s	4. *A differential pressure gauge is installed across the filter banks and is read and recorded on a log at least once per shift. (If pressure reading is outside of established limits, or there is an unexpected pressure drop, operation is shut down immediately and the UEC is notified.) II.B.3.b 1										
	<ol><li>Blast med folder) for th</li></ol>	<ol> <li>Blast media consumption is entered into a CEV data system (or sent to CEV using Air Reports folder) for this process by the 10<sup>th</sup> of each new month using operator usage logs. II.B.2.a</li> </ol>									
UEC	A monthly visual emissions observation (VEO) is conducted and documented on this form. II.B.3.a      Date: Time: Emissions Observed: Yes or No						U				
	A Method 9 evaluation is performed within 24 hours if emissions are observed during the monthly VEO. (opacity limit is 40% for Aerospace NESHAP blast booths) II.B.3.a										
	8. Process and equipment changes are pre-coordinated with CEV. (Submit a New Source Sheet and CEV will submit a 7-day notification of new equipment installation to UDAQ) <i>II.B.2.b</i>							UEC Initials/Date/Time (Monthly)			
	9. All equipment malfunctions or limit exceedences are reported to CEV immediately. II.B.3.b.2										
	<ol> <li>Operator/UEC checklists, all material usage logs, and records of all maintenance performed on this unit are available and maintained for five years. I.S.1.a</li> </ol>										
	<ol> <li>CEV was notified promptly of any potential Title V deviations. I.S.2.c</li> </ol>										
	12. This log-entry documents that a visual inspection was performed to determine compliance with the items listed in the operator section of this Operator/UEC Checklist and that all information on the checklist is true, accurate, and complete. I.S.1.a										



## **Summary**



- The Hill AFB Air Quality Instruction was developed as a means to sanction existing compliance practices developed over years at Hill AFB
- Is unique because it's not a supplement to 32-7040
- Addresses multiple aspects of compliance including planning, implementation and operation, checking and corrective action, management review, and training protocols
- It a singular authoritative source of shop-level tasks and responsibilities for supporting air quality compliance efforts



#### **Questions?**





#### **Background**



#### **Utah Test and Training Range (UTTR):**

- Aging and surveillance for Minuteman motors
- Munitions and propellant disposal
- Missile motor disposal
- Maximum permitted Net Explosive Weight (NEW):
  - 84,000 lbs per day
  - 6,552,000 lbs per year
- Trident D5 motor detonation:
  - Largest open detonation lbs)
  - Sep 2006





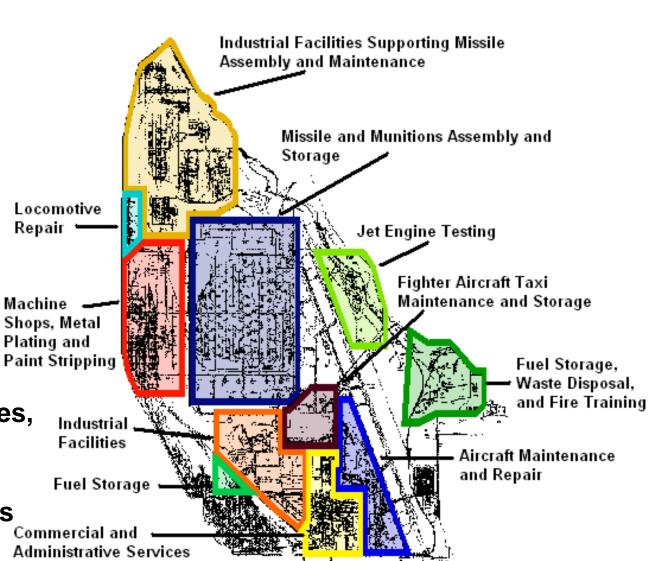
#### **Background**



75TH AIR BASE WING

#### **Main Base:**

- F-16
- **■** C-130
- A-10
- KC-135
- F/A-22
- Flight simulators
- Munitions and propellants
- ICBMs
- ■B2 composite
- Landing gear, brakes, and wheels
- ACMs
- Gas turbine engines





#### **Benefits/Results**



- Sanctions day-to-day shop-level compliance activities as official policy
- Serves as a clear and singular source of air quality operational compliance requirements:
  - Educates new employees about their tasks and expectations
- Serves as an official and physical source of reference:
  - Provides immediate clarification when needed
- Promotes consistency and compliance



#### **Status**



- Voluntary courtesy review by all affected base organizations
- Staffed the document similarly to compliance reports that must reach all affected base organizations
- Once in agreement, will finalize through AF publishing channels

