

Trend Analysis of Army Air Quality Issues

Heather L. Johnson & Lisa M. Polyak

US Army Center for Health Promotion & Preventive Medicine

Aberdeen Proving Ground, MD 21010-5403

Phone: 410-436-2509 FAX: 410-436-3656

Email: Heather.Johnson@apg.amedd.army.mil

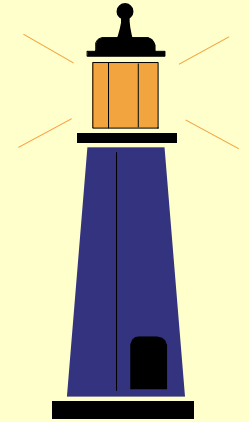


Trend Analysis Research Process

- US Army CONUS ECAS assessments FY 1996-2002
- Database includes findings for: Air Quality, Asbestos, & Air-related NSPS (Storage Tanks, Landfills)
- 128 ECAS Assessments
- 60 Army Installations
- 546 Negative Air Quality Findings
- 404 Total Class I Findings



Keyword Guide

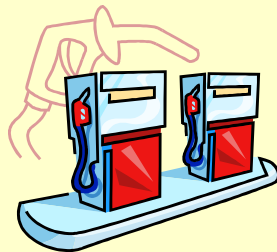


- Developed keyword templates for each finding and each finding issue
- Emission Source Keyword- categorizes the type of air pollution source
- Issue Keyword- illuminates the specific deficiency with the air emission source

Emission Source Keywords



- Abrasive
- Asbestos
- Boiler
- Cold Degreaser
- Conformity
- Drycleaner
- Environmental
- Gas
- Generator
- Installation-wide
(affect entire
installation)
- Incinerator
- Landfill
- Laundry
- Mobile
- Open Burn/Open
Detonation
- Ozone Depleting
Substances
- Miscellaneous
- Paint
- Paint Spray Booth
- Regulations
- Tank
- Vapor Degreaser
- Woodwork
- Water Treatment Plants



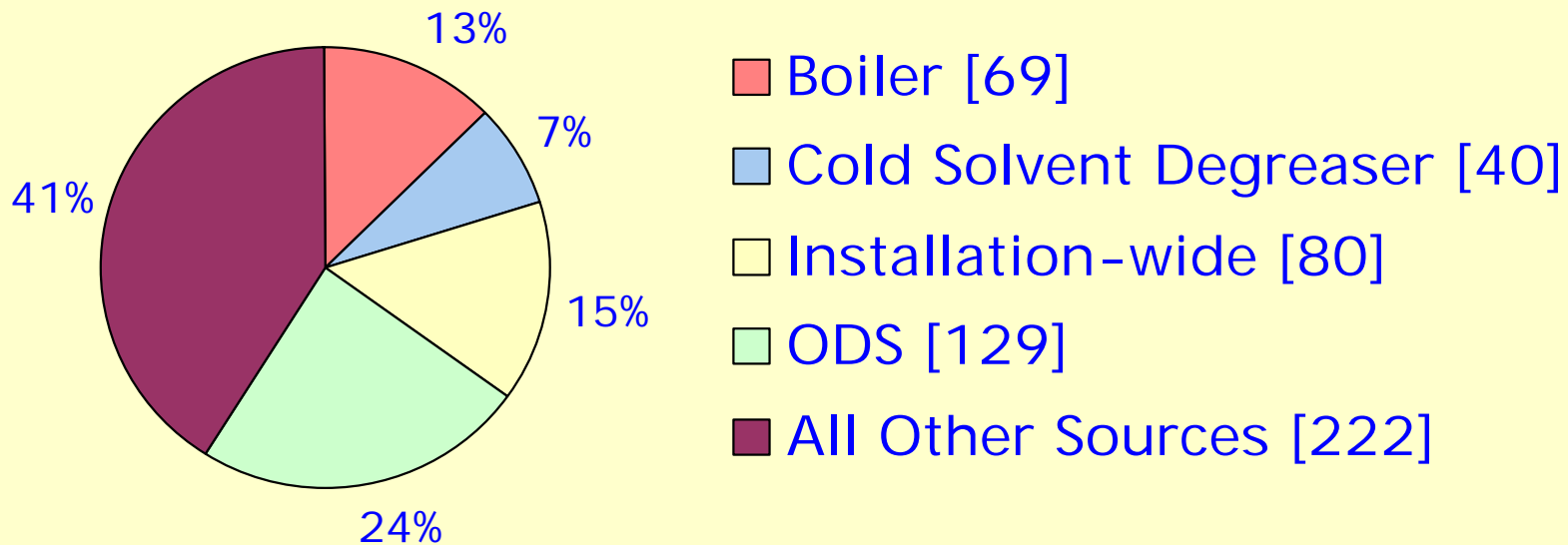


Compliance Issue Keywords

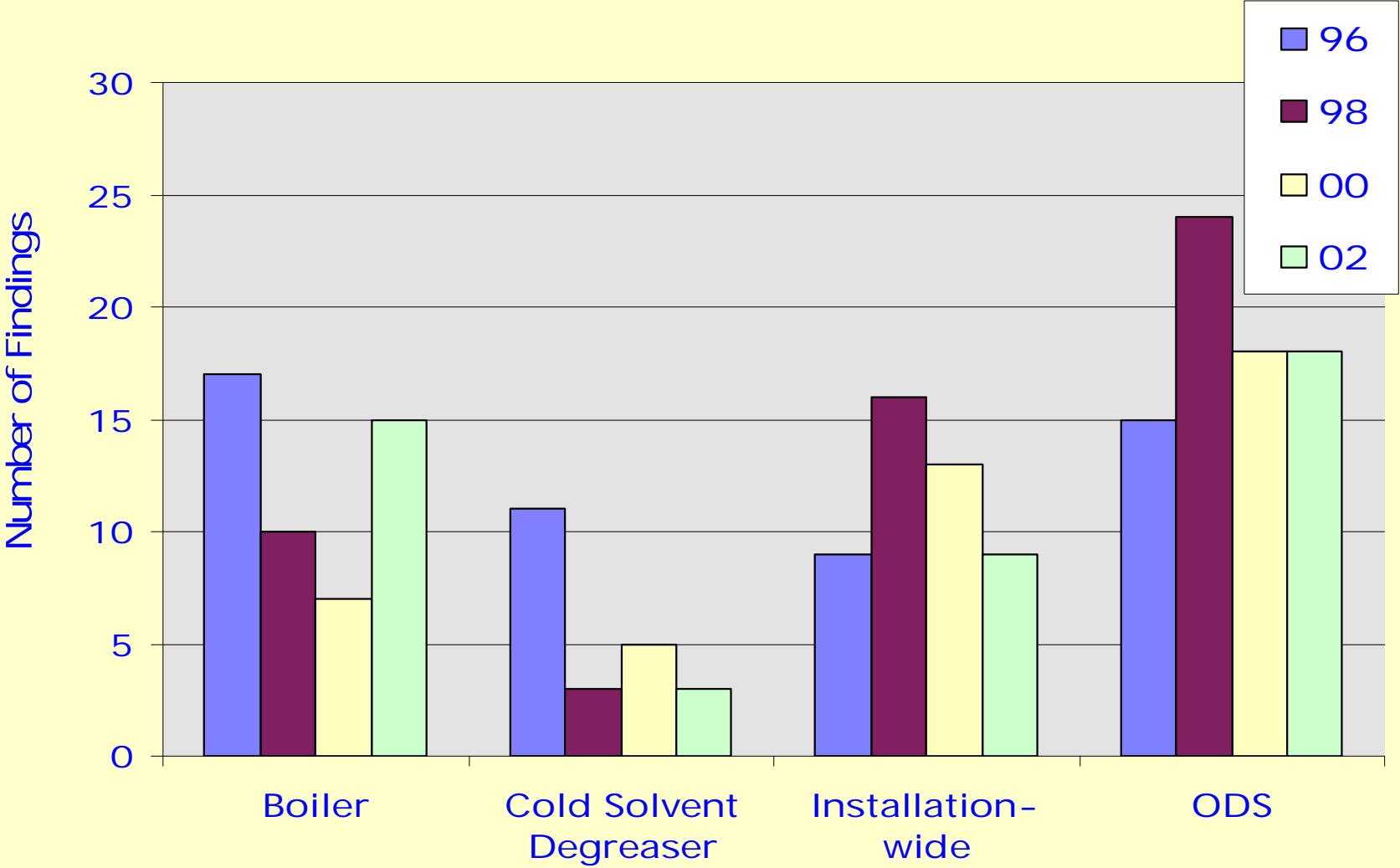
- Emission Control
- Disposal
- Emission Inventory
- Manage
- Monitor
- Notice of Violation
- New Source Review (includes PSD)
- Miscellaneous
- Permits
- Plans
- Operating Procedure
- Record keeping
- Report
- Risk Management Plan
- Title V
- Training



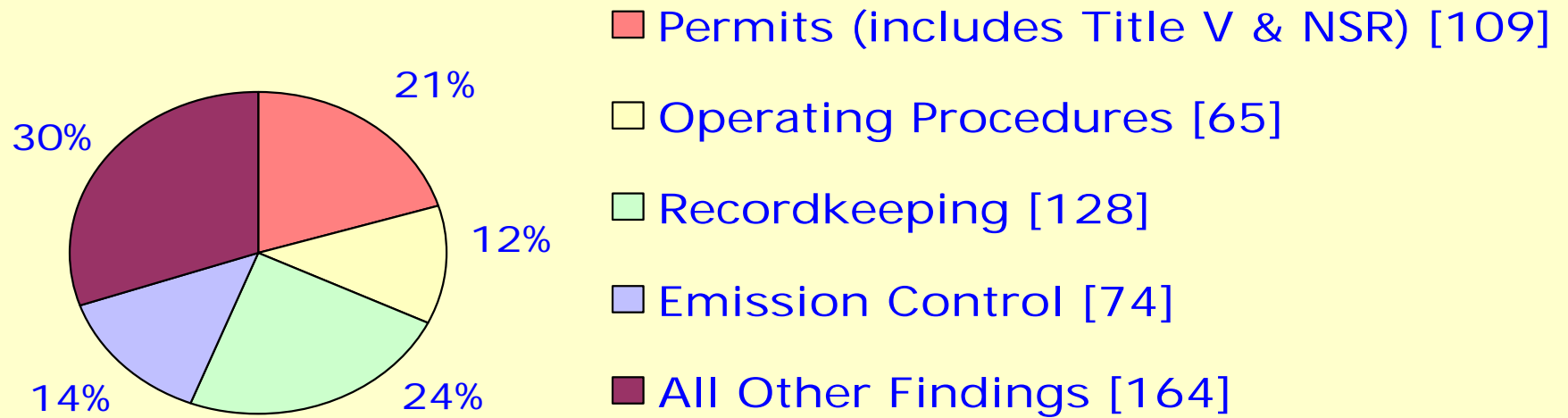
Emission Sources with Greatest Number of ECAS Findings FY96-FY02



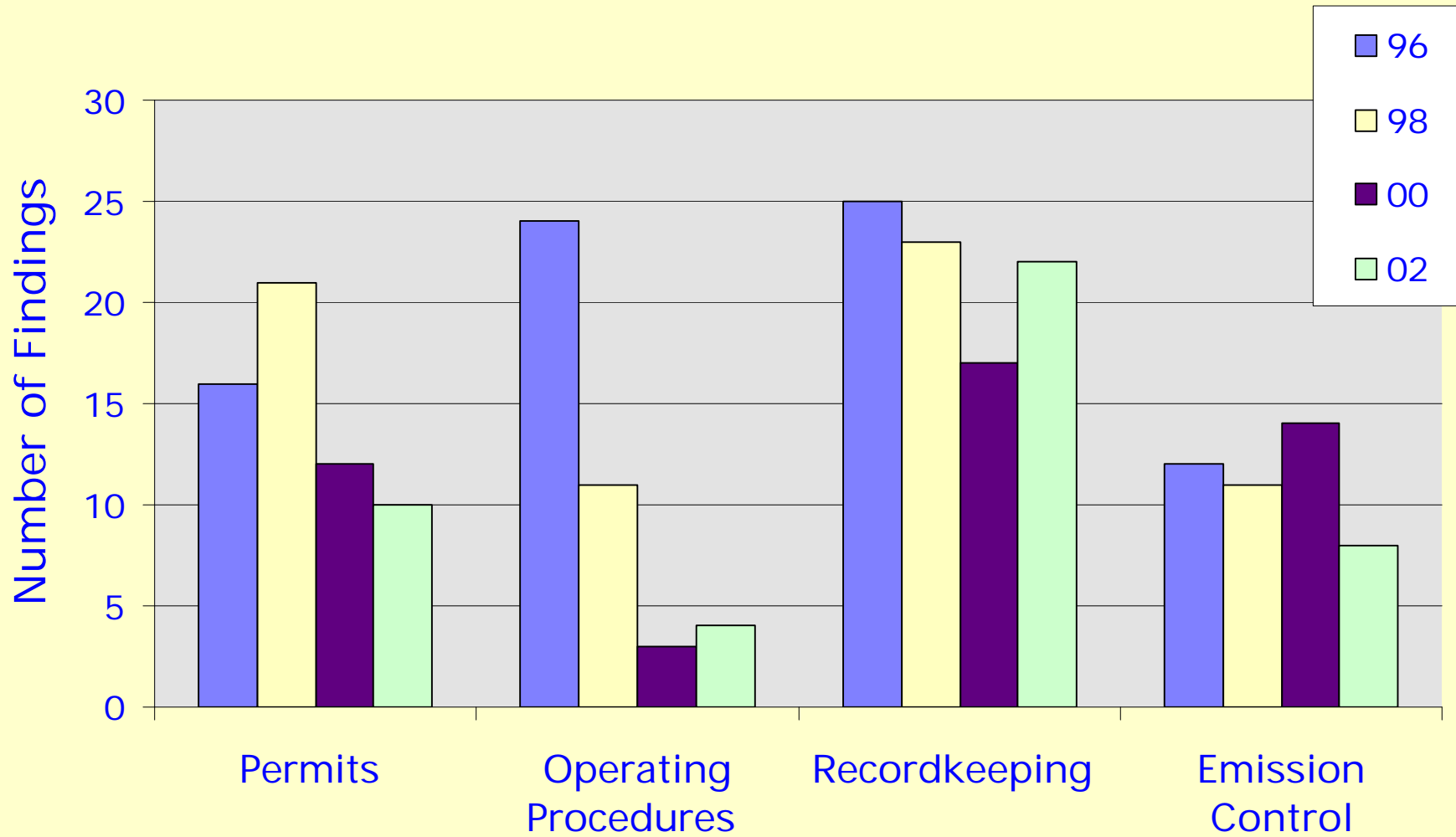
Annual Trends - Emission Sources with Greatest Number of ECAS Findings



Reasons for Air ECAS Findings FY96-FY02



Annual Trends - Reasons for ECAS Findings

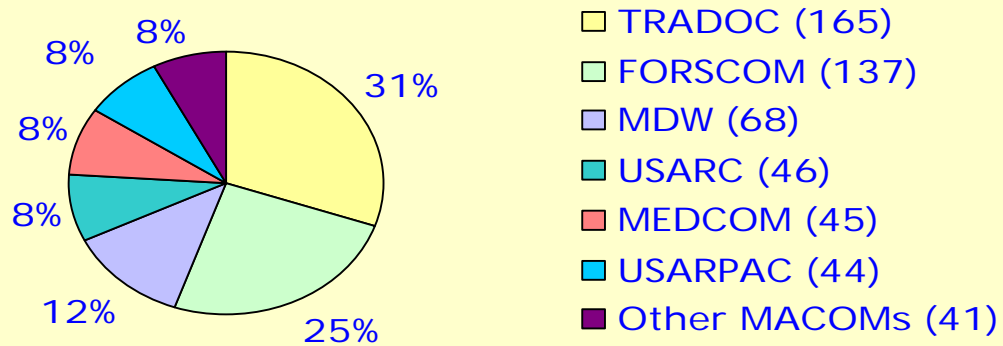


Major Commands

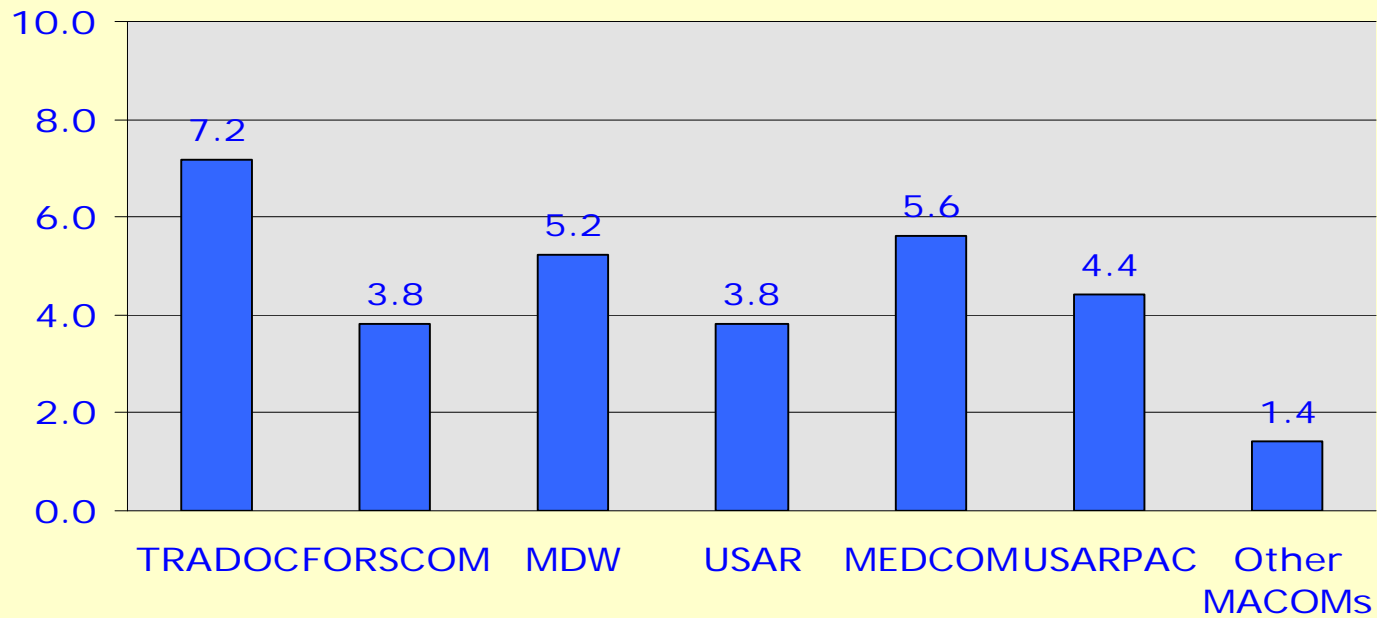


- FORSCOM
- MEDCOM
- MDW
- TRADOC
- USARC
- USARPAC
- Other MACOMS (i.e., MTMC, USMA)

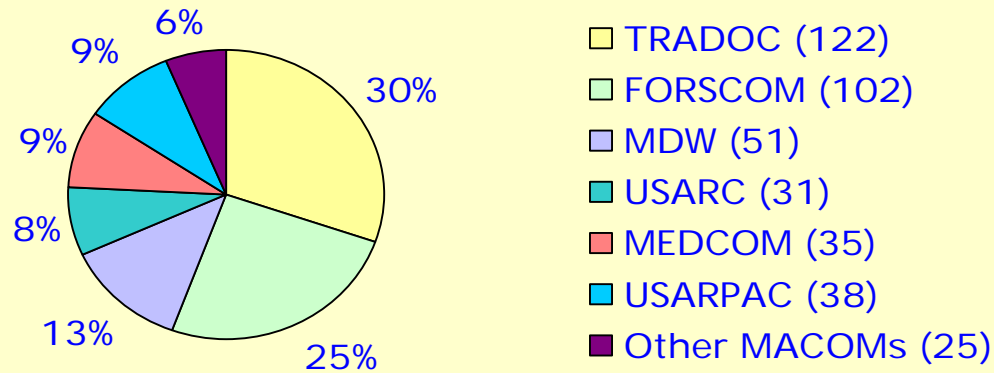
Total Air Findings by MACOM FY96 - FY02



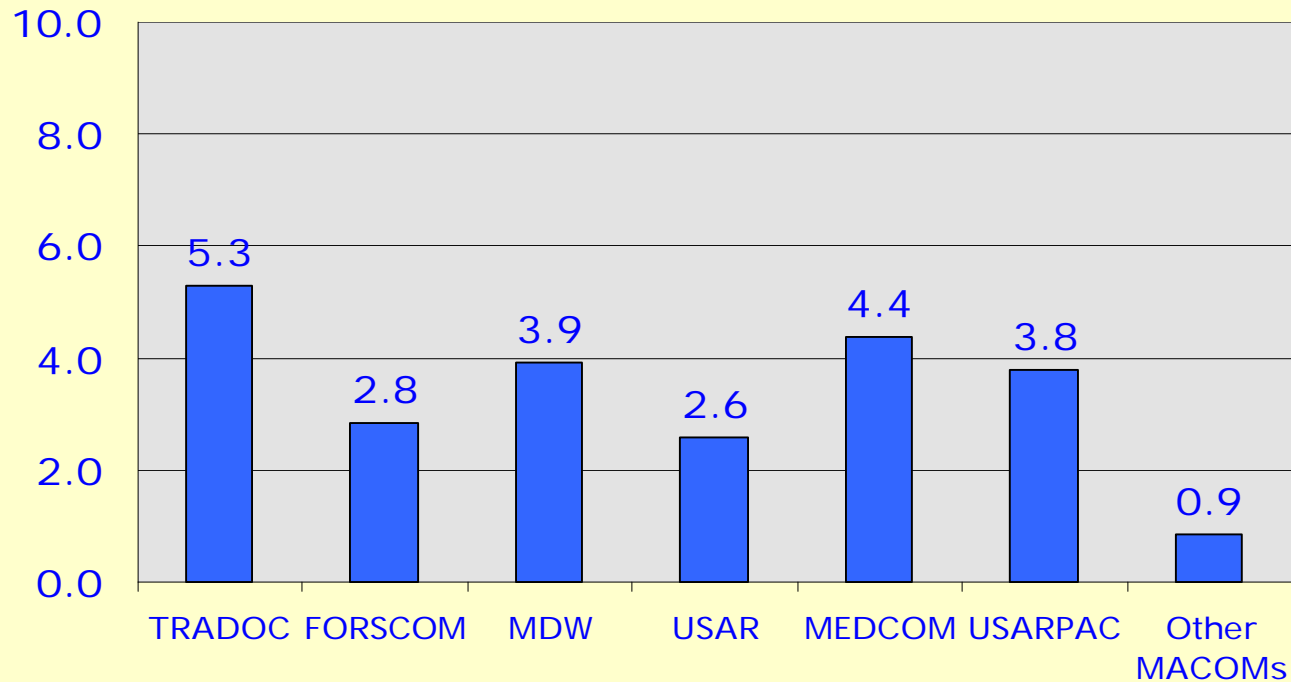
Average Number of Air Findings / ECAS



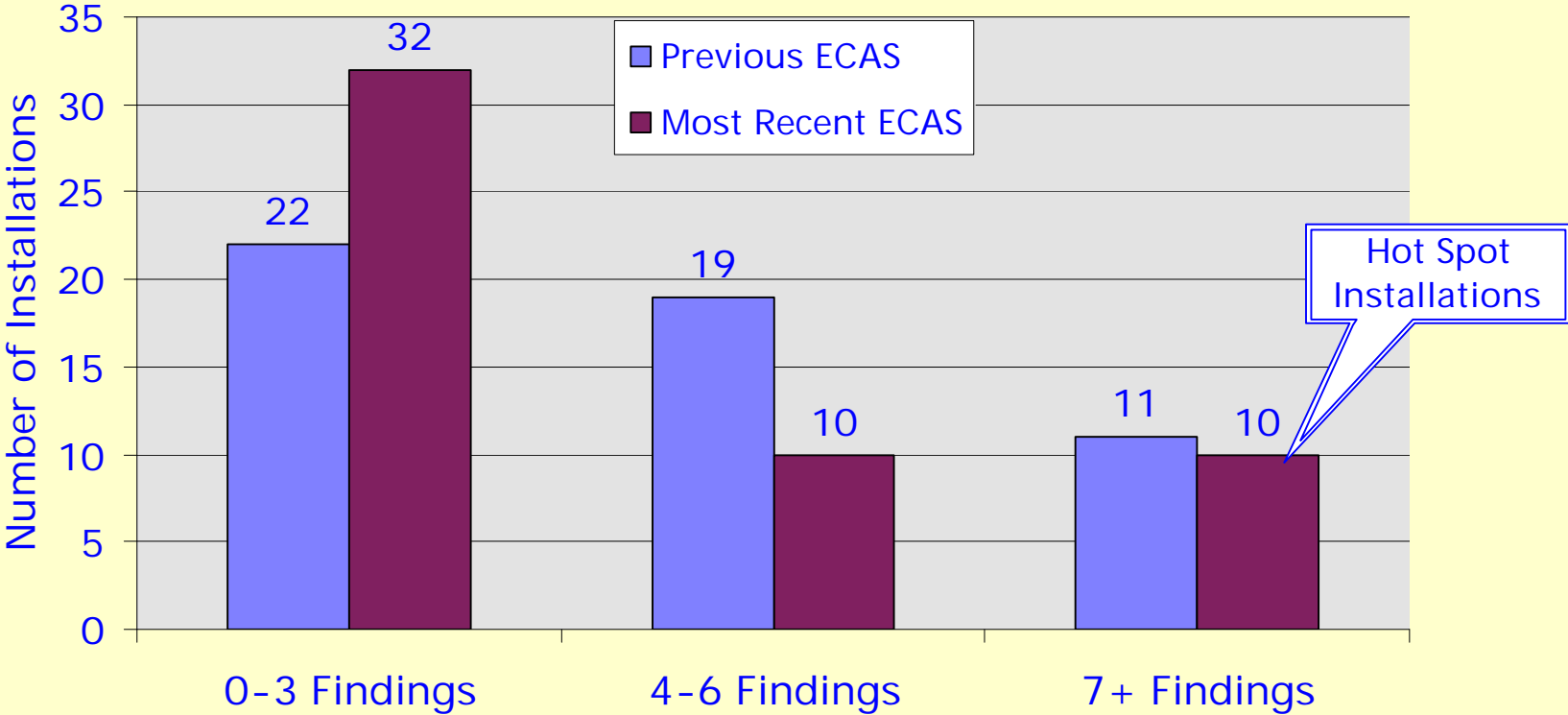
Class I Air Findings by MACOM FY96 - FY02



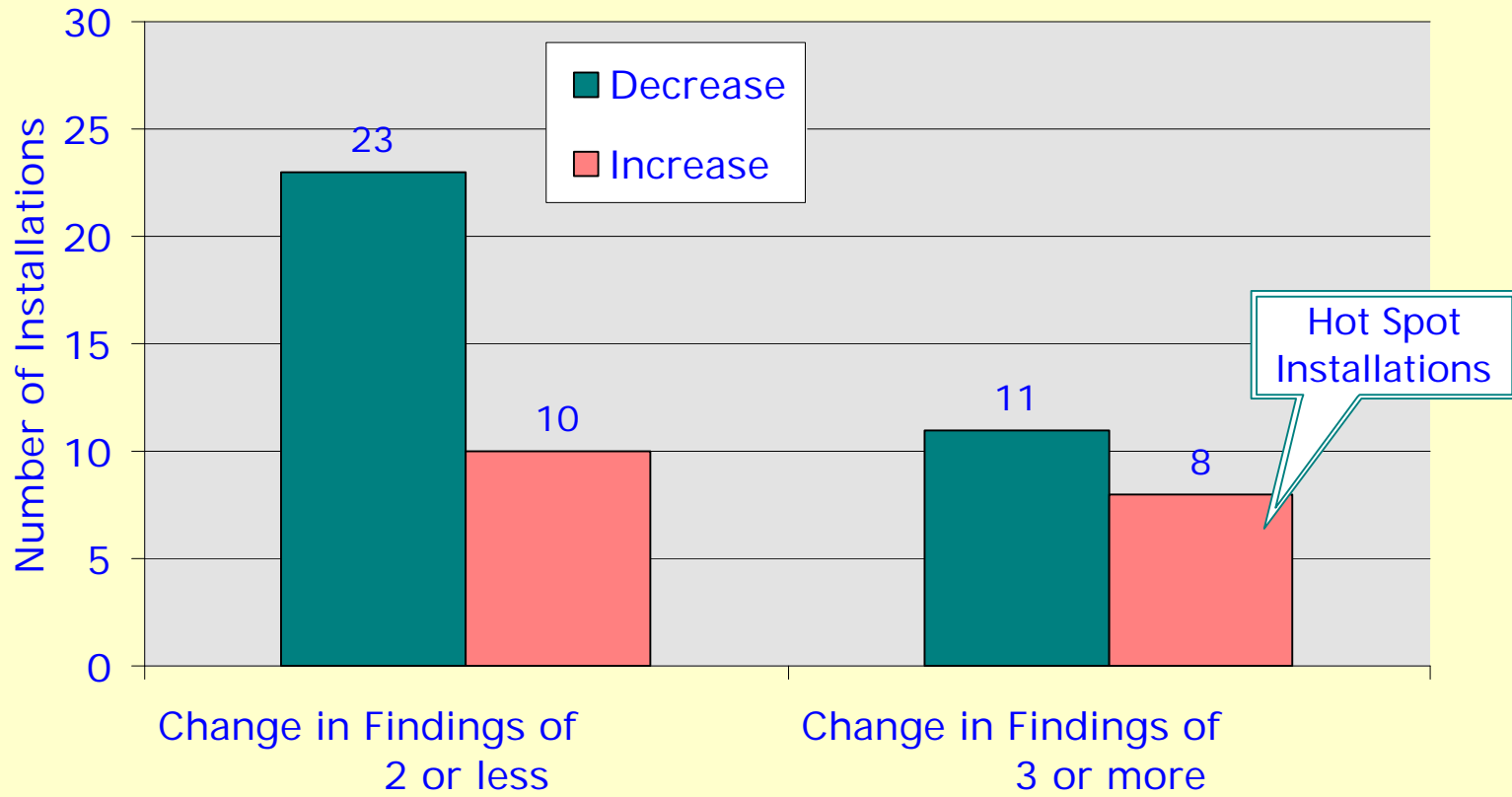
Average Number of Class I Air Findings / ECAS

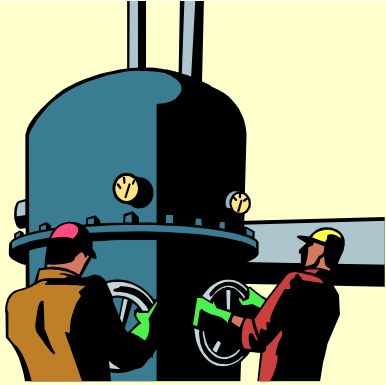


Air Findings Repeat ECAS



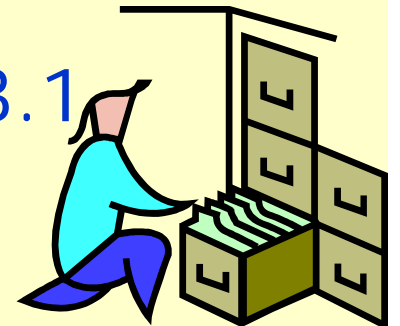
Air Findings Repeat ECAS



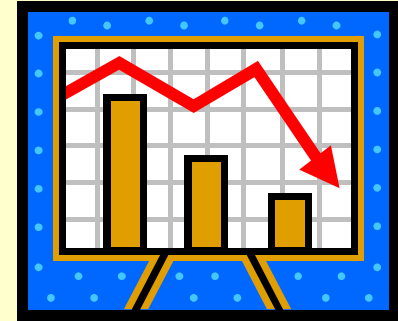


Summary

- Most common emission source problems are: ODS, installation-wide, boilers and cold degreasers
- Most common compliance issues: record keeping, permits, emission control devices and operating procedures
- Average findings per ECAS= 4.2
- Average Class I findings per ECAS= 3.1



Conclusions



- More installations are generating less findings
- Air quality trends highlight common and persistent problems for the Army air quality program
- Headquarters & MACOMs can address Hotspot installations and provide extra assistance
- Shop level staff need to be better trained to manage common compliance issues
- EPAS schedule may need to be modified to address hotspot installations

Questions?

