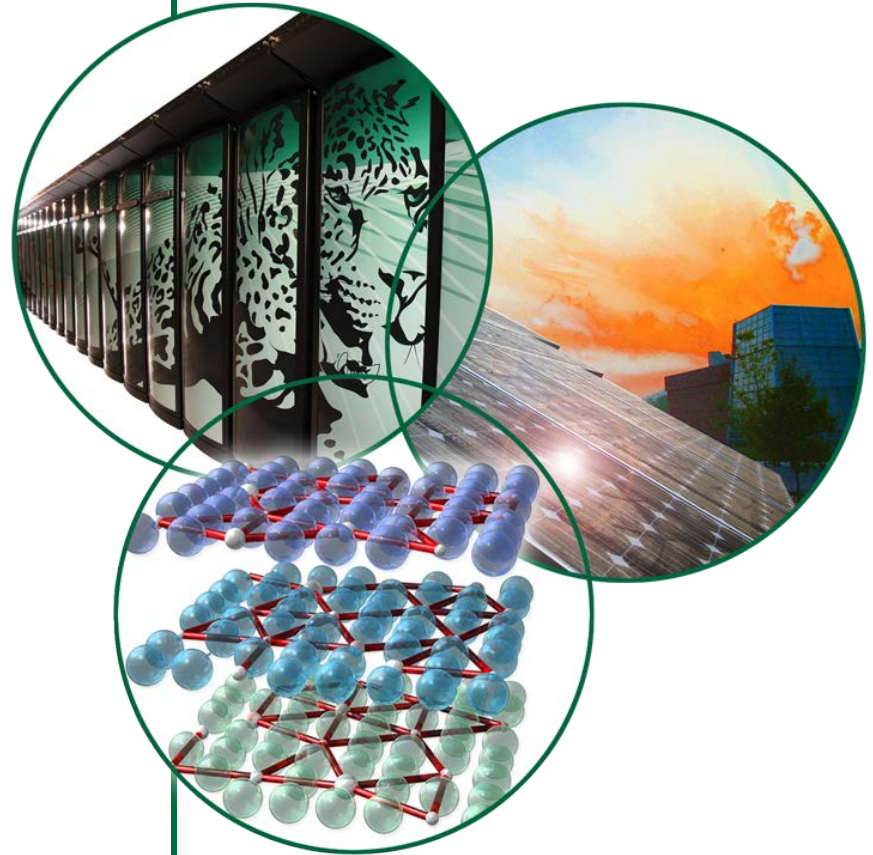


Operational Awareness Program at ORNL

DOE ISM Conference

Feedback and Improvement
Becky Webb
August 27, 2009



Becky Webb

- Operational Awareness Program Manager
- Twenty-plus years in Quality Management at EG&G, PerkinElmer, and AMETEK
- Bachelor of Science from Xavier University
- Quality Representative at ORNL for three years
- American Society for Quality certified Quality Engineer and Quality Auditor
- ORNL Certified Lead Auditor

OAP Goal

“Improving Operational Safety”

- Independent assessment program that identifies potential hazards and less-than-optimum environmental, safety, and health conditions throughout ORNL
- Utilizes an integrated team of ES&H subject matter experts from DOE-ORO and UT-Battelle
- Focuses on both compliance and performance
- Provides real-time feedback for line management to identify and control risks
- Data for analysis and trending
- Verification of effective implementation of corrective actions
- Maintain strong DOE participation

OAP Program Elements

- Preparation
- Performing the Assessment
- Feedback
- Corrective Action Verification

OAP Preparation

- Annual Schedule – August timeframe
 - Based on risk analysis and past performance
 - Schedule includes both Research and Support divisions
 - Typically schedule 7- 8 divisions a year – based on size of the divisions and complexity of operations
 - Schedule reviewed by DOE – ORO
 - Notification to Directorates/Divisions
 - Schedule posted on the OAP web-site
- Assessment Notification
 - Divisions notified 30 days prior to assessment
 - Ask for a single point of contact (POC)
 - Pre-planning activities (meeting with division director, POC to discuss facility access, PPE, etc.)



OAP Assessment – Compliance focus

- OAP team includes:
 - OAP Team Lead
 - Subject Matter Experts:
 - Environmental
 - Safety & Health
 - Radiological Protection
 - Representatives:
 - DOE
 - ATLC
 - Facilities



- Walk-through compliance assessments conducted:
 - Work areas – laboratories - shops
 - Hallways - break rooms
 - Storage areas
 - Outside areas

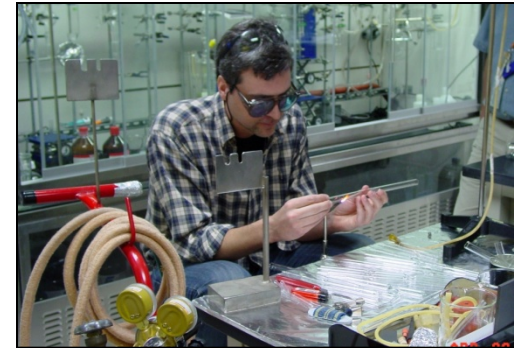
OAP Assessment – Compliance focus

- Walk-throughs always conducted on Thursday mornings from 8:30 – 11:30
- Adherence to contractual and regulatory requirements
- Laboratory Space Manager Self-assessment checklist used as reference
- Take notes and lots of pictures
- All observations are discussed with division staff – no surprises in field reports



OAP Assessment – Performance focus

- Performance observations (PO) conducted by 2 – 4 team members
- Scheduled during work activities in-progress
- Opportunity to discuss Safety and Work Control practices with division staff
- Observations include –
 - Preparation and analysis of samples
 - Inspection, testing, and calibration activities
 - Maintenance activities
 - Glass-blowing
 - Lasers



OAP Feedback

- Assessment results communicated in Field Reports
 - Draft Reports sent to the division within 5 working days of each walk-through and PO
 - Factual accuracy review and comment resolution
 - Finalized Field Reports
- Data entered into OAP Access Database
 - Date, Division, Building, Room, Category, Description of observation, etc.
- Formal presentation of results given to division management
- Final Report identifying major findings, opportunities for improvement, and strengths based on trend analysis from the Field Reports

OAP Assessment Categories

- **Noteworthy Practices / Strengths** - Positive statements that highlight good work practices, well-written procedures, or other positive aspects of a program that could be used as a model for other similar programs across ORNL.
- **Finding** – A deficiency or noncompliance with contractual or regulatory requirements – or does not meet the expectation of the requirement.
 - **Environmental**
 - **Radiological**
 - **Safety**
 - **Work Control**
 - **Other (Training, Calibration, etc.)**
- **Other Items Noted** - Concerns that management may want to review for possible safety hazards or environmental issues – not referenced to regulatory or contractual requirements or national standards.

OAP Noteworthy Practices – 91 Total YTD

– Work practices

- All the solder observed was lead free solder, which eliminates lead waste.
- The gas cabinets are kept locked, so settings will not be changed. There are weekly checks of the gas levels and settings.
- It is standard practice that a researcher working in the acid/base bay must work with a buddy. The researcher and the buddy must sign in and out on a log sheet.

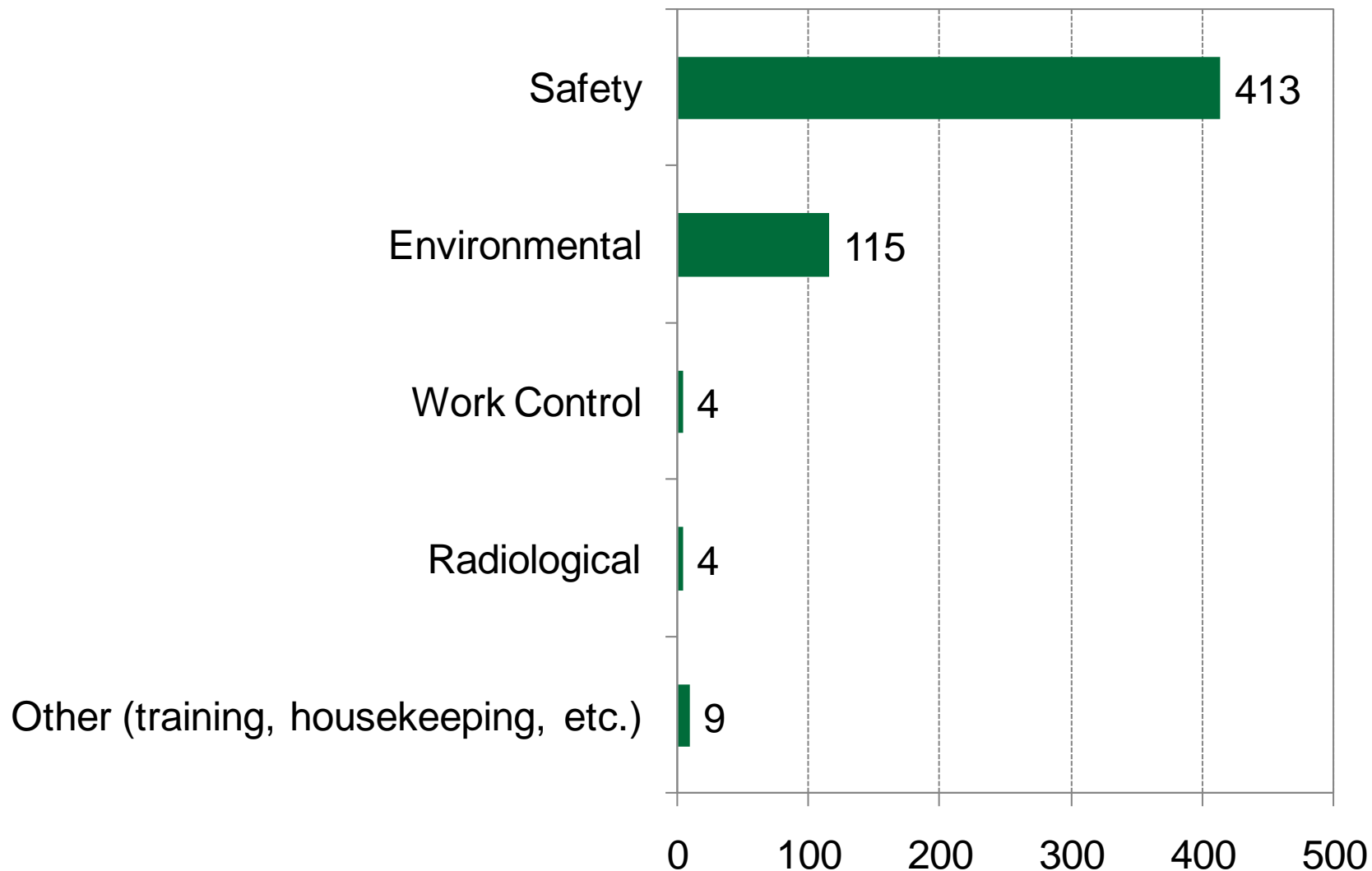
– Administrative Controls

- The Operations Manager maintains a spreadsheet identifying the locations of local HEPA filtration systems associated with the hoods. This is good administrative control for matching experiments with appropriate hood exhaust systems.
- In the clean room area, emergency response signs, specifying which fire extinguisher to use on which type of material, and which type of spill response supplies to use and how to use them is considered a noteworthy practice.

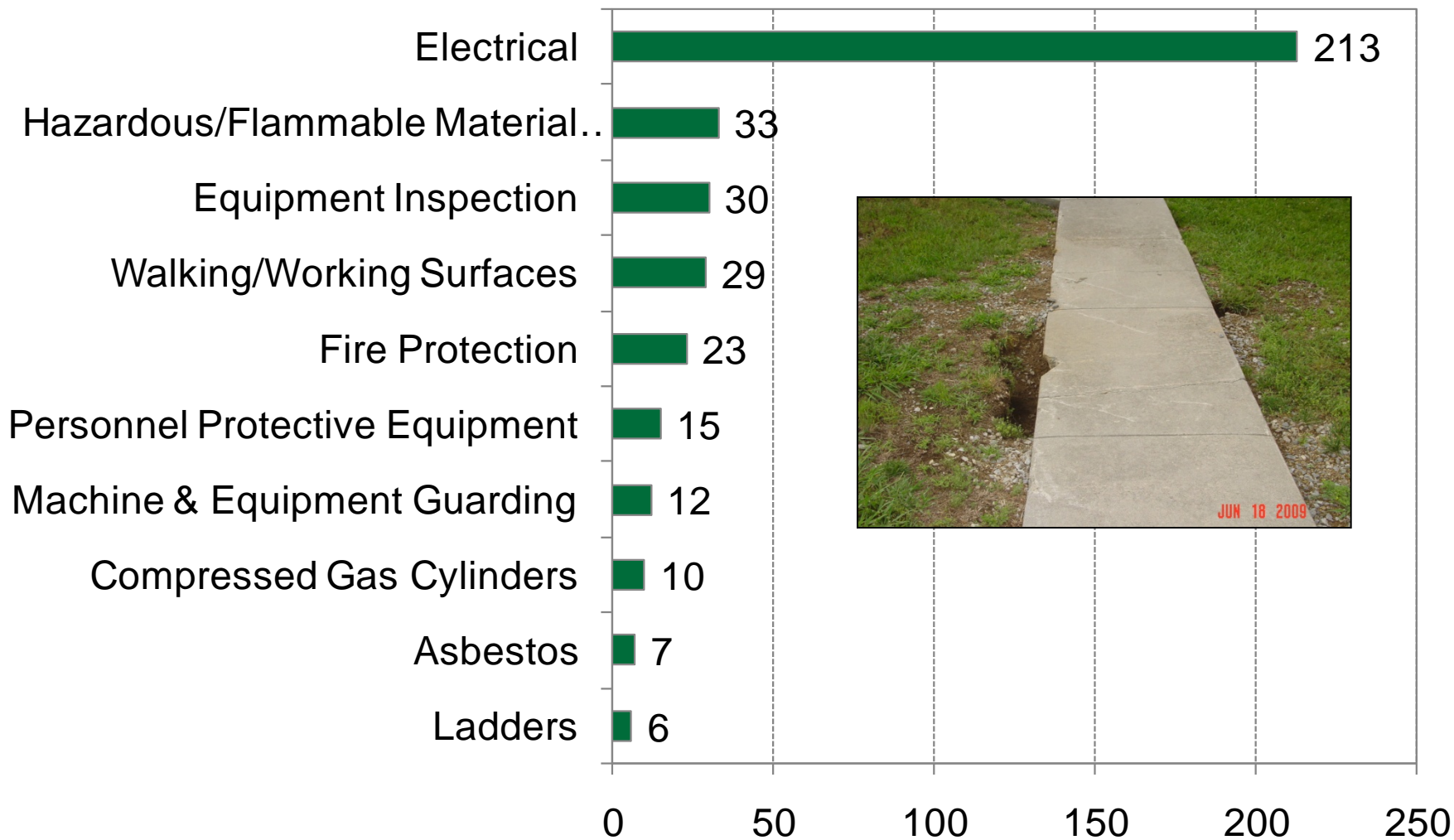
– Engineering Controls

- Access to the laboratories is controlled with proxy key cards, which are tied to the researcher's training. Researchers must have received the required training to gain access to individual laboratories.

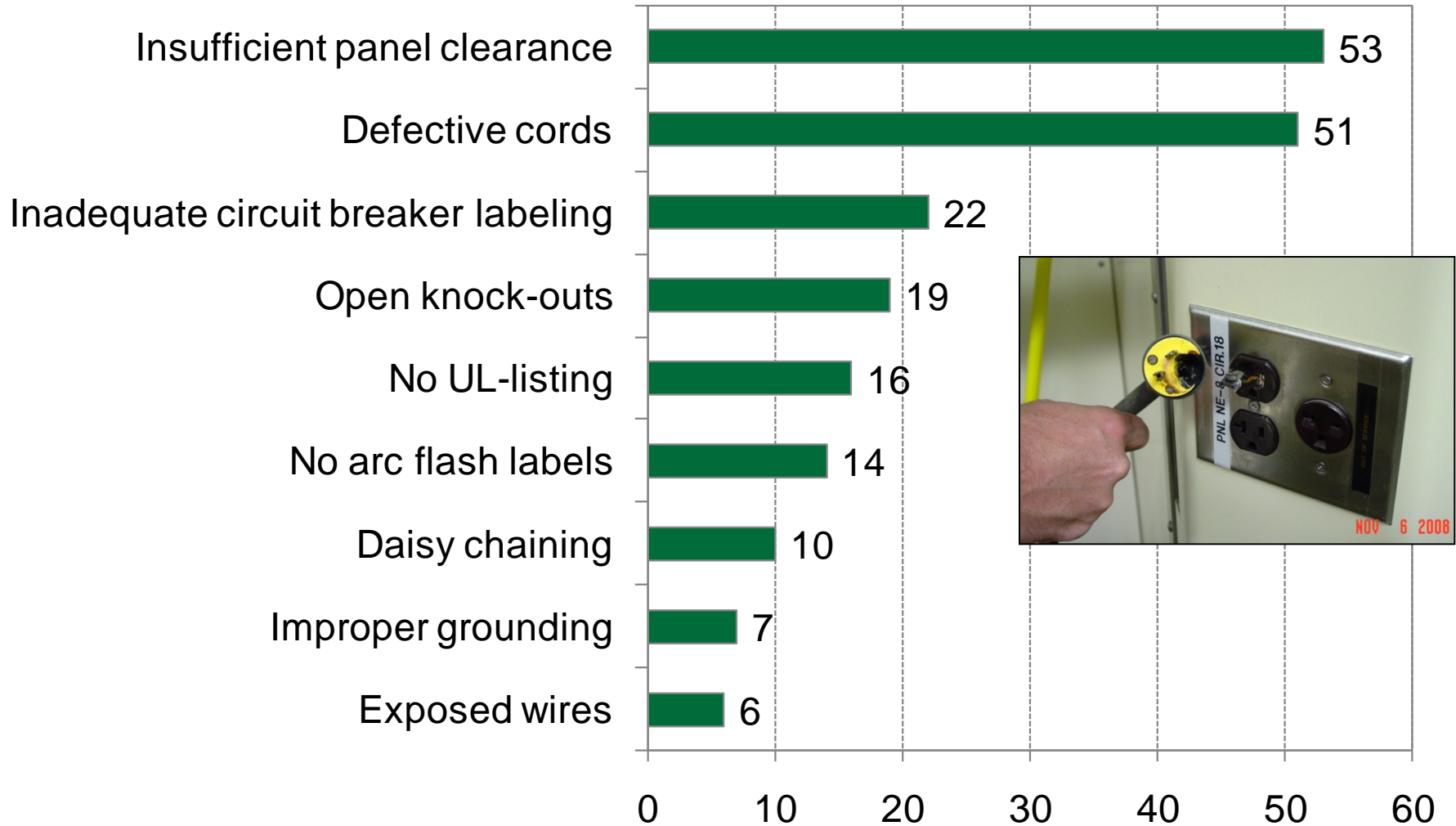
OAP Observation Details – FY09 YTD



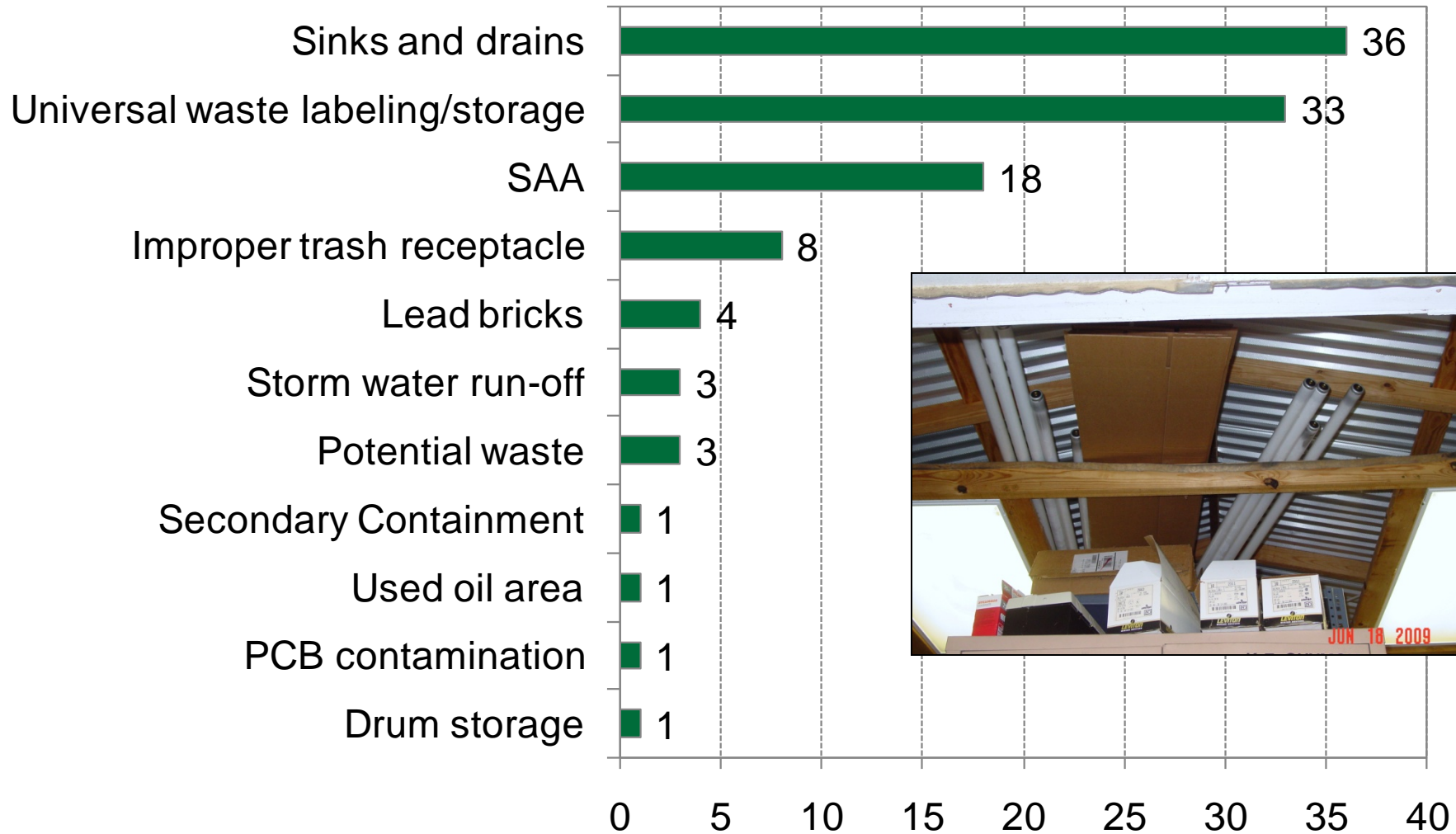
OAP Safety Data - FY09 YTD



OAP Safety Data - Electrical - FY09 YTD



OAP Environmental Observations – FY09 YTD



OAP Corrective Action Verification

- The assessed division is responsible for tracking findings and effective corrective actions in the Assessment and Commitment Tracking System (ACTS)
- Verification methods -
 - Two to four OAP team members consisting of the team leader, SMEs, and a DOE representative will perform verification assessment
 - Quality Representatives will perform verification of corrective actions for their assigned division
 - The OAP Manager will coordinate the verification assessment with other on-going assessments

OAP Customer Survey

| | | FY06 | FY07 | FY08 | FY09 |
|----|---|------------|------------|------------|------------|
| 1 | The initial planning with your division was adequate. | 4.7 | 4.9 | 4.5 | 4.8 |
| 2 | The length of each visit was reasonable. | 4.7 | 4.7 | 4.4 | 5.0 |
| 3 | The interactions between the OAP team and your staff were professional. | 4.3 | 4.9 | 4.8 | 5.0 |
| 4 | The OAP team was technically knowledgeable. | 4.0 | 4.2 | 4.3 | 4.5 |
| 5 | All physical areas of your division were adequately covered. | 4.5 | 4.6 | 4.4 | 4.5 |
| 6 | Communication of information/observations to your organization was timely. | 4.7 | 4.7 | 4.6 | 5.0 |
| 7 | Communication of information/observations (emails, reports) were clear and precise. | 4.7 | 4.4 | 4.5 | 4.8 |
| 8 | Information/observations were useful to your division's self-assessment feedback and improvement process. | 4.2 | 4.3 | 4.4 | 4.8 |
| 9 | Lessons Learned were generated from observations and communicated internally. | 3.8 | 3.5 | 4.3 | 4.8 |
| 10 | Lessons Learned were generated from observation and communicated externally. | 3.3 | 2.7 | 3.8 | 4.5 |
| 11 | The OAP process added value/support to your ES&H program. | 4.0 | 4.2 | 4.3 | 4.8 |
| 12 | The changes to the OAP have improved the process. | 4.0 | 4.2 | 4.4 | 4.8 |
| | | 4.2 | 4.3 | 4.4 | 4.8 |

Ranking

1 2 3 4 5
 Do not agree Agree Strongly Agree

OAP – Comments from Division POCs

- “The OAP Team was very professional and helpful throughout this process. Communication with the OAP Team was timely and informative. It was helpful to have outside subject matter experts review our facilities for safety problems. People tend to not notice or recognize as a problem things they see daily.”
- “What can I say – the logistics and communication were excellent, very good idea on lessons learned – I have gotten a good response from outside the lab. The assessment was conducted in a very professional and helpful manner.”
- “The review was a positive experience....set the tone and provided an overall spirit of goodwill that made the process so well received with our staff. “
- “In previous audits I often felt under attack but this team presented themselves very professionally and quickly gained my confidence. It was clear to me the team was there to identify problem areas and offer solutions. The overall knowledge, focus, and helpful attitude of the entire team was remarkable. Thanks to all.”

OAP – Adding value to ORNL

- Data used for lab-wide trending
- Comparison data for divisions
- Safety Flashes
- Formal Lessons Learned
- Driven changes to laboratory-wide procedures
- Informal – lessons learned
- Great exposure to the laboratory
- OAP SharePoint site
 - Annual Schedule
 - Formal Reports
 - Trend analysis



A screenshot of a SharePoint web page for the Operational Awareness Program (OAP). The page includes a navigation menu on the left with links for "Surveys", "QP Home", "Lessons Learned", "OAP", and "Lists". The main content area features the "Operational Awareness Program" title, a "Mission" statement, a "Program Description", and contact information for Becky Webb, Team Leader. The page is part of the Quality Programs site at ORNL.