

# **NS&T Management Observations**

Quarterly Performance Analysis

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## **Quarterly Performance Analysis**

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**September 2014**

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## Background

The INL Management Observation Program (MOP) is designed to improve managers and supervisors understanding of work being performed by employees and the barriers impacting their success. The MOP also increases workers understanding of managements' expectations as they relate to safety, security, quality, and work performance. Management observations (observations) are designed to improve the relationship and trust between employees and managers through increased engagement and interactions between managers and researchers in the field.

As part of continuous improvement, NS&T management took initiative to focus on the participation and quality of observations in FY-14. This quarterly report is intended to (a) summarize the participation and quality of management's observations, (b) assess observations for commonalities or trends related to facility or process barriers impacting research, and (c) provide feedback and make recommendations for improvements NS&T's MOP.

## Evaluation Methods

The NS&T Management Observation website provides managers with the guidance and tools to plan, perform, and document a management observation. The website outlines the purpose and goals of management observations, identifies the performance expectations, and provides guidance for addressing performance issues. Subsequent to performing an observation, managers use the website to document the results using time/date, binning categories, and narrative text boxes. Reviewers of the observations use the website to bin any of the issues identified, review the scope and content of the observation, and assign a quality score. This report uses the website data to track progress and report results.

The primary means for evaluating Management Observations is:

**Participation** - Tracking participation and completion of observations will be compared to the assigned frequency (quantity) over time.

**Observation Quality** - The documented scope and content of the management observation will be evaluated and graded against predefined quality criteria.

**Observation Review** - Results from management observations will be reviewed and analyzed for issues, trends, safety concerns, corrective actions, and areas for improvement.

## Participation

Management observations tracked to monitor management participation. NS&T has established frequency requirements based on the levels and roles of management (Table 1).

**TABLE 1.** Frequency requirements for Observations.

MANAGEMENT OBSERVATION PARTICIPATION REQUIREMENTS		
◆	Associate Lab Director	Quarterly
	Chief Operations Officer	Quarterly
	Division Director	Quarterly
	Deputy Division Director	Quarterly
■	Department Manager	Monthly
	Operations Lead	Monthly
	Lab Manager	Monthly
	Lab Space Coordinator	Monthly
	Principal Researcher	Monthly
	Mission Manager	Monthly

The ‘participation’ metric uses discrete data to measure of the percentage of managers completing their assigned number of management observations for a given month. The thresholds for management participation are set as follows:

- **Green** = >85% completion rate
- **Yellow** = 70 – 85% completion rate
- **Red** = <70% completion rate
- **Acceptable performance** = not to drop below a 75% completion rate for two consecutive months.

## Observation Quality

Observation quality converts qualitative evaluations of the observations into a quantitative measure. Using criteria to facilitate objectivity; each management observation is reviewed, evaluated, and graded using a simple 3-point system (3 being the highest quality; 1 being the least quality).

- 3 Points** Work tasks observed are of at least moderate complexity. The interaction between manager and worker is clearly documented. The observation provides insightful evaluation, analysis, and/or recommendations; which may result in specific actions or improvements (resolving of conditions, correcting behavior). Discussions reinforce expectations, provided behavior-based coaching or correction, and are specific to behaviors, practices, and performance. If identified, issues/conditions are entered into LabWay.
- 2 Points** Work (tasks) or work areas are observed and evaluated. Observations are generally neutral in evaluation and analysis (e.g., ‘good communication’, ‘proper PPE’, ‘good housekeeping’). Some discussion or feedback between manager and worker is apparent, but does not document or specify the reinforcement of expectations, behavior-based coaching/correction, or was not specific to work practice and/or performance.
- 1 Point** Observation involved little or no actual work (e.g., housekeeping in an empty lab). Documentation only provided a description of the task or work area observed. No documented interactions, communications, or feedback between manager and worker. No evaluation, analysis, or recommendation.

The thresholds for observation quality are set as follows:

- **Green** = >2.25
- **Yellow** = 1.5 – 2.25
- **Red** = <1.5
- **Acceptable performance** = not to drop below a value of 2 for two consecutive months.

## Observation Reviews

Reviews of the management observations includes identifying facility and process barriers impacting research, safety concerns, corrective actions, and areas for improvement. Barriers, concerns, and issues will be entered into LabWay for tracking and trending.



## Results, Analysis, Actions

### Participation

NS&T Management participation in performing observations remained satisfactory despite a downward trend. Directors and upper management continued to complete their quarterly observations for the quarter (Figure 1). Managers and supervisors completing their observations decreased from last quarter and were in the 'yellow' for each month. The threshold for acceptable performance was not negatively exceeded (i.e., not to drop below 75% for two consecutive months) and no immediate action or intervention is necessary. However, the downward trend will be monitored and reminders will be communicated.

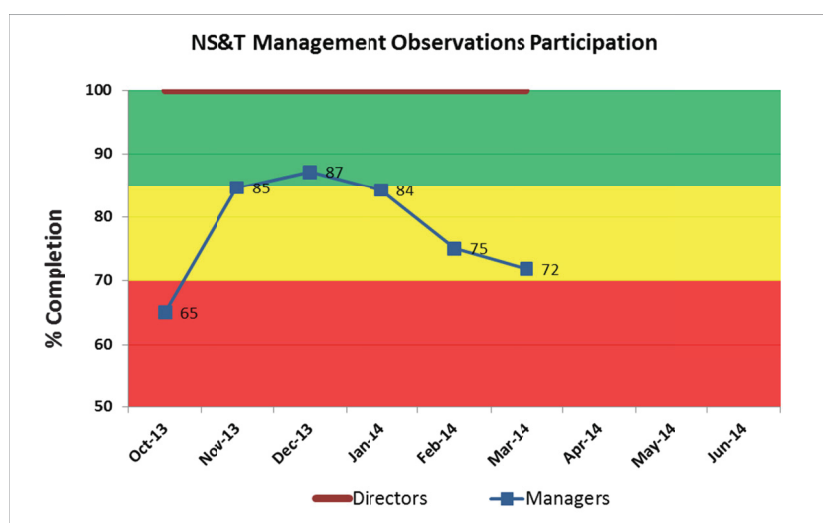


FIGURE 1. Management participation.

### Observation Quality

The quality of observations continued to fluctuate in the 'yellow' and dropped below a score of '2' in February (Figure 2). There was an increase in the frequency of 1-point observations compared to last quarter. However, the threshold for acceptable performance was not negatively exceeded (i.e., not to drop below a value of 2 for two consecutive months) and no action or intervention is necessary.

Observations scored as 1-point lacked or did not sufficiently document the interactions or conversations between managers and workers and often provided only a basic description of what was observed. Observations graded 2-3 documented the interactions and conversation and in some cases documented improvement opportunities and/or

managers actively engaging with workers, facilitating barrier removal, promoting strategies to improve communications.

NS&T management initiated corrective actions by outlining their expectations, and the criteria used to evaluate the observations, during the NS&T Laboratory Operations Forum in February. To further improve quality, the NS&T Performance Assurance analyst needs to initiate feedback to managers and supervisors to communicate results, performance expectations, and strategies for improving the planning, execution, and documentation of observations. NS&T will continue to collaborate with Lab Performance and the Contractor Assurance System as further direction and guidance is provided.

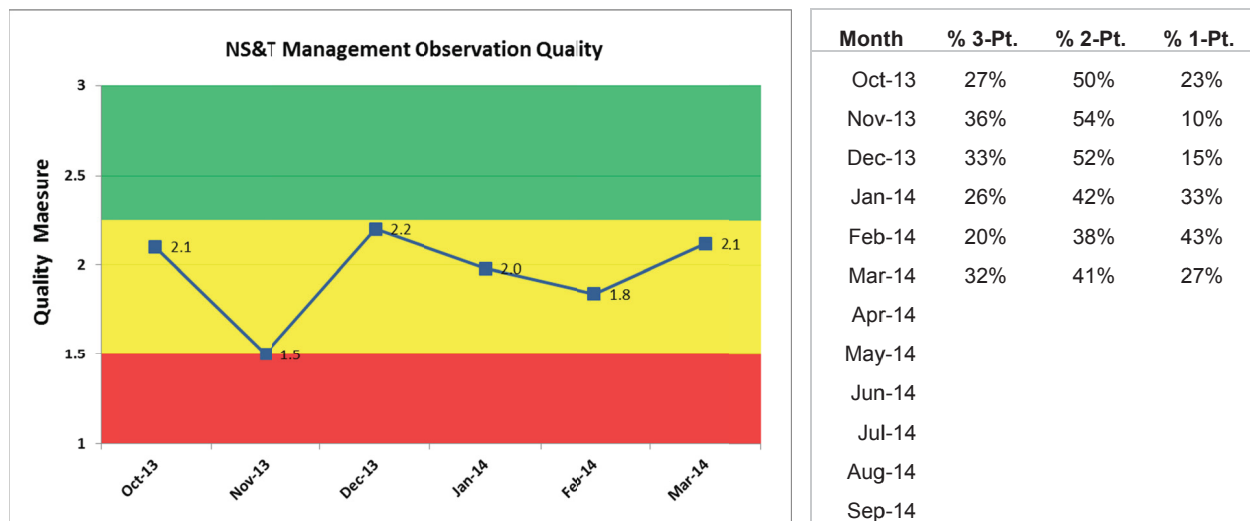


FIGURE 2. Management Observation Quality Index.

## Observation Review

Results this quarter were similar with last quarter's; 114 observations performed, 85% identified as 'meeting expectations', and 15% identified as 'shows room for improvement'. Observation focus areas were broadly distributed and included defining and planning work scope, hazard identification, work execution, communications, and general housekeeping.

There were a few observations that noted that researches were having difficulties understanding and implementing the numerous processes and requirements. This issue is expected to be addressed by the revision of LWP-10700, "Nuclear Materials Experiments Life-Cycle Process," which includes a comprehensive system engineering evaluation of the experiments life-cycle process (planning, and executing the irradiation

and post-irradiation examination). Other observations, actions, and improvement opportunities included the following:

- **Facility/Equipment**
  - Equipment required for connecting to inert gas and sufficient water pressure for cooling our furnace not available at HTTL/REL
  - MFC HFEF Met Box rabbit system in need of repair
  - HFEF & FCF: ETV was found to be in poor shape, needs repairs to the hydraulically operated wheels
  - Electrical cord identified for repair
  - Hot plate on/off light not working; taken out of service and other hot-plates evaluated.
- **Requirements, Procedures, Documents**
  - Some researchers indicated that work and operational requirements may not be sufficiently documented, can change frequently, and are sometimes inconsistent.
  - Procedures were identified for revision.
  - Need clarifications for storage of quality level storage requirements for three cargo containers located west of TTAF (entered into LabWay).
- **Training**
  - Concern regarding the long-term availability and skill mix needed for containment box and metallography box work
  - Concern that resource limitations at MFC prohibit reasonable preparation for some skill sets (such as MRG) when attrition (i.e., retirement) is imminent
- **Housekeeping** - Minor housekeeping issues associated with trash removal, equipment storage, bench-top clutter, glovebox cleanliness.
- **Work Practices**
  - Instructed technicians to incorporate hazard identification and mitigation into the pre-job briefings (in addition to task sequence) prior to the next evolution of work activity

No significant safety issues or NS&T-wide trends were identified. NS&T Performance Assurance analysts will review observation content and work with managers to facilitate entries into LabWay as appropriate