



## Waste Treatment Plant Project

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# **Safety Culture Sustainment Best Practices Workshop**

## ***Grass Roots Safety Culture – Monitoring at the Working Level***

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Bechtel National, Inc.



# Waste Treatment Plant (WTP) Project

- Designing, constructing and commissioning the world's largest radioactive waste treatment plant
- Able to process and stabilize 56 million gallons of radioactive and chemical waste currently stored at the Hanford Site
- 2700+ employees, professionals, craft, and subcontractors
- Multiple locations locally and across the country



Hanford Site, Richland, WA



## Cultivate a Learning Organization!

Nuclear Safety and Quality Culture Focus Area:

### Employee Engagement

- Engage employees through meaningful interactions in the attributes of a culture that values safety and quality
- Reframe successful work practices employees bring from non-nuclear construction projects
- Link key practices and processes to nuclear safety and quality
- Attack complacency by investing in programs that reinforce trust, anchor desired behaviors, and enable forthright conversations
- Monitor employee engagement at the working level so that everyone knows their work, however incidental to the mission, is to be done with safety and quality as the overriding values

**Take advantage of our cultural strengths!**

## Cultivate a Learning Organization!

Nuclear Safety and Quality Culture Focus Area:

### Employee Engagement



## People Based Quality

- Through PBQ, grow our environment of Employee Engagement at the Project's working level.
- Using Quality Absolutes, monitor our employee's understanding and application of quality as a value in our culture to strengthen our safety culture.

## Make Quality Personal!

## Why Implement a PBQ Program?

Developing a culture that **Delivers Quality Results** is imperative to our safety culture and our continued success. The most significant impact we can make on achieving *Right The First Time Quality* is through engagement at the working level and ensuring everyone is prepared and understands each task.

### The WTP PBQ program:

- Encourages group participation and sharing lessons learned and best practices
- Enhances employee ownership for delivering quality
- Facilitates best approach to work execution
- Reduces occurrence of at-risk behaviors
- Pulses the organization's nuclear safety and quality culture

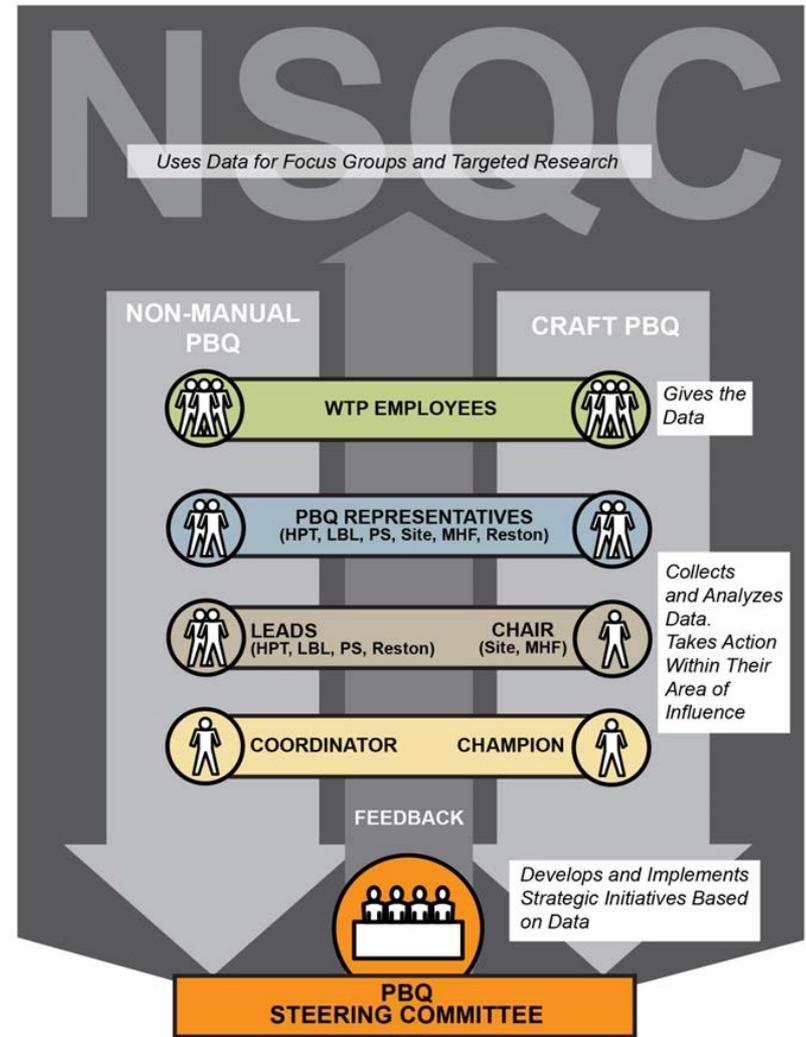


**Engage the Workforce!**

## People Based Quality – How Does it Work?

- Grass roots, employee driven and modeled after People Based Safety
- Rotational representatives of 1 per 20 employees in non-manual areas; craft participate for a specific time period
- Workshop to develop interview and coaching skills, along with an increased understanding of HPI
- Monitors quality culture using peer-to-peer interactions and providing immediate feedback
- Uses conversations about quality to reinforce a commitment to quality excellence and foster learning

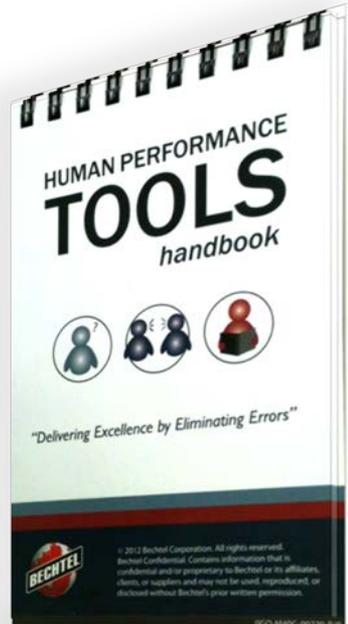
**Link Safety Culture and Quality!**



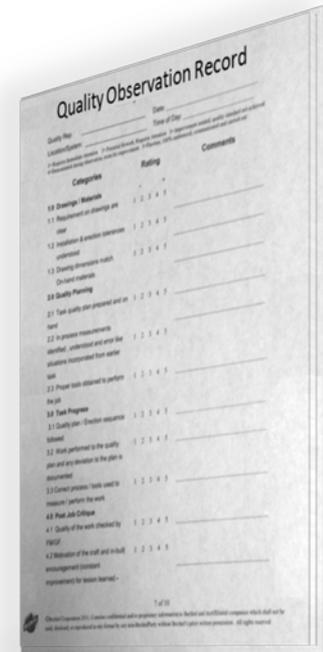
## Key PBQ Components Drive Our Quality Culture



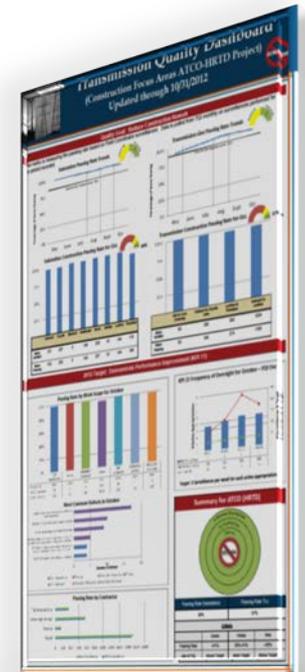
**Direction**



**Competency**



**Opportunity**

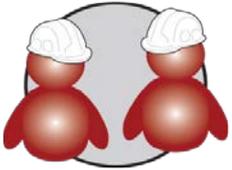


**Motivation**

## PBQ Quality Absolutes Focus Our Quality Culture



**Procedures.** Follow procedures.



**Task Briefs.** Conduct pre and post task briefs.



**Hold Points.** Adhere to hold points.



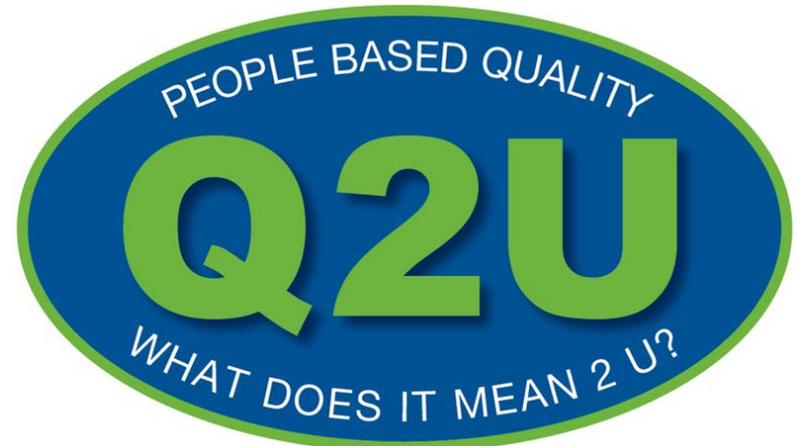
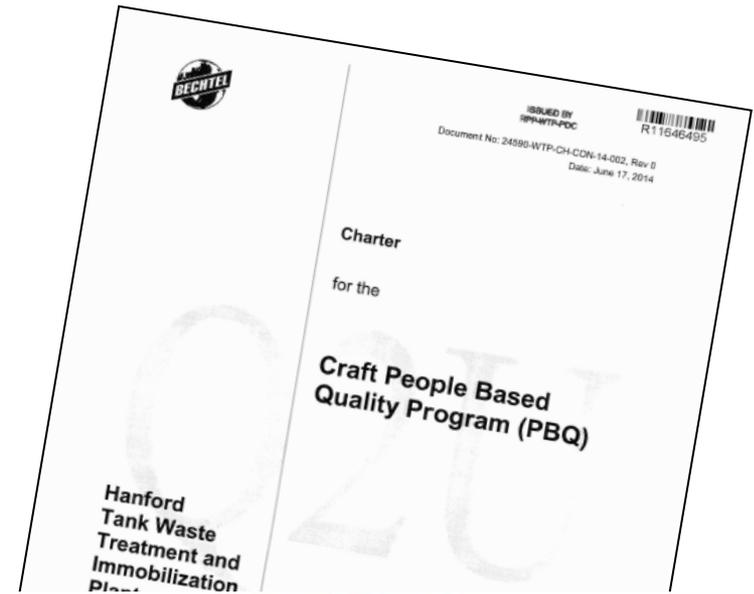
**Signature.** Own your signature and apply it when you have fulfilled your responsibility.



**Stop When Unsure.** Exhibit a questioning attitude.

## Example: Craft People Based Quality Charter

- **Mission:** “...to empower each employee to embrace Quality as a Core Value, and to foster a culture which promotes the open discussion and resolution of quality issues...”
- **Vision:** “...to promote and establish a World Class quality culture that results in a high level of safe operability within the WTP complex...”
- **Purpose:** “...to emphasize quality as a core value, reduce rework, and identify areas of opportunity...”



**Bridge Safety and Quality as  
Common Strengths in our Culture!**



# Example: "Q2U" and Quality Submission Cards

**WTP Q2U CARD** Q2U-000122

*THIS CARD MAY BE SUBMITTED ANONYMOUSLY. WE APPRECIATE ALL THE INFORMATION YOU CAN PROVIDE.*

NAME: <i>Jeffrey Robbins</i>	DATE: <i>1-29-14</i>	BEST WAY TO REACH YOU: <small>(RADIO, PHONE, EMAIL)</small> <i>PBQ Team</i>
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LAB  LAW  BOF  HLW  PTF  MHF  OTHER \_\_\_\_\_  
(Specify Elevation & Room)

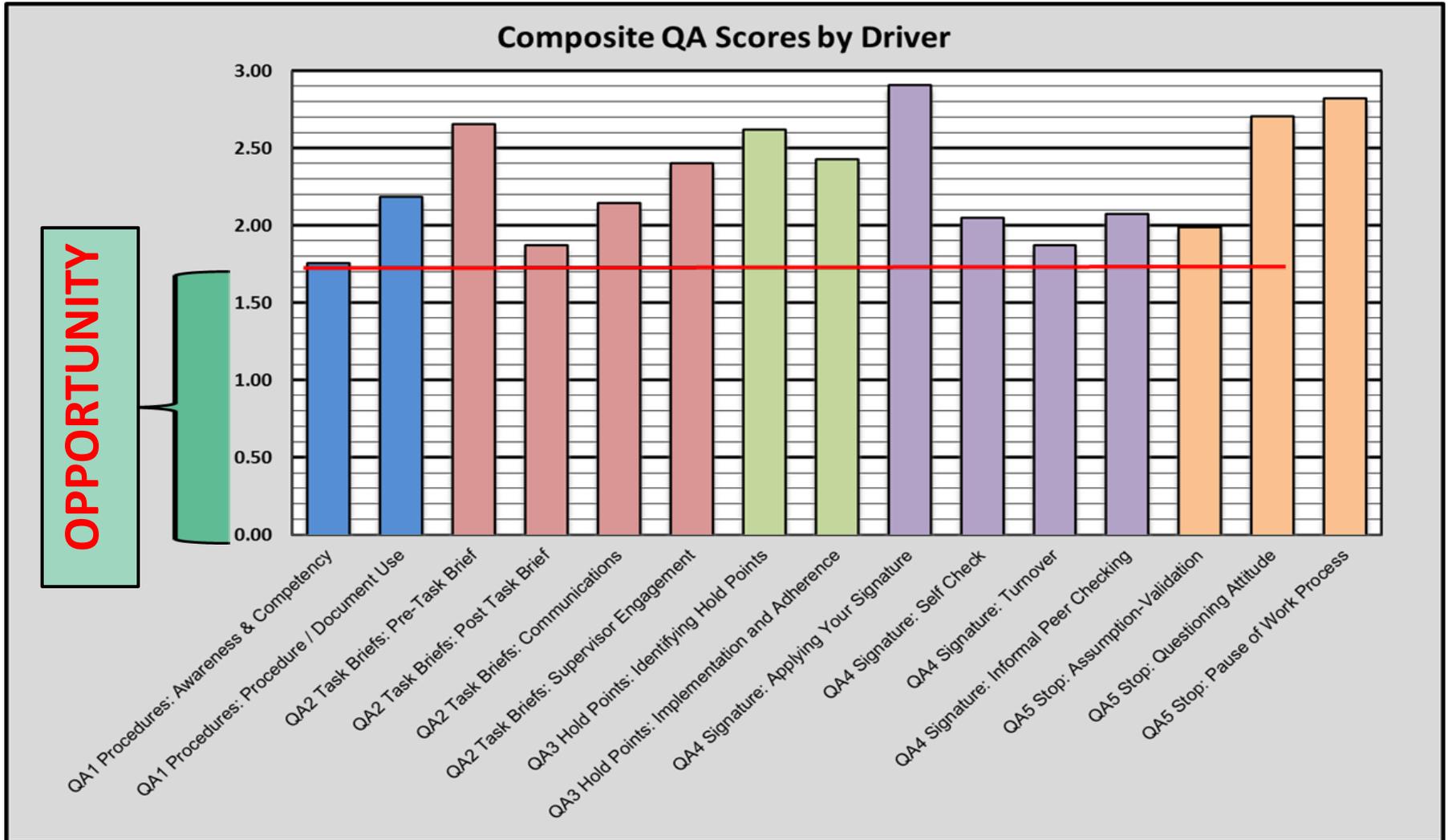
**Please Identify your CONCERN, RECOMMENDATION OR QUESTION HERE IN DETAIL:**

**Provide the Workforce with Multiple Opportunities to Participate in Strengthening the Safety and Quality Culture!**

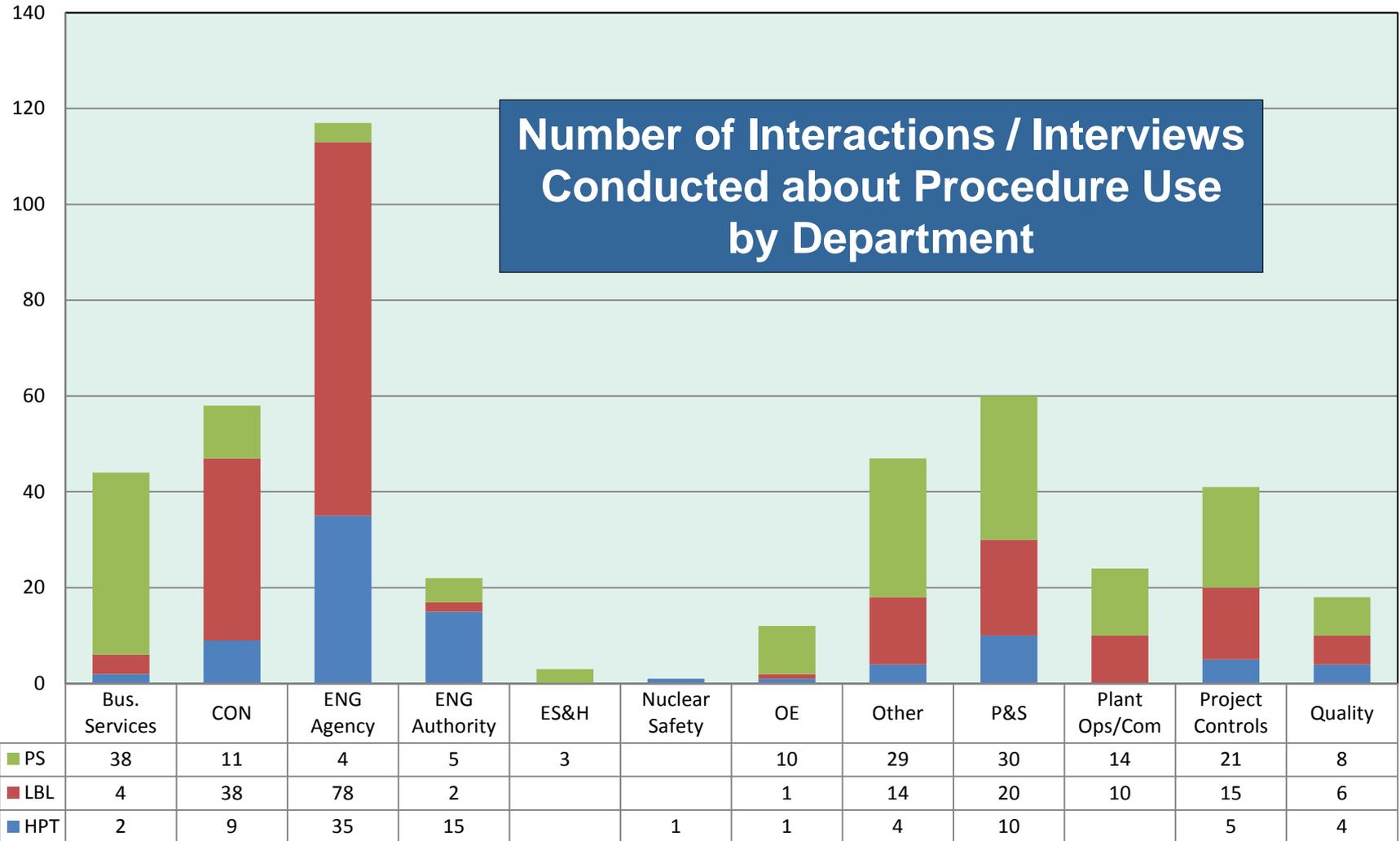
*This question is regarding the drain piping from some FCU's... Certain... into a d... "what ab... grade req... O.K. to p... should have a check... at the bottom of vertical columns. Examples NLD-ZU 01682005, NLD-ZU 01643002, RLD-ZR 0395003, RLD-ZR 00001001*

REFERENCE DOCUMENTS: <i>Please indicate documents that relate to the concern.</i> _____ _____ _____	<b>ACTION:</b> Have you raised this issue before? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Do you want to be involved in the solution? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO How can you be reached? <b>NOTE: Results of your concern will be posted <u>without</u> your name</b>
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# PBQ Craft Interactions – Opportunities



## PBQ Non-Manual Interactions – Opportunities





## Integrating PBQ Results with Safety Culture Assessment and Monitoring

- NSQC program collaborates with both craft and non-manual PBQ teams looking for continuous improvement opportunities.
- Metrics are reviewed in aggregate with other safety culture metrics, such as corrective action management, employee concerns, labor relations, differing professional opinion, leadership actions.
- Cumulative data are provided to the NSQC Monitoring Panel and the PBQ Steering Committee to review and determine next steps.
- NSQC program initiates additional actions as needed to gather data or analyses, such as focus groups, interviews, assessments, surveys, pulse polls, to ensure that potential problems are understood and actions are implemented appropriately.

**Integrate Diverse and Multiple Monitoring Approaches to Assess and Measure the Safety Culture for a Top Down and the Bottom Up View!**

## What are We Learning?

- PBQ interactions and conversations about quality are moving safety culture messages from the walls into the workplace; and making a difference in employee's questioning attitude and supervisor's engagement.
- PBQ shows that employees are improving their safety and quality culture.

**Leadership attention and endorsement of PBQ keeps employees engaged in improving quality; and there is more to do.**

