U.S.NRC
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Protecting People and the Environment

SAFETY CULTURE TRAIT TALK

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Trait Talk *was developed to provide you with a better understanding of the nine safety culture traits found in the U.S. Nuclear Regulatory Commission's (NRC) Safety Culture Policy Statement (SCPS) and how they apply to you—whether you are an NRC licensee, a vendor or contractor employee, an organization interested in the safe and secure use of nuclear materials, or others involved in nuclear safety regulation.* *Please see page 4 of Safety Culture Trait Talk for more information on the SCPS.*

Experience has shown that certain personal and organizational traits are present in a positive safety culture. A trait, in this case, is a pattern of thinking, feeling, and behaving that emphasizes safety, particularly in goal conflict situations, for example, in situations where production, schedule, or just the cost of effort may conflict with doing the job safely. The NRC identified nine traits of a positive safety culture in the SCPS, although the agency recognizes that additional traits may also be important. In addition, please note that the traits were not developed to be used for inspection purposes.

Each Trait Talk includes a fictional scenario based on a different licensee or community. The scenario used in this Trait Talk is based on the vendor community.

As you read through Trait Talk, consider the following questions:

1. *How does this trait apply to my organization?*
2. *Are there other attributes and examples that better fit my organization?*
3. *What impact does this trait have on the safety culture in my organization?*
4. *How does this increase my understanding of the safety culture in my organization?*
5. *How could I improve the performance of this trait in my organization?*

Personal Accountability

One of the traits of a positive safety culture as described in the U.S. Nuclear Regulatory Commission's Safety Culture Policy Statement.

What Is The Definition Of Personal Accountability?

The NRC's SCPS defines Personal Accountability as all individuals take personal responsibility for safety.

Why Is This Trait Important?

Personal accountability reflects the belief that leaders and employees are responsible and have ownership for their performance and the roles they play in nuclear safety. Personal accountability is not finger pointing, blame, or punishment.

In organizations with positive safety cultures, individuals have a strong sense of accountability for the safe operation of the facility, their own safety, and for the safety of their coworkers and the public. Leaders can develop personal accountability within their organization by empowering employees. They must give employees the skills and training needed to communicate, explain, and do their jobs well. They must set performance objectives with specific behaviors and outcomes and evaluate performance and give timely feedback.

Furthermore, leaders should encourage accountability through rewards rather than discourage through punishment. When leaders model, acknowledge, and reward positive accountability behaviors, employees are more likely to be motivated to invest in safe operations personally.

Everyone must take personal ownership for his or her actions and decisions for accountability to become a fundamental part of an organization's safety culture. Reinforcement can come from supervisors and managers, but also from coworkers, the public, and an individual's own personal values and standards. Accountability can motivate mindfulness, attention to detail, and self-assessment, and can result in fewer accidents and incidents.

An ongoing challenge in fostering personal accountability is to identify who is responsible for the factors that affect safety within an organization and how to make appropriate accountability assignments. For example, responsibility can be assigned to ensure that training is completed, procedures are updated, and decisions are made. Accountability systems in an organization involve identifying who is held accountable for which actions and by whom. Alignment in these accountability systems within an organization can create effective communications, teamwork, strong safety performance, and motivated employees and can lead to a positive safety culture.

WHAT DOES THIS TRAIT LOOK LIKE?

Standards: Individuals understand the importance of adherence to nuclear standards. All levels of the organization exercise accountability for shortfalls in meeting standards.

Individuals encourage each other to adhere to high standards. They demonstrate a proper focus on nuclear safety and reinforce this focus through peer coaching and discussions. Individuals hold themselves personally accountable for modeling nuclear safety behaviors and individuals across the organization apply nuclear safety standards consistently. Individuals actively solicit and are open to feedback and they help supplemental personnel understand and practice expected behaviors and actions.

Job Ownership: Individuals understand and demonstrate personal responsibility for the behaviors and work practices that support nuclear safety.

Individuals understand their personal responsibility to foster a professional environment, encourage teamwork, and identify challenges to nuclear safety. They understand their personal responsibility to raise nuclear safety issues, including those identified by others. Individuals take ownership for the preparation and execution of assigned work activities. They actively participate in pre-job briefings, understanding their responsibility to raise nuclear safety concerns before work begins. Individuals ensure that they are trained and qualified to perform assigned work and understand the objective of the work activity, their role in the activity, and their personal responsibility for safely accomplishing the overall objective.

Teamwork: Individuals and work groups communicate and coordinate their activities within and across organizational boundaries to ensure nuclear safety is maintained.

Individuals demonstrate a strong sense of collaboration and cooperation in connection with projects and operational activities. They work as a team to provide peer-checks, verify certifications and training, ensure detailed safety practices, actively peer coach new personnel, and share tools and publications. Individuals strive to meet commitments.

Conflict Resolution: Fair and objective methods are used to resolve conflicts.

The organization implements processes to ensure fair and objective resolution of conflicts and differing views. Leaders ensure conflicts are resolved in a balanced, equitable, and consistent manner, even when outside of defined processes. Individuals have confidence that conflicts will be resolved respectfully and professionally.

WHAT IS A SCENARIO IN WHICH THIS TRAIT COULD PLAY A ROLE?

A welder at a vendor facility inadvertently dropped a spool of weld wire into a puddle while carrying it to the controlled storage area at the end of his shift. When weld wire is exposed to water, the flux inside absorbs moisture. Once the welding wire is wetted or absorbs an excessive amount of moisture, no process can "dry out" the welding wire. Dropping a spool of weld wire in a puddle would make it unacceptable for use in welding safety-related components. Wetted weld wire can potentially result in welding defects such as porosity. Wetted weld wire also can contribute to hydrogen cracking, which might not be detected unless the inspection of the welds is conducted at least 48 hours after the weld is completed.

However, the quality inspector responsible for checking in the wire believed that the spool would dry out, and attached a handwritten note "DO NOT USE SPOOL" to prevent issuance while it was still wet. The quality inspector accepting the wetted wire did not enter the issue into either the nonconformance or corrective action programs, as required. Within a few days, the wire developed spots of surface rust. Numerous quality inspectors, including the lead inspector, who had access to the controlled storage area and responsibility to issue and receive the wire on a daily basis, observed the spool of wire with the handwritten note. Many knew that it had been wetted or that it had visible rust spots. No personnel took the appropriate action to write a nonconformance or corrective action report. Because the issue was not documented in the corrective action system, the spool was not segregated from the spools ready for issue, the cause of the rust had not been determined, and an investigation had not been performed to determine whether any nonconforming wire had actually been used in a safety-related welding application.

The vendor did not document or investigate the issue until a U.S. Nuclear Regulatory Commission inspector discovered the spool of weld wire during a walkdown. The wire was intended for use on nuclear safety-related welds for modular subassemblies for a domestic plant. Ultimately, the vendor determined that the spool of wire had not been used for production work after it was wetted, even though it was on the shelf and could have potentially been used. This incident may have been prevented if the vendor personnel had exhibited personal accountability for their behaviors and work practices.

Thinking about the scenario discussed above, consider the following questions:

1. How does this scenario apply to the safety culture trait Personal Accountability?
2. What kinds of communications would have reinforced safety as the overriding priority?
3. How could this situation have been handled differently, and what might have been the outcome?

WHO CAN I CONTACT WITH A QUESTION OR SUGGESTION?

The NRC looks forward to continuing to provide you with information about the traits of a positive safety culture. If you have a question or would like to make a suggestion, please contact the U.S. Nuclear Regulatory Commission, Office of Enforcement, Safety Culture Team, at external_safety_culture.resource@nrc.gov.

Sources of Information:

1 "Why is this trait important?" was derived, in part, from a literature review (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13023A054) prepared by Pacific Northwest National Laboratories for the NRC Office of Nuclear Regulatory Research.

2 "What does this trait look like?" was derived from the Safety Culture Common Language effort (ADAMS Accession No. ML13031A343), under the direction of the Office of Nuclear Reactor Regulation. Panelists from the NRC, nuclear power industry, and the public created attributes of a positive nuclear safety culture, and examples of each attribute that a nuclear power organization should demonstrate in maintaining a positive safety culture. Although these attributes and examples were created specifically for the reactor community, they may also be applicable to various other communities and organizations. For purposes of Trait Talk, the examples were partially rewritten to increase applicability to nuclear as well as non nuclear communities.

3 "What is a scenario in which this trait played a role?" was developed specifically for Safety Culture Trait Talk for educational purposes only. The scenario is fictional and any resemblance to actual events, people, or organizations is purely coincidental.

WHAT IS THE NRC'S SAFETY CULTURE POLICY STATEMENT?

There are many definitions of safety culture. Most of these definitions focus on the idea that in a positive safety culture individuals and organizations emphasize safety over competing goals, such as production or costs, ensuring a safety-first focus. The NRC's SCPS defines nuclear safety culture as ***the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.*** Experience has shown that certain personal and organizational traits are present in a positive safety culture. The following traits were included in the NRC's SCPS, although additional traits may also be important in a positive safety culture:

Leadership Safety Values and Actions	Problem Identification and Resolution	Personal Accountability
Leaders demonstrate a commitment to safety in their decisions and behaviors.	*Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.*	*All individuals take personal responsibility for safety.*
Work Processes	**Continuous Learning**	**Environment for Raising Concerns**
The process of planning and controlling work activities is implemented so that safety is maintained.	*Opportunities to learn about ways to ensure safety are sought out and implemented.*	*A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment or discrimination.*
Effective Safety Communications	**Respectful Work Environment**	**Questioning Attitude**
Communications maintain a focus on safety.	*Trust and respect permeate the organization.*	*Individuals avoid complacency and continually challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.*

The NRC's SCPS provides the NRC's expectation that individuals and organizations performing regulated activities establish and maintain a positive safety culture commensurate with the safety and security significance of their activities and the nature and complexity of their organizations and functions. Because safety and security are the primary pillars of the NRC's regulatory mission, consideration of both safety and security issues, commensurate with their significance, is an underlying principle of the SCPS.

The NRC's SCPS applies to all licensees, certificate holders, permit holders, authorization holders, holders of quality assurance program approvals, vendors and suppliers of safety-related components, and applicants for a license, certificate permit, authorization, or quality assurance program approval subject to NRC authority. In addition, the Commission encourages the Agreement States (States that assume regulatory authority over their own use of certain nuclear materials), their licensees, and other organizations interested in nuclear safety to support the development and maintenance of a positive safety culture within their regulated communities. The SCPS is not a regulation; therefore, it is the organization's responsibility, as part of its safety culture program, to consider how to apply the SCPS to its regulated activities.

The NRC's SCPS, which includes the definition of nuclear safety culture and the nine traits of a positive safety culture, can be found on the NRC's Safety Culture Web site. The Web site includes additional safety culture information, as well as the NRC safety culture case studies, which describe how the presence or absence of safety culture traits affects the outcome of the events.