

POLICY ISSUE NOTATION VOTE

July 1, 2004

SECY-04-0111

FOR: The Commissioners

FROM: Luis A. Reyes
Executive Director for Operations

SUBJECT: RECOMMENDED STAFF ACTIONS REGARDING AGENCY
GUIDANCE IN THE AREAS OF SAFETY CONSCIOUS WORK
ENVIRONMENT AND SAFETY CULTURE

PURPOSE:

To advise the Commission of the status of the staff's effort to develop a guidance document to encourage a Safety Conscious Work Environment (SCWE) and monitor efforts by foreign regulators to measure and regulate Safety Culture, and to seek Commission direction, prior to consideration of budgeting resources, with regard to the development of possible options for enhancing oversight of SCWE and Safety Culture.

SUMMARY:

In its March 26, 2003, Staff Requirements Memorandum (SRM), the Commission directed the staff to take certain actions in the areas of SCWE and Safety Culture. In response to the Commission's direction related to SCWE guidance, the staff has consulted with internal and external stakeholders and drafted the attached industry guidance on establishing and maintaining a SCWE. Likewise, in response to the Commission's direction related to Safety Culture, the staff continues to monitor developments abroad within the international

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communities to regulate Safety Culture and develop objective Safety Culture performance indicators. The staff will keep the Commission informed of these efforts through trip reports and other means as developments dictate.

Additionally, in response to lessons learned from the reactor vessel head degradation event at Davis-Besse, the staff discusses below options to develop additional SCWE and Safety Culture assessment tools for the industry and NRC inspectors.

BACKGROUND:

The Agency's expectations with regard to licensee's establishing and maintaining a SCWE are outlined in a May 14, 1996, policy statement entitled, "Freedom of Employees in the Nuclear Industry to Raise Safety Concerns Without Fear of Retaliation." A SCWE is defined by the NRC as an environment in which, "employees feel free to raise safety concerns, both to their management and to the NRC, without fear of retaliation." The NRC recognizes, however, that, aside from fearing retaliation, other matters can affect an employee's willingness to identify safety concerns, such as the effectiveness of the licensee's processes for resolving concerns, and senior management's ability to detect and prevent retaliatory actions. The NRC policy statement, therefore, addresses these attributes of a SCWE, as well.

Regarding Safety Culture, there has been some confusion historically. Many use the terms "SCWE" and "Safety Culture" interchangeably. They are, in fact, two distinct, but related concepts. The Agency's expectations with regard to licensee's establishing and maintaining a strong Safety Culture are provided in a January 24, 1989, policy statement entitled, "Policy Statement on the Conduct of Nuclear Power Operations." Safety Culture in this document refers to, "the necessary full attention to safety matters," and, "the personal dedication and accountability of all individuals engaged in any activity which has a bearing on the safety of nuclear power plants." A strong Safety Culture is also often described as having a "safety-first focus." Attributes include concepts such as safety-over-production, procedural adherence, and conservative decision-making. The willingness of employees to identify safety concerns, i.e., SCWE, is also an attribute of Safety Culture. The guidance provided by both of these Commission policies is very broad.

On March 26, 2003, the Commission issued an SRM for SECY-02-0166, approving the recommendations of the Discrimination Task Group, as revised by the Senior Management Review Team. Although the Commission did not approve rulemaking with regard to SCWE as recommended in the SECY, the Commission directed the staff to develop further guidance, in consultation with stakeholders, that would identify "best practices" to encourage a SCWE. The Commission indicated that the proposed guidance should emphasize training of management as to its obligation under the employee protection regulations and should provide information as to the recommended content of the training in this important area. Within this SRM, the Commission also provided direction in the broader area of Safety Culture. Specifically, the Commission stated that, "[i]n light of efforts by foreign regulators to measure and regulate safety culture, the staff should monitor developments abroad so as to ensure that the Commission remains informed about these efforts and their effectiveness. In particular, because subjectivity is a principal objection to the direct regulation of safety culture, the staff should also monitor efforts to develop objective measures that serve as indicators of possible problems with safety culture."

Finally, a weak Safety Culture was identified as a root cause of the reactor vessel head degradation at the Davis-Besse nuclear power plant. The NRC's Davis-Besse Lessons Learned Task Force report recommended that the staff review NRC inspections and plant assessment processes to determine whether sufficient processes are in place to identify and appropriately disposition the types of problems experienced at Davis-Besse. The report also recommended more structured and focused inspections to assess a licensee's SCWE.

Both in response to the Commission's direction and lessons learned from the reactor vessel head degradation event at Davis-Besse, the staff discusses below actions taken and recommended in the areas of SCWE and Safety Culture.

DISCUSSION:

Industry Guidance re: Safety Conscious Work Environment

In response to the Commission's March 26, 2003 SRM, the staff formed a working group that developed an outline of a SCWE guidance document regarding "best practices" to encourage a SCWE. The outline was based on the content of the 1996 Policy Statement and the experience and knowledge of the working group's members. The outline was published both on the NRC's public web site and in the Federal Register for comment and was used to facilitate discussion during a February 19, 2004, public meeting with various stakeholders. Although most stakeholders, including representatives from both the industry and whistleblower advocates, were in general agreement concerning the content of the outline, some improvements were suggested and many have been incorporated into the attached draft document. The most significant comment, however, addressed whether the Agency should be producing such a document at all. Industry representatives commented that the industry, rather than the NRC, should develop the guidance. The following specific comments related to this topic were received:

- The May 1996 Policy Statement clearly set the NRC staff's expectations for development of a SCWE and placed responsibility for establishing and maintaining a SCWE on the licensees. Therefore, it is not appropriate for the NRC staff to assume responsibility for development of a "best practices" document in the area of SCWE.
- Some "best practices" in the NRC's document may be impractical or inappropriate for some organizations covered by the 1996 policy.
- "Best practices" are not enforceable nor useful for NRC inspectors.
- The industry has developed and is using guidance from Nuclear Energy Institute (NEI) 97-05¹; therefore, additional guidance from the NRC is not necessary.
- Any guidance developed by the NRC would be defacto regulatory requirements in this area.

¹NEI 97-05, "Nuclear Power Plant Personnel-Employee Concerns Program-Process Tools In A Safety Conscious Work Environment," Rev. 1, January 2002.

In addition, during the February 2004 meeting and in the public comments that followed, the industry requested that, should the NRC proceed in developing such guidance, it provide another opportunity for supplemental comments prior to final issuance of the document.

The staff has reviewed the above general comments which suggested that the industry, rather than the NRC staff, be responsible for developing guidance related to “best practices” for establishing and maintaining a SCWE. Regarding the comment that the 1996 Policy Statement clearly set the NRC’s expectations for development of a SCWE and placed responsibility for establishing and maintaining a SCWE on the licensees, the staff notes that, in response to the findings of the Discrimination Task Force, the Commission more recently (March 26, 2003) issued a staff requirements memorandum that specifically requested that the staff develop more guidance regarding “best practices” to encourage a SCWE. The staff agrees with the comment that some practices in the proposed document may not be appropriate for every NRC licensee or contractor, and has clarified this point in the attached document’s title and content. Nonetheless, the staff continues to believe that the guidance can be helpful to licensees and their contractors developing or trying to enhance a SCWE. Regarding the comment that “best practices” are not enforceable, the NRC staff plans to issue the attached guidance in the form of a Regulatory Issue Summary (RIS), which does not create a regulatory requirement but is an established method of providing guidance to the industry. Regarding the comment that additional guidance beyond NEI 97-05 is not necessary, the staff has reviewed NEI 97-05, Revision 1 and a draft of Revision 2, and concurs that both revisions contain elements that are important to establishing and maintaining a SCWE. However, the staff noted the following important distinctions in comparing the NEI document to the proposed NRC guidance on establishing and maintaining a SCWE:

- NEI 97-05 provides tools for use in the establishment of an Employee Concerns Program (ECP), an alternative process for reporting safety concerns, and resolving those concerns brought to its attention. As such, the emphasis in the NEI document is on the effectiveness of the ECP Program. While the NEI document includes information on some of the same topics as the NRC’s guidance document on SCWE, the NRC’s document more broadly addresses the issue of SCWE as it applies to all problem identification and resolution processes. For example, while both documents discuss the need for accessibility to problem identification and resolution processes, the NEI document emphasizes accessibility of the ECP Program, while the NRC document emphasizes accessibility of all site-wide problem identification and resolution processes.
- The NRC guidance document contains more detail than the NEI document on several practices which may affect a SCWE, including how to conduct exit interviews with individuals who raise concerns, management behaviors which contribute to a SCWE, feedback to individuals who raise safety concerns, techniques for conducting surveys, and oversight of contractor activities which may impact the SCWE at licensed facilities.
- The NRC guidance document provides more detail than the NEI document on the content of SCWE training. The Commission specifically directed in the March 26, 2003, SRM that the proposed guidance emphasize training of management as to its obligations under the employee protection regulations and provide information as to the recommended content of the training.
- The NRC guidance document includes information on several important and complex issues that may affect the SCWE which are not included in the NEI document. These

issues include: the effect of incentive programs on the SCWE, 360 degree appraisal programs, and balancing personal accountability with maintaining a SCWE.

- NEI 97-05 does not provide guidance with respect to processes to help detect and prevent discrimination, or mitigate perceptions of discrimination. Such processes have been valuable both in preventing discriminatory acts and providing continuous training to licensee management when used at licensed facilities, such as the Millstone and Davis-Besse nuclear power plants.

Option 1A - Continue to engage stakeholders by noticing the attached draft document in the Federal Register for a brief comment period. The outline previously noticed in the Federal Register and commented on by various stakeholders was fairly detailed and comments received indicated that most were in general agreement concerning the content of the document. Nonetheless, this option allows for public comment on the complete document, is responsive to industry's request for further comment, and reflects the staff's expectations to provide for further comment as indicated during the February 2004 public meeting.

Option 1B - Issue the attached document as a RIS without further public comment. This option reflects the fact that most stakeholders that provided comments on the detailed outline of the document published earlier this year were in general agreement with its contents. Published as a RIS, it does not impose regulatory requirements, but merely provides guidance for use by licensees hoping to improve their SCWE. The RIS process can take anywhere from one to four months, however, this option is expected to be the most timely. It is not, however, responsive to the industry's request for further involvement and is contrary to the staff's stated expectations during the February 2004 public meeting.

Option 1C - Notice in the Federal Register the NRC's decision not to pursue further development of such guidance. This option is response to the above industry comments. However, as detailed above, the NRC staff does not believe the existing industry guidance is comprehensive enough to provide sufficient direction in this important area.

Industry Guidance re: Safety Culture:

The Commission stated in its 1989 Policy Statement that it was issued to, "foster the development and maintenance of a safety culture at every facility licensed by the NRC." It notes that, "management has the duty and obligation to foster the development of a 'safety culture' at each facility and to provide a professional working environment, in the control room and throughout the facility, that assures safe operations. Management must provide the leadership that nurtures and perpetuates the safety culture." The proposed options in this area focus on enhancing NRC guidance to encourage and assist the industry in taking the initiative to monitor and maintain a strong Safety Culture.

Option 2A - Revise the 1989 Policy Statement, "Policy Statement on the Conduct of Nuclear Power Operations," to: a) broaden its focus beyond the control room and licensed operators to encompass all areas of plant operations and; b) update the definition and attributes of Safety Culture referenced to improve alignment with current international standards. Option 2A would broaden the scope of the policy statement to increase its applicability to all aspects of plant operations. In addition, the reference to the document International Nuclear Safety Advisory Group (INSAG)-3, Basic Safety Principles for Nuclear Power Plants, would be updated to reflect the current guidance document used internationally. Updating the policy statement would also

provide the Commission the opportunity to clarify its expectations in the area of Safety Culture and to provide guidance and encouragement for the industry to progress in a preferred direction. The disadvantage to implementing this option is that resource expenditures would be required without the practical effect on the industry being determinable, since it would not be a regulatory requirement.

Option 2B - Emphasize the 1989 Policy Statement, "Policy Statement on Conduct of Nuclear Power Operations," by encouraging licensee self-assessment of Safety Culture through the development of a guidance document on Safety Culture similar to that being developed for SCWE. Option 2B would provide the industry with practical methods for implementing the 1989 Policy Statement. Providing explicit and detailed guidance would improve the likelihood of licensees taking the initiative to implement the suggested practices and to do so successfully. The disadvantage to this option is similar to that of the previous option: resources would be required to develop the document, but its actual effects on industry practices would not be known.

Option 2C - Monitor developments by the industry to assess Safety Culture to ensure the Commission remains informed on such efforts, but without providing additional guidance. Under this option the Commission would not be able to fully express its views or make explicit its expectations for the area of Safety Culture. Without such guidance and encouragement from the Commission, industry initiatives and progress may be limited or move in directions that are not in accordance with Commission preference and/or internationally accepted standards.

NRC Inspector Guidance re: SCWE and Safety Culture:

A weak Safety Culture was identified as a root cause of the reactor head degradation at the Davis-Besse nuclear power plant. Because the NRC staff was limited in its ability to find this problem prior to the incident, the staff believes implementation of assessment processes which facilitate identification of negative trends in the area of Safety Culture should be explored. Item 3.3.4(5) of the Davis-Besse Lessons Learned Task Force states that the staff will "review the range of NRC baseline inspections and plant assessment processes, as well as other NRC programs, to determine whether sufficient programs and processes are in place to identify and appropriately disposition the types of problems experienced at DBNPS (Davis-Besse Nuclear Power Station). Additionally, the NRC should provide more structured and focused inspections to assess licensee employee concern programs and safety conscious work environment."

The staff is developing a response to a General Accounting Office (GAO) Report entitled, "Nuclear Regulation - NRC Needs to More Aggressively and Comprehensively Resolve Issues Related to the Davis-Besse Nuclear Power Plant's Shutdown," May 2004. Among the responses the NRC staff is considering is enhancing its oversight of Safety Culture over the next two years by increasing its focus on SCWE inspection and assessment efforts.

Regarding NRC assessment of the broader area of Safety Culture, a subset of underlying elements of Safety Culture, such as identification and resolution of problems, currently is assessed to some extent by elements of the Reactor Oversight Process (ROP). However, there has been no attempt to move beyond the current implementation philosophy with its emphasis on objectivity and predictability by supplementing these elements with the subjective aspects inherent in an assessment of Safety Culture.

Option 3A - Develop an inspection process that would provide instruction on systematically assessing Safety Culture and result in additional agency actions if Safety Culture issues were identified. Develop training for inspectors on this methodology. This option would allow the staff to assess the willingness of the licensee to raise and document safety issues, adhere to written procedures, make conservative decisions, and conduct probing self-assessments. The present inspection program and its associated action matrix would not support this approach, because the ROP is based on assessing performance deficiencies in an objective manner through the significance determination process. Additional agency action under the ROP is driven by the Action Matrix, which integrates inspection findings after their significance is determined. The nature of assessing Safety Culture by direct inspection requires some measure of subjective judgment. Under this option, the staff would develop an inspection process and an assessment tool to drive additional agency action, that would be separate from the existing ROP Action Matrix, and unique to the area of Safety Culture. Presently the goals of the ROP are to be objective, risk-informed, and predictable. The subjective nature of assessing Safety Culture by direct inspection may detract from meeting these goals.

Option 3B - Enhance the ROP treatment of cross-cutting issues to more fully address Safety Culture, and to allow for more agency action as the result of the identification of a cross-cutting issue. Develop training for inspectors on this methodology. Again, this option would allow the staff to assess the willingness of the licensee to raise and document safety issues, adhere to written procedures, make conservative decisions, and conduct probing self-assessments. Presently cross-cutting issues can be identified as the result of inspection findings of sufficient numbers in multiple areas, although the individual findings may be of low safety significance. Agency action in response to cross-cutting issues is presently generally limited to requested oral or written responses from licensees as part of the annual assessment process. Under this option, the staff would develop a Safety Culture cross-cutting issue, and define specific agency actions as a result of the identification of a Safety Culture cross-cutting issue. To support this, the inspection program would need to be modified to allow for observation and documentation of Safety Culture issues. The staff would develop guidance for inspectors to use in making observations, such as a survey tool, and documenting such observations in a format that allows for trending. The documentation of these observations are expected to be a challenge in terms of their risk perspective and use for trending. Negative survey results would be followed up by NRC staff and additional agency actions would be determined by NRC senior management on a case by case basis. This option provides an avenue for the NRC staff to pro-actively assess Safety Culture within a framework which provides for some subjective assessment.

Option 3C - While continuing to monitor efforts by foreign regulators on Safety Culture, pro-actively work with the international communities to develop objective performance indicators of possible problems with the safety cultures of our licensees. This option would help to assure consistency among the international communities and applicability to US facilities.

Option 3D - Engage the industry to develop an industry process to assess the Safety Culture at individual facilities, with NRC oversight of this process. This option would be along the lines of the industry efforts in the training area, where the INPO has set up standards for training, and there is an industry process to periodically assess training at each facility and to react to weak performance in this area. This option would allow the industry the flexibility to determine the most efficient manner to achieve the goal, yet provide the NRC with some oversight capability. The NRC would reserve the option of directly intervening at a facility if circumstances warrant. Under this option, public access to specific plant Safety Culture assessments would be limited,

and therefore public confidence could be negatively impacted. In addition, without direct involvement of the NRC there is a higher probability that the industry's actions in this area may not meet NRC expectations.

Option 3E - Develop criteria for and possible intervention strategies for the NRC to take when downward trends in the area of SCWE and/or Safety Culture already exist and the licensee has failed to take appropriate action. This option is different from all of the other options in that it is re-active rather than pro-active. This would avoid a situation as at Davis-Besse where the licensee identified Safety Culture as a root cause and the NRC had to rely on its expertise and documents from the IAEA to develop an ad hoc inspection protocol.

RECOMMENDATION:

The staff recommends approval of Options 1B and 2B, and authorization to explore the feasibility of Options 3B, 3C, 3D, and 3E.

COORDINATION:

The development of this paper has been coordinated with the Offices of Nuclear Regulatory Research and Nuclear Reactor Regulation. The Office of General Counsel advises that actions to address Safety Culture are limited in the absence of a regulation. Without such regulation, the NRC cannot require licensees to meet an agency standard for Safety Culture; at most, the NRC may suggest that licensees take actions to improve Safety Culture even if serious shortcomings are found through inspection. The development of an NRC standard for Safety Culture which can be assessed and addressed by substantive NRC action would require the development of a Safety Culture regulation. Developing this type of regulation would pose the same difficulties as a regulation on SCWE, which the Commission previously decided not to pursue. Therefore, the adoption of the options discussed earlier, to the extent that they call for more active NRC oversight of Safety Culture, may require reconsideration of the Commission's determination not to initiate rulemaking in this subjective area.

/RA/

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Attachment: Guidance Document, "Establishing and Maintaining
a Safety Conscious Work Environment"



**Establishing & Maintaining
a
Safety Conscious
Work Environment**

BACKGROUND

In July 1993, the Nuclear Regulatory Commission's Executive Director for Operations directed that a team reassess the NRC's program for protecting allegeders against retaliation. The team evaluated the process that was in place in 1993 and sought comments from other NRC offices, other Federal agencies, licensees, former allegeders, and the public. One recommendation from the 1993 effort was the development of an agency policy which underscored the importance of licensees and their contractors achieving and maintaining a work environment which is conducive to the reporting of concerns without fear of retaliation.²

On May 14, 1996, the NRC issued a policy statement³ which delineated its expectation that licensees and other employers subject to NRC authority will establish and maintain safety conscious environments in which employees feel free to raise safety concerns, both to their management and to the NRC, without fear of retaliation. The responsibility for maintaining such an environment, called a Safety Conscious Work Environment (SCWE), rests with each licensee, as well as with contractors, subcontractors and employees in the nuclear industry. The policy is applicable to NRC regulated activities of all NRC licensees and their contractors and subcontractors. The policy emphasizes that the identification and communication of safety concerns and the freedom of employees to raise such concerns is an integral part of ensuring the safety of nuclear operations.

In a March 26, 2003 Staff Requirements Memorandum,⁴ the Commission directed the staff to develop further guidance, in consultation with stakeholders, that identifies best practices to encourage a SCWE. On February 19, 2004, the staff met with stakeholders to discuss an expanded outline of best practices to encourage a SCWE prepared by the staff based on the guidance contained in the 1996 Policy Statement and the experience and knowledge of the NRC staff in this area. Furthermore, comments on the outline were solicited in a February 12, 2004 Federal Register Notice. The comments that were received during the meeting and in response to the Federal Register Notice were considered in the preparation of this guide.

²"Reassessment of the NRC's Program for Protecting Allegers Against Retaliation," NUREG 1499, January 1994.

³ "Policy Statement for Nuclear Employees Raising Safety Concerns Without Fear of Retaliation." Federal Register Notice May 14, 1996, (Volume 61, Number 94).

⁴ Staff Requirements - SECY-02-0166 - "Policy Options and Recommendations for Revising The NRC's Process for Handling Discrimination Issues, March 26, 2003."

INTRODUCTION

The guidance in this document is intended to augment existing information that was communicated in the 1996 Policy Statement. The expanded elements of a SCWE summarized within this document were developed utilizing information obtained from reactive inspections of problematic licensee programs as well as reviews of successful progressive SCWE programs, and insights obtained during discussions with nuclear industry professionals, including individuals who provide training to the industry on the subject and attorneys who have represented licensees and whistleblowers in proceedings.

The NRC recognizes that some of the practices outlined in this guidance may not be practicable or appropriate for every NRC licensee or contractor depending on the existing work environment and/or the size or complexity of the licensed activities. In addition, practices not included in this guidance may be effective in establishing and maintaining a SCWE. The NRC staff continues to emphasize that licensees are responsible for establishing and maintaining a SCWE and implementation of the following guidance may not improve a SCWE without additional efforts by site management. However, the NRC does believe that the elements in this guidance could be helpful to NRC licensees and their contractors when developing or enhancing existing SCWE programs, or when attempting to identify and correct potential problems within a program.

ELEMENTS OF A SAFETY CONSCIOUS WORK ENVIRONMENT

Effective Processes for Problem Identification and Resolution

Effective processes for problem identification and resolution are essential to ensuring the safe use of nuclear materials and operation of facilities. Attributes of the work environment that encourage individuals to look for and articulate safety concerns and effectively and efficiently address and resolve the concerns raised, are discussed in the following guidance.

A. Employees are Encouraged to Raise Safety Concerns

SCWE Policy

A SCWE Policy statement which: (a) is applicable to employees and contractors; (b) asserts that it is everyone's responsibility to promptly raise concerns; and (c) retaliation for doing so will not be tolerated, helps establish a SCWE and communicate senior management's expectations for maintaining it. In addition, the policy may include:

- ! A statement that, to the extent appropriate, employees are allowed and encouraged to use work hours to report concerns;
- ! Sanctions for retaliation by supervisors, managers, or peers
- ! Expectations for management behavior that fosters employee confidence in raising concerns;
- ! Information on the various avenues available for raising concerns; and
- ! The rights of employees to raise concerns externally

SCWE Training

SCWE training for managers, supervisors, and employees helps reinforce the principals outlined in the licensee's SCWE Policy. The scope of the training given to managers and employees should include applicable laws, regulations and policies underlying SCWE expectations including an understanding of:

- ! What, besides raising safety concerns, constitutes a "protected activity."

The term "protected activity" has been broadly interpreted by the Department of Labor and the US Courts. Protected activity is defined by NRC regulation as including, but not limited to:

- " Providing the Commission or employer information about alleged or possible violations of the Atomic Energy Act, the Energy Reorganization Act or requirements imposed under either statute;
- " Refusing to engage in any practice made unlawful under either statute or the requirements, if the employee has identified the alleged illegality to the employer;
- " Requesting the Commission to institute action against the employer for the administration or enforcement of these requirements;
- " Testifying in any Commission proceeding, or before Congress, or at any Federal or State proceeding regarding an provision of either statute;
- " Assisting or participating in, or is about to assist or participate in, these activities.

- ! What constitutes an "adverse action."

An "adverse action" is generally defined as an adverse change of the terms, conditions, or benefits of the employee's work. Adverse employment actions may include changes in employment status,

regardless of whether the individual's pay is affected, and threats to employment.

! What constitutes "retaliation" under the NRC's regulations.

An adverse action is deemed retaliatory if it is taken, in whole or in part, because the individual was engaged in a protected activity.

The scope of the training given should also include consequences for deviations from applicable laws, regulations and policies underlying SCWE expectations.

The training for should identify appropriate gateways for employees and contractors to identify concerns, i.e., manager, quality assurance, corrective action programs, appeal processes, alternative processes for raising concerns, if applicable (e.g., Employee Concerns Program/Ombudsman), NRC and DOL. The training should include a description of how the programs function, and the role for a manager within each program.

Expectations for management behavior should be included in the training. For example, managers should be expected to make themselves available to the workforce by various means, including an "open-door" policy in the office and when a manager is in the field. The expectations might include the need for the manager to be sensitive to an employee's potential reluctance to raising concerns and, therefore, the need to protect their identity or the identity of others involved. Basic listening skills, effective ways to seek input, and expressing appreciation to those who raise concerns, are other behaviors one might expect of managers. Management should be knowledgeable of and periodically use various media instruments to communicate their SCWE principles. Management should establish timeliness goals for responding to concerns, which consider safety significance, and provide periodic updates to the individual who identified a concern. A manager should evaluate the effectiveness of their responses to determine whether they adequately addressed the employee's concerns. Management should be sensitive to ensure operational or maintenance goals do not result in supervisors being less receptive to safety concerns, particularly those which may result in significant costs or schedule delays?

Finally, training for managers, in particular, should include information to help them identify and address signs of a "chilled environment," that is, one in which employees are afraid to raise safety concerns for fear of retaliation.

Managers who model positive traits of availability, receptiveness, sensitivity, encouraging communications, timeliness, and responsiveness associated with a SCWE will promote employee confidence in identifying and resolving concerns. Managers who have exhibited success in this area should consider training or mentoring other managers in an effort to duplicate the success.

Similarly, expectations for employee behavior, should also be included in their training. Consider emphasizing the following employee behaviors during training:

- ! Individual responsibility for reporting concerns;
- ! Clear communication of the concern and confirmation of understanding with the person receiving the concern;
- ! Willingness to share suggested solutions to concerns and participate or not in their resolution;
- ! Follow-up to ensure concern is adequately addressed, and;
- ! Need for every employee to demonstrate respect for others who identify concerns.

Initial training of recently hired employees or recently promoted managers should be conducted as soon as practicable and refresher training for existing staff, should be conducted annually or more frequently, as determined by the needs and complexity of the organization. Annual refresher training for employees and managers should review key points from initial training and include lessons learned, as appropriate, from successes and/or problem areas.

SCWE Incentive Programs

An incentive program can be developed which provides recognition/rewards for individual/team efforts in identifying and/or resolving safety issues. In addition, implementation of site-wide bonus/incentive programs which reflect safety objectives over production goals may also encourage reporting of safety concerns. However, some care should be taken to ensure that incentive programs do not inadvertently discourage reporting concerns, e.g., some employees may not want recognition.

While it is important to hold employees accountable for personnel errors, licensee personnel management practices, to the extent practicable, should consider that actions against personnel who self report errors can, in some circumstances, discourage employees from raising concerns, near misses, etc. Consider discussing self-identification and prompt, effective corrective actions as mitigating circumstances for consideration in addressing personnel errors.

- B. Management is Promptly Notified of Concerns** - Aside from the practices discussed above concerning policies, training, and incentive programs designed to create a work environment where employees feel free to raise safety concerns without fear of retaliation, there are other behaviors and processes which may help employees promptly identify and notify management of concerns. Employees and management that demonstrate an open and questioning attitude by asking “why” and “what if” type questions help to ensure concerns are promptly identified. Processes for identifying concerns should be accessible and user-friendly. A

corrective action program which is flexible in its use of paper forms and/or terminals, conveniently placed throughout the facility, also helps ensure prompt notification of safety concerns. An accessible and approachable management team further motivates employees to report concerns including communications that ensure an understanding of the concerns prior to their proposed resolution and inspection. As appropriate, employees should be allowed and encouraged to spend needed work hours to report concerns.

- C. Concerns are Promptly Prioritized and Reviewed** - Safety should be a primary factor in the concern prioritization scheme and in determining the breadth and depth of the evaluation. Effective communication plans should ensure the sharing of information between affected departments so that the identified concern's potential impact on safety can be appropriately assessed. In addition, management and employees should develop expectations concerning timeliness to complete the evaluation and resolution of issues. The process for screening issues should include a review for operability and reportability as applicable. For significant conditions adverse to quality, the evaluation should be sufficient to identify the root and contributing causes of the issue. In addition, the root cause analysis should address both the extent of the condition and the cause of the issue.
- D. Concerns are Appropriately Resolved** - Timeliness of the corrective actions should be commensurate with the safety significance of the issue. Processes should be in place to ensure that appropriate actions are taken in response to all conditions adverse to quality. For significant conditions adverse to quality, corrective actions should be taken to address the root causes, contributing causes, and the extent of the condition caused by the identified concern.
- E. Feedback is Provided to the Concerned Individual** - Feedback should be provided at appropriate points during the concern resolution process. Upon receipt of the concern, the individual receiving the information may need to discuss the concern with the employee raising the concern to ensure understanding of issue and its safety significance. Additional feedback may be necessary during the evaluation when it is apparent that resolution may take longer than anticipated. Follow-up with the concerned individual when the evaluation is complete is important to share proposed actions to address the issue, if appropriate. The feedback process which is sufficiently flexible to permit a concerned individual who wants anonymity to obtain feedback, can be most effective.
- F. Appeal Process for Concerns** - An appeal process which facilitates an additional review to ensure issues were thoroughly addressed (e.g., differing professional opinion or alternate dispute resolution processes) can provide added assurance that concerns are appropriately resolved.

G. Self-Assessments of Problem Identification & Resolution (PI&R) Processes -

It is a good practice to periodically evaluate the adequacy and timeliness of responses, as well as the satisfaction of the concerned individual with the response and process. In addition, a self-assessment should address whether employees feel free to raise issues using the various processes employed by the licensee and whether these processes are viewed as effective, and why or why not. An assessment should include an appraisal of the effectiveness of the root cause analyses for significant issues and the effectiveness of associated corrective actions. Management should have a plan to promptly review the findings of such self assessments and implement appropriate corrective actions.

H. An Alternative Process to Line Management - To address the situation where

an individual may wish to raise a concern to someone other than their management or through the corrective action program, an alternative process, such as an Employee Concerns Program, can be useful. Given the nature of many of the issues one may wish to raise outside of line management, such a process should ensure identity protection and/or anonymity to the extent appropriate. Such an alternative process should be accessible through multiple inputs, e.g. walk-ins, hot lines, drop boxes, etc. In considering the physical location of the personnel operating the alternative process, one should consider both its accessibility to the workforce as well as its visibility. An overly visible office may not allow for discreet visits. Personnel training programs, advertising posters, and facility news articles help provide notification of the process. Like concerns brought to the corrective action program, concerns brought to the alternative program must receive appropriate operability and reportability reviews and be properly prioritized utilizing safety as a primary factor for determining the breadth, depth, and timeliness of the evaluation. While independent from line organizations involved in the concerns, the process is most effective if directly accountable to senior management. Senior management provides appropriate support and resources including staffing and access to necessary documents and materials to conduct inspections. The process should provide timely feedback on the status and resolution of concerns, and status reports to senior management with analysis of program data and observations.

Tools to Assess the SCWE

Information gathered from the following tools should be considered for program enhancements, training enhancements, coaching and counseling opportunities, organizational changes, and survey topic suggestions.

- A. Lessons Learned -** Periodically evaluate information from pertinent organizations and processes which may contribute to or negatively affect the SCWE to identify enhancements or adjustments to the organizations and processes. The organizations and processes with pertinent information may include: the primary process for raising concerns (e.g., Correction Action Program), an alternative

process for raising concerns (e.g., Employee Concerns Program (ECP) or Ombudsman), Human Resources (regarding work environment concerns, etc.), legal counsel (regarding Department of Labor files, etc.) and/or Regulatory Affairs (regarding NRC findings or observations). Discussions about specific documentation or events should take into considerations privacy and attorney-client restrictions. Lessons learned from external organizations can also be useful.

- B. Benchmarking** - Participation in applicable industry forums or peer-group assessments of other SCWE programs, where ideas and practices are exchanged and various SCWE elements compared, can also provided valuable insights.
- C. Performance Indicators** - Parameters should be identified and monitored that help indicate the effectiveness of the SCWE training and problem identification and resolution processes. For example, the number and trend of NRC allegations compared to the number and trend of internally raised concerns may be an indication of employee willingness to raise concerns internally. Similarly, the percent of anonymous concerns raised may give insights into employee willingness to raise concerns without fear of retaliation.

An indication of licensee effectiveness in preventing retaliation claims may be indicated by the number and trend of NRC retaliation allegations compared to the number and trend of internally raised retaliation concerns.

Employees with a questioning attitude and a willingness and ability to raise safety concerns may be indicated by the comparison of risk significant concerns that are self-revealing, self-identified or externally identified by INPO, NRC, OSHA, etc.

Finally, the backlog and age of concerns may indicate a lack of effectiveness of processes for resolving concerns.

No single indicator is sufficient in identifying weaknesses in the SCWE, nor are there absolute measurements that indicate an unhealthy environment. Nonetheless, monitoring the trends in various characteristics of the SCWE with performance indicators like those mentioned above and others provide some insights into the strengths and weaknesses of the SCWE at a site.

- D. Survey and Interview Tools** - Survey instruments and interview questionnaires implemented by organizations independent of the groups being surveyed or interviewed, can be useful tools and complement other tools used to assess the SCWE.

Pre-survey or pre-interview communications are a very important part of such a tool. Communications with the workforce prior to the implementation of the survey or interview should include a request for participation, the need for input,

protection of participant's identity, the intended use of gathered information, and the intent to share results with the workforce.

Regular employee business hours should be made available to conduct surveys or interviews.

The scope of SCWE surveys should include the following:

- ! Awareness of company policies and practices with regard to raising safety concerns and avenues available for raising concerns;
- ! Management behaviors encouraging the workforce to raise safety concerns;
- ! Workforce willingness to raise safety concerns;
- ! Effectiveness of the processes available (normal and alternative) for raising concerns;
- ! Management's ability to detect and prevent retaliation for raising safety concerns.

Space should be provided on surveys for written comments.

Survey or interview follow-up action plans should be developed to address findings that are specific to work groups and generic to the facility. In addition, management commitments should be made to share the results and action plans to address findings with the workforce. The results of survey or interviews may indicate employee beliefs, attitudes and satisfaction with key SCWE attributes, as well as ways to improve the SCWE.

- E. Direct Behavior Observations** - Direct observations of individuals' behavior provides information regarding the effectiveness of any SCWE training. Management behaviors observed may indicate a supervisor's receptiveness and support to employees for raising concerns, including how such action is rewarded, etc. While direct observation of employees in the work environment can provide valuable insights into the employee's questioning attitude and willingness to challenge perceived unsafe behavior.
- F. Exit Interviews/Surveys** - Exit interviews and surveys, conducted to facilitate the identification of safety issues from exiting employees, provide an opportunity to capture concerns an individual may not have been comfortable raising while working at the facility. These activities should be conducted while ensuring identity protection and include follow-up mechanisms for exiting employees who want to be informed of the resolution of their concerns.
- G. 360-Degree Appraisals** - Consideration should be given to the implementation of a "360-degree" appraisal program where employees are asked to provide feedback on manager SCWE behavior.

Improving Licensee Contractor Awareness of SCWE Principles

The Commission's long-standing policy has been and continues to be to hold its licensees responsible for compliance with NRC requirements, even if licensees use contractors for products or services related to licensee activities. Thus, licensees are responsible for ensuring that their contractors maintain an environment in which contractor employees are free to raise concerns without fear of retaliation. In considering whether enforcement action should be taken against licensees for contractor actions, the NRC considers, among other things, the reasonableness of the licensee's involvement and oversight of the contractor environment for raising concerns.

- A. Communicating Licensee SCWE Expectations to Contractors** - Licensee SCWE expectations of contractor responsibilities as they relate to creating and maintaining a SCWE should be communicated to contractors engaged in regulated activities. It should be the licensee's expectation that the contractors and their subcontractors are aware of applicable regulations. Furthermore, a licensee may want to communicate to its contractors and subcontractors that they expect them to demonstrate that either an effective program exists that a) prohibits discrimination of contractor employees for engaging in protected activity and b) fosters a SCWE, or adopt and comply with the licensee's SCWE program for their employees.
- B. Licensee Oversight of Contractor SCWE Activities** - Aside from communicating its SCWE-related expectations to their contractors, licensees may wish to oversee contractor SCWE-related activities. Such oversight may include:
- ! Reviewing contractor programs and processes to prohibit discrimination and foster a SCWE;
 - ! Assessing the contractor management's commitment to SCWE principles/policy through document review or behavioral observations;
 - ! Reviewing contractor training, both for content and effectiveness;
 - ! Monitoring the contractor's actions to address concerns, such as reviewing contractor investigations to determine the need to conduct independent licensee investigations; and,
 - ! Evaluating actions, if any, the contractor takes to mitigate a concern's potential impact on the SCWE.
- C. Licensee Management Involvement in Contractor Cases of Alleged Discrimination** - Given that the SCWE is most challenged when changes are made to the employment conditions of the workforce, it can be very beneficial to licensees to monitor such changes when proposed or executed by the contractor. Licensee oversight in this area might include evaluating contractor processes for making changes to employment conditions, such as Disciplinary Policies and/or Reduction-In-Force Plans, to ensure they are well-defined, defensible, and communicated to the workforce in advance of their implementation.

Furthermore, licensee management should evaluate contractor proposed changes to employment conditions to ensure the proposed changes follow defined processes and are non-retaliatory. The licensee can also assess whether the contractor has taken into consideration the potential impact their actions might have on the SCWE, and, if appropriate, actions to mitigate those impacts.

Finally, contractor changes to employment conditions that are alleged or perceived to be retaliatory should be reviewed to ensure the changes are not retaliatory or could adversely impact the SCWE.

- D. Contractor SCWE Training** - Contractor SCWE training can be provided by the contractor or licensee. As with the training given to licensee employees, the contractor training should cover the laws, regulations, and policies underlying the licensee's SCWE expectations; the licensee's governing SCWE policy; the avenues available to contractor staff to raise concerns; and the licensee's expectations for contractor management and employee behavior regarding raising safety concerns. The contractor training should also include an explanation of licensee contractual rights to oversee the contractor's safety conscious work environment. Training should be conducted during business hours.

Involvement of Senior Management in Employment Actions

Management should ensure that programs and processes involving changes to employment conditions, such as Disciplinary Policies or Reductions-In-Force plans, are well-defined, defensible and communicated to the workforce prior to their implementation.

An effective way for senior licensee management to prevent retaliatory actions by their supervisory staff, is to review proposed employment actions before the actions are taken to determine whether any of the factors of retaliation are present. Employment actions above an oral reprimand should be considered for prior review.

The factors include:

- ! Protected Activity - Has the individual against which the action is being taken engaged in protected activity?;
- ! Adverse Action - Is an adverse employment action being proposed?;
- ! Licensee or contractor Knowledge of Protected Activity - Such knowledge can be attributed to other than the individual's direct supervisor;
- ! Relationship Between the Adverse Action and Protected Activity - Is there evidence that the adverse action is being taken, at least in part, because of the protected activity? Even if there are other legitimate, defensible business reasons to have taken the action, if one of the contributing causes of the action was protected, a violation of the NRC's regulations has occurred.

Senior management review of such employment actions should ensure programs or processes are being followed to ensure actions are well founded and non-retaliatory. In addition, the review should ensure that the proposed action comports with normal practice within the latitudes allowed by the defined process and is consistent with actions taken previously.

The review should assess whether the supervisor requesting the action exhibits any sign of unnecessary urgency. The employee's prior performance assessments and the proposed action should be consistent or inconsistencies should be justified and documented.

Finally, an assessment should be done to determine what, if any, effect the employment action may have on the SCWE. If management determines that the action, despite its legitimacy, could be perceived as retaliatory by the workforce, mitigating actions to minimize potential chilling effects on raising safety issues should be considered. Such mitigating actions may include: (1) the use of holding periods during which the proposed employment action is held in abeyance while further evaluations are completed; (2) communications to the workforce about the action being taken, with appropriate consideration of privacy rights; (3) reiteration of the SCWE policy; and (4) communications with the employee against whom the action is being taken to clearly explain the non-retaliatory basis for the action.

After an employment action is taken, management should initiate a review of the facts, and, if warranted, reconsider the action that was taken. If retaliation is alleged, the licensee should assure that the appropriate level of senior management is involved in successfully implementing mitigating actions planned to minimize a potential chilling effect for raising safety issues. .

Definitions

Adverse Action - *Initiated by the employer that detrimentally affects the employee's terms, conditions or privileges of employment. These include but are not limited to termination, demotion, denial of a promotion, lower performance appraisal, transfer to a less desirable job, or denial of access.*

Alternate Dispute Resolution (ADR) - *Refers to a number of processes, such as mediation and facilitated dialogues, that can be used to assist parties in resolving disputes.*

Corrective Action Program (CAP) - *A formal, trackable system for employees to document issues which they believe warrant some remedial action. The issues are usually prioritized according to the relative safety significance.*

Differing Professional Opinion (DPO) - *A formal alternative process which provides an avenue of appeal for an employee to disagree with a position taken by management.*

Employee Concerns Program (ECP) - *An alternative process to line management and the CAP for employees to seek an impartial review of safety concerns. Many programs handle a variety of concerns and may act as a broker seeking resolution on behalf of the employee with other offices.*

Hostile Work Environment - *An intentional discriminatory work environment that is pervasive and regular and detrimentally affects the employee because of protected activity.*

Memorandum of Understanding (MOU) - *A written agreement which describes how organizations, offices or agencies will cooperate on matters of mutual interest and responsibility.*

Performance Indicators (PI) - *A series of pre-determined measured items which usually provide managers with insight into what may be occurring within an organization and give an early sign of problems that, if acted upon, could relieve stress within an organization.*

Protected Activity - *Includes initiating or testifying in an NRC or DOL proceeding regarding issues under the NRC's jurisdiction, documenting nuclear safety concerns, and the internal or external expression of nuclear safety concerns.*

Safety Conscious Work Environment (SCWE) - *An environment in which employees are encouraged to raise safety concerns both to their own management and to the NRC without fear of retaliation.*