



Research Reactor Center

University of Missouri-Columbia

Research Park
Columbia, MO 65211

PHONE (573) 882-4211
FAX (573) 882-6360

December 29, 2004

David B. Matthews
Director, Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

Reference: Docket No. 50-186
License No. R-103
EA-02-0256
University of Missouri Research Reactor

Subject: First annual report of Safety Conscious Work Environment Survey and Assessment as required by Confirmatory Order of December 19, 2003

On December 19, 2003, the U.S. Nuclear Regulatory Commission (NRC) issued a Confirmatory Order, which required, in Section IV.2(a) that the University of Missouri (MURR):

[Perform] an employee cultural survey developed by an independent consultant or entity. This survey shall be performed annually for not less than two years. During the two year period, the NRC shall be provided an annual report summarizing the findings of the culture assessment, including the questions used, the methodology applied, and any follow-up actions....

MURR has satisfied the above requirement by arranging for the Utilities Service Alliance Group (USA Group) to perform the culture assessment. The assessment was conducted during April and May of 2004 and a final report on USA Group's findings was provided to MURR on September 1, 2004. Since that time, MURR has been evaluating the USA recommendations and adjusting its anticipated actions, as appropriate.

The NRC should note that MURR has gone beyond the scope of the order in its efforts to improve the MURR culture. For example, MURR also had USA Group evaluate the Safety Conscious Work Environment as part of its efforts, which also would include areas such as the MURR Corrective Action Program. As a result, MURR has received some very useful insights from USA Group on how to improve its programs and procedures in this regard based on lessons-learned in the power reactor industry. While having such a robust CAP is not typical of a research reactor, MURR believes that having a more detailed corrective action process, that more clearly and predictably addresses facility issues, will be a benefit to MURR's performance and a useful tool for its employees.

A020

David B. Matthews
December 29, 2004
Page Two

Consistent with the Confirmatory Order, Attachment 1 provides MURR's Annual Culture Assessment Report. This Annual Report includes a description of the methodology used by the USA Group. The Annual Report also includes planned actions for improving the culture at MURR based on the results of the cultural survey and assessment.

Attachment 2 includes the questions asked by the USA Group during its survey and a graphical representation of the USA Group results. The detailed USA Group assessment report is available for NRC inspection at MURR.

Sincerely,



Ralph A. Butler, Director
University of Missouri-Columbia Research Reactor Center

Attachments (2)

xc: Dr. Frank J. Congel, Director
Office of Enforcement, USNRC

Dr. Elson Floyd, President
University of Missouri

Dr. Lori Franz, Interim Provost
University of Missouri-Columbia

Dr. James Coleman, Vice-Provost
Office of Research, University of Missouri-Columbia



DIANE PURCELL
Notary Public - State of Missouri
County of Boone
My Commission Expires Jan. 31, 2006



Attachment 1

University of Missouri Culture Survey Annual Report

A. Methodology

The University of Missouri (MURR) approached its requirement to perform a culture survey as an opportunity to also assess additional areas of interest at the facility. In that light, MURR determined that a Safety Conscious Work Environment (SCWE) survey would not only address MURR's culture, but also would address other recently initiated programs such as the Corrective Action Program and recent management-implemented processes.

The USA Group survey used at MURR was similar to what has been used by the USA Group to assess the SCWE at power reactor facilities. The survey was developed by the USA Group using the Nuclear Energy Institute (NEI) document NEI 97-05, "Nuclear Power Plant Personnel—Employee Concerns Program—Process Tools in a Safety Conscious Work Environment." It was appropriate and necessary to revise the USA Group survey slightly to reflect MURR terminology rather than power plant terminology (e.g., Safety Concerns Process instead of Employee Concerns Process, respectively). As previously noted, the scope of the survey exceeded that required by the NRC order in that it addressed four general topics: Safety Conscious Work Environment, Employee Safety Concerns/Reporting Process, Management Conduct and Performance, and Corrective Action Program/Process. The USA Group collected MURR responses to the survey and developed charts that capture these responses. (See Attachment 2.)

Following the survey effort, a USA Group team visited MURR the week of May 17 to May 21, 2004 to interview a cross section of MURR staff regarding MURR SCWE. The interviews were performed to provide additional insight into the survey results and to steer the USA Group team into other areas worthy of review consistent with their expanded scope.

A possible dilemma was presented by the USA Group effort in that to the best of our knowledge, a non-power reactor had not been benchmarked using the USA Group process. Therefore, the results had to be carefully reviewed to determine whether the results previously noted at power reactor facilities could be compared to a non-power reactor setting to assess the state of its culture. The average results for seven power reactors were utilized for a comparison to MURR's results. We note that while the power reactor results are not a direct benchmark for a research reactor, they do indicate the relative condition of the MURR SCWE compared to commercial nuclear plants. As such, in most areas, MURR was reasonably consistent with what has been observed at power reactor facilities. However, the true benchmark for MURR will be the current survey and assessment and any trends seen during the second survey to be performed in 2005.

B. MURR Evaluation of USA Group Survey and Assessment

The following is a summary of MURR's evaluation of the USA Group SCWE survey results and report. The USA Group separated its questions into four basic categories.

1. Questions 1-5: Condition of the MURR Culture/SCWE

Questions 1 through 5 and associated responses provide a snapshot of the overall condition of the MURR culture/Safety Conscious Work Environment. There were encouraging responses to several questions in the survey. The results for Question 1 indicate that with few exceptions, MURR workers understand the need to identify safety problems and adverse conditions at MURR. The highest disagreement was 9% for Question 3. MURR survey results for all five questions showed the same or less disagreement than the power plant results.

2. Questions 6-10: Safety Concerns Process

Questions 6 through 10 specifically address the level of understanding and effectiveness of the Safety Concerns Process. The results for Question 7 indicate a vast majority of individuals are familiar with the avenues available for them to report safety concerns. The highest disagreement was 6% for Question 9. MURR survey results for all five questions showed the same or less disagreement than the power plant results.

3. Questions 11-15: Management Processes

Questions 11 through 15 relate to management performance in support and encouragement of the SCWE. The USA Group identified the Effectiveness of Management Performance as an area of weakness. MURR management agrees that the survey results show areas for improvement. As previously discussed, the average survey results for seven power reactors were utilized for a comparison to MURR's survey results. The power plant survey results were comparable for survey Questions 12 and 15, two of three questions in the MURR survey with the highest disagreement. (The other was Question 20 related to the Corrective Action Program).

	<u>MURR</u> % Disagree	<u>Power Plant</u> % Disagree
Management Performance		
Q12 (expectations reflected in performance review/rewards/discipline)	18	14
Q15 (professional/open environment)	14	10

4. Questions 16-21: Corrective Action Program

Questions 16 through 21 relate to the Corrective Action Program and its perceived effectiveness. (Since the Corrective Action Program is not within the scope of the NRC Order, its results have not been addressed in this submittal. However, the NRC is welcomed to review the CAP evaluation at the MURR, as well as our plans to improve in this area.

C. Planned Follow-up Actions

MURR is not waiting for the 2005 survey and the identification of any trends, but has already initiated efforts that we believe will better ensure that the culture at MURR is focused on identifying and raising safety concerns without fear of retaliation such as revising our MURR Safety Oversight Committee procedure. We also are focused on improving the much broader area of a robust SCWE. MURR management will focus our improvement actions in the coming year on the areas that will have the greatest impact and benefit for MURR—**Management Performance** and the **Corrective Action Program**.

MURR management realizes that **Management Performance** will be an on-going effort to improve communication skills and work habits. To improve Management Performance, MURR will take the following actions in the coming year:

1. Provide for supervisor training/development courses in areas such as coaching, effective listening and delegation. This will improve two-way communications as well as pave the way for improved change management.
2. Improve task-oriented ALARA and safety coaching. This will improve manager communication of safety expectations and help develop stronger working relationships.

The USA Group observation that the **Corrective Action Program** has not reached its full potential is consistent with our own assessment. The Corrective Action Program, although not within the scope of the NRC order, can and should be improved to provide greater benefit to MURR. This program is relatively new at MURR and may be experiencing some of the growing pains experienced with implementing a new program. To improve the Corrective Action Program, MURR will focus considerable effort to encourage the use of the program and to enhance its analysis and prioritization processes during the next year.







