

# MURR Independent Management Assessment Report

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## **Introduction**

A safety assessment was undertaken at the request of the Missouri University Research Reactor (MURR) Center management and completed on September 22, 1994. This request was a result of claims by two employees that MURR management had taken retaliatory actions against them for raising safety issues. After starting this assessment, it was clear there were two distinct aspects of such an assessment. One aspect was safety and the other aspect was management. We decided to report our findings and recommendations in two reports, one for the safety aspect, the other for the management aspect. The safety report was completed first due to its significance.

In conducting a management assessment of this type, there is always the danger that any problems found are the main focus of the report and the ensuing recommendations, whereas the positive findings are overlooked or taken for granted. This report is not free of similar weaknesses. The Independent Safety Assessment Team (ISAT) found the Center, the facilities and equipment, the academic activities, the quality of personnel, and their enthusiasm for and love of their work as both a University and a national resource.

## **Methodology**

In order to conduct a thorough assessment, the Assessment Team quickly determined that it was advisable to interview 100% of the MURR staff and appropriate faculty researchers. This Management report resulted from staff interview discussions, the review of written reports, the use of management oversight techniques, and a written management survey. It was found that many issues raised during the safety assessment were broad management issues not related solely to safety. Therefore, a separate report on management issues was undertaken in order to keep the safety assessment report as concisely related to safety as possible. However, there is definite overlap and interrelationship in some instances between management and safety. As a result, there is some



overlap and duplication in the two reports. We acknowledge this duplication but felt it was necessary so that each report is self contained.

## Background

There have been several issues at MURR over the last several years that have contributed to the current management difficulties. The following list provides a summary of the key factors that have had a significant impact on MURR:

- Shifting MURR from the UM System to UMC Campus responsibility
- Turmoil surrounding the departure of the previous permanent Director and a former Associate Director
- Public concern over the TRUMP-S project
- Perception that with the interim Director there was a change in research focus towards the life sciences and then a refocus to neutron scattering with the present Director
- Hiring of the present Director from outside the University of Missouri System to lead a mature, experienced staff that is perhaps not as open to change as a staff with less time at MURR
- Strong direction from the UMC Administration to the new Director to emphasize greater faculty involvement in MURR
- Increase in staff size without an accompanying change in communication style and without a corresponding ability to provide adequate office and work space
- Necessity to reduce the initial size requirements for a planned expansion to the Center
- Stress resulting from current legal proceedings and from veiled threats of law suits
- Increased perceptions by the MURR staff that they are considered second class citizens of the University
- Changes in the regulatory environment that have increased the level of performance expectations
- Many changes in the cognizant UMC administrative personnel
- Increased stress due to several shipping errors and violations



- Increased concern over the priorities of research vs. service activities
- Based on our interviews, readings, and discussions the ISAT provides the following findings and recommendations regarding management issues.

## **Findings Regarding Management Issues**

The management findings are divided into seven broad areas. These are presented below in no specific order of priority; however, communication is at the heart of many of the management issues identified.

### **1. Communication:**

Growth at the Center has outstripped its communication style. The informal communication style that was successful in the past needs to be modified to address a number of communication weaknesses identified, such as:

- Lack of direct feedback to concerns that have been raised
- Lack of timely follow-up and carry-through on action items
- Lack of keeping staff and faculty appropriately informed of issues related to MURR
- Lack of formal structure for a personnel appraisal process for all MURR staff (currently in process for exempt employees)
- Weaknesses of communication and documentation of personnel evaluations (currently in process for exempt employees)
- Lack of staff meetings that include opportunities for open and effective staff input and discussion
- Lack of a provision for submitting anonymous comments such as a suggestion box (currently in process)
- Ineffective two-way communication between staff and management where each party needs to listen to the other party
- Weaknesses in communication of the decision making process and the resulting actions to be taken



- Perception by some individuals that they were told what was perceived to be what they wanted to hear, and the perception that different individuals were told different things which has led to mistrust of management
- Lack of an effective internal communication medium that provides accurate, timely information on items of internal interest, such as a newsletter
- Perception by some individuals that the Director is more effective dealing with individuals outside MURR than dealing with MURR staff
- Perception by some individuals that the Director is more effective at communication one-on-one or in a small group in contrast to large groups
- Failure to take advantage of team building opportunities through staff meetings, social events, etc.
- Insufficient visibility of the Director and the Associate Director in various areas (e.g., the Control Room and various laboratories)

## 2. Organization

The ISAT acknowledges the support that the UMC administration has provided MURR. However, it is important that the UMC administration continues and strengthens its involvement in MURR. The MURR is a unique facility and has unusual needs compared to a typical university college, school, or department. Examples of these include federal and state license requirements and professional staff concerns about the UMC administration's appreciation and support of their role within the University.

Weaknesses were found in the organizational structure. In an effective organization, informal lines of communication and/or reporting should not exist. Roles, responsibilities, and authority should be clearly stated in position descriptions and shown on an organization chart. Organizational issues identified include the following:

- Three different departments can ship material off-site. Each department has different staff and procedures for shipping materials.
- The Reactor Service Engineer reports to the Associate Director rather than to the Assistant Director as shown on the organization chart.
- Some Shift Supervisors report directly to the Reactor Manager in contrast to the Reactor Engineer.



- Director has multiple functions of Group Leader, Coordinator, and Director.
- Research scientists report to the Director for evaluations rather than to the Group Leader or Coordinator.
- Some individuals have assumed inferred responsibilities and authorities.
- Some individuals indicated a lack of full understanding of their duties and responsibilities.
- UMC having two RSOs (Campus and MURR) may be confusing and may create inconsistencies in policies, procedures, and practices.
- Upper UMC management oversight has been minimal since MURR was shifted from the UM System to the UMC Campus responsibility.
- Lack of an individual identified to ensure the conduct of the following: employee evaluations; position descriptions; and, employee reassignments, transfers, hirings, dismissals, promotions and development.

### **3. Role of the Director:**

The multiple functions of Director, Coordinator, and Group Leader have created confusion in as much as some indicate that they did not know whether a discussion was being held with a Director, a Coordinator, or a Group Leader. It is important that the Director have credibility with both Center staff and faculty researchers, and it is laudable for the Director to have his own research program and other academic activities. However, the Center involves a relatively large management responsibility and currently faces a number of managerial as well as regulatory issues. The Director is clearly responsible for all aspects of the Center's health and activities; therefore, it is important that this responsibility is clear within the Center, within the University, and by the regulatory bodies, and is not muddled by simultaneously holding subsidiary responsibilities which some may view as conflicts of interest and responsibilities.

### **4. Priorities and Tracking:**

There is an inadequate process for ensuring that issues, when identified, are prioritized, corrected and tracked, and to ensure that feedback is provided



to the individuals who raised the issue. Management guidance for how to prioritize and track issues has not been developed.

Weaknesses were identified in the staffs knowledge of MURR's long-term goals and near-term objectives.

## **5. Morale:**

Morale at the Center varies greatly and does not have a consistent thread. Although a large segment of personnel indicated that morale is low within the Center, others indicated that morale is normal for such a facility and a number (mostly younger personnel) stressed that the Center was an excellent place to work. Beyond those matters discussed under Communication, other reasons given for low morale include:

- loss of a former sense of being a "MURR family"
- lack of a team approach to solving internal problems in contrast to past effective team approaches to countering external problems
- the DOL proceedings and the uncertainty as to the meaning of the Chancellor's reported media comments
- uncertainty as to the personal effect of the new emphasis on the Center's fuller integration into University academic activities.

It is possible that as some of these matters are resolved, the pride in the Center and the satisfaction with one's work will result in improved team efforts and a restored sense of family.

## **6. Regulatory Awareness:**

The MURR Management and UMC Administration were not aware of various changes to NRC regulations and issues to which the NRC is especially sensitive. These include:

- Whistle blower concerns
- Root cause identification
- Department of Labor process
- Department of Transportation regulations



- NRC enforcement hearing process and the approach to take in presentations at these hearings

There appears to be a lack of a full appreciation of the regulatory environment and the regulatory process in which the University must safely operate its nonpower reactor and safely conduct its numerous material licensing activities. Those with a lack of full appreciation include the higher levels of University administration with cognizant responsibility for licensed activities. Contributing to this situation is the transfer of the Reactor Center to Columbia Campus administrative oversight and a number of major university administrative personnel changes.

## **7. Employee Training:**

Training programs appear weak in certain areas. For example, several individuals indicated that there is a lack of adequate training of personnel in shipping and in the use of pneumatic tubes, reactor operator requalification training is primarily limited to self-reading and on-the job training, there is insufficient training on industrial safety and worker protection, and there is a need for training on safety policies, processes, and procedures.

# **Recommendations Regarding Management Issues**

## **1. Communication:**

- A. Communication is a two-way street; therefore, all individuals at the Center must strive to improve effective communication. There needs to be a willingness by all individuals to truly listen to and actually hear what others are saying and a willingness to express one's own views in a direct, concise, and professional manner. The Center management should strive to provide enhanced opportunities for open discussion of views on issues and to provide more effective feedback on the status of resolution of concerns or issues, as appropriate. Middle management



support and involvement in these communication efforts is needed to keep their personnel effectively informed and to provide opportunities for input.

B. Establish a program for management training and development.

## **2. Organization:**

A. The complete MURR organization structure should be examined. In doing so, input should be solicited from within the MURR staff, from the appropriate faculty, from the MURR administration, and from the UMC administration. It should be noted that after suggestions are received and discussed, the final decision on the MURR organization structure belongs to the Director. The Director is charged with the responsibility of operating the MURR; therefore, the Director has to have the authority to organize the MURR to achieve the goals and objectives of a MURR strategic plan.

B. Consideration should be given to moving all (i.e., LLW, HLW, and target) shipping functions to Reactor Operations where there exists a culture for compliance with regulatory requirements and procedure adherence.

C. Consideration should be given to identifying a MURR personnel manager.

D. Consideration should be given to having a single Radiation Safety Office for the UMC campus within which an RSO would be dedicated to MURR activities.

E. Consideration should be given to designating a high level UMC administrator (e.g., Vice President for Research or Vice Provost) to have cognizant responsibility for MURR. It is expected that this individual would become familiar with MURR activities by meeting frequently with the MURR Director as well as by making periodic visits to MURR.



### **3. Role of the Director:**

Consideration should be given for the need and advisability of the Director holding multiple vertical leadership and managerial positions within MURR. This is not to imply that the Director should not be active in research.

### **4. Priorities and Tracking:**

- A. Develop a Center-wide policy for prioritizing, correcting, and tracking issues that have been identified, and ensure that feedback is provided to the individual(s) who raised the issues. When establishing this Center-wide policy, the Director should solicit staff input. Management should provide overall guidance for prioritizing and tracking issues. While encouraging a climate where individuals feel free to openly identify issues, a mechanism should be provided for those individuals who might prefer to remain anonymous.
- B. Develop a strategic plan for the Center with input from the staff which describes the mission, goals, and objectives.

### **5. Morale:**

- A. Concerted effort should be made to achieve a team approach in addressing Center activities. (The current effort of encouraging all Center personnel to participate in an action plan in response to the Assessment Team's safety report, as well as the encouragement for all to assume "ownership" of all aspects of safety are laudable examples of encouraging a team approach to problem solving.)
- B. The University should give careful attention to the personal concerns expressed by long-time senior Center personnel. The University should explore possible solutions to mitigate such concerns as the University continues to undertake the laudable goal of closer integration of the Center—its personnel and activities—into the University.



## **6. Regulatory Awareness:**

- A. The MURR staff should keep abreast of current NRC concerns and the changing regulatory climate by maintaining active and open communications with Region III of the NRC. Periodic trips to Region III to discuss MURR's approach, philosophy, concerns, etc., is encouraged.
- B. A formal root-cause analysis program should be developed for significant problems that have been identified and of scope appropriate for the activities conducted at MURR.
- C. A seminar should be developed and conducted for all University administrators with direct or cognizant responsibility (e.g. MURR management, MURR RSO, University RSO, cognizant Provost Office representative and V.P. for Business Services personnel, Campus Security and University Legal Counsel personnel, etc.) for all NRC licenses held by the University (e.g. Reactor, Reactor Broadscope Byproduct Material, Cobalt-60, University Broadscope Byproduct Material, etc.). The purpose of the seminar should be to identify and inform those in attendance of the various licenses in effect, the requirements for and the commitments of maintaining such licenses, identifying the responsibilities of the various individuals and offices, and to describe and discuss the regulatory process and environment in which the University must successfully operate.

## **7. Employee Training**

Evaluate the training needs in all areas of the Center, including the need for a Center-wide training coordinator. Develop and implement training programs where appropriate.



## Summary

An assessment of various issues relative to MURR requiring over 600 person hours was carried out by the Independent Safety Assessment Team by interviewing one hundred and forty-six individuals. The findings and recommendations resulting from the assessment are contained in two reports, the first on safety issues and the second on management issues. There were no problems identified that cannot be resolved assuming the MURR staff and management both desire to do so. Several recommendations are made to assist this process.

The Assessment Team found a strong interest at the MURR Center to improve and to get back to a family environment. Due to the many changes in the last few years, it may not be possible to get back fully to the environment of those earlier years. However, MURR has the potential to move into a new, positive era. MURR is unique and it is incumbent upon UMC administrators, MURR management, and MURR staff to seize their opportunities to make MURR the best research center possible. The most significant issue that needs to be addressed at MURR is communication. Communication issues are at the heart of all major concerns of the various regulatory bodies and this Assessment Team.

## Acknowledgement

The Assessment Team extends its appreciation to all the individuals that participated in our deliberations. We found the UMC and MURR management open to our suggestions and the MURR staff very open in expressing their concerns and hopes. The Center is a University and a national asset.