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## **Launching Total Quality Management in the Bureau of Mines: A Case Study**

**Quality Improvement Report:  
October 1990 Through  
September 1992**

**By Julie N. Walker and Sheri L. Harris**



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**Mission:** As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

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**UNITED STATES DEPARTMENT OF THE INTERIOR  
Manuel Lujan, Jr., Secretary**

**BUREAU OF MINES  
T S Ary, Director**

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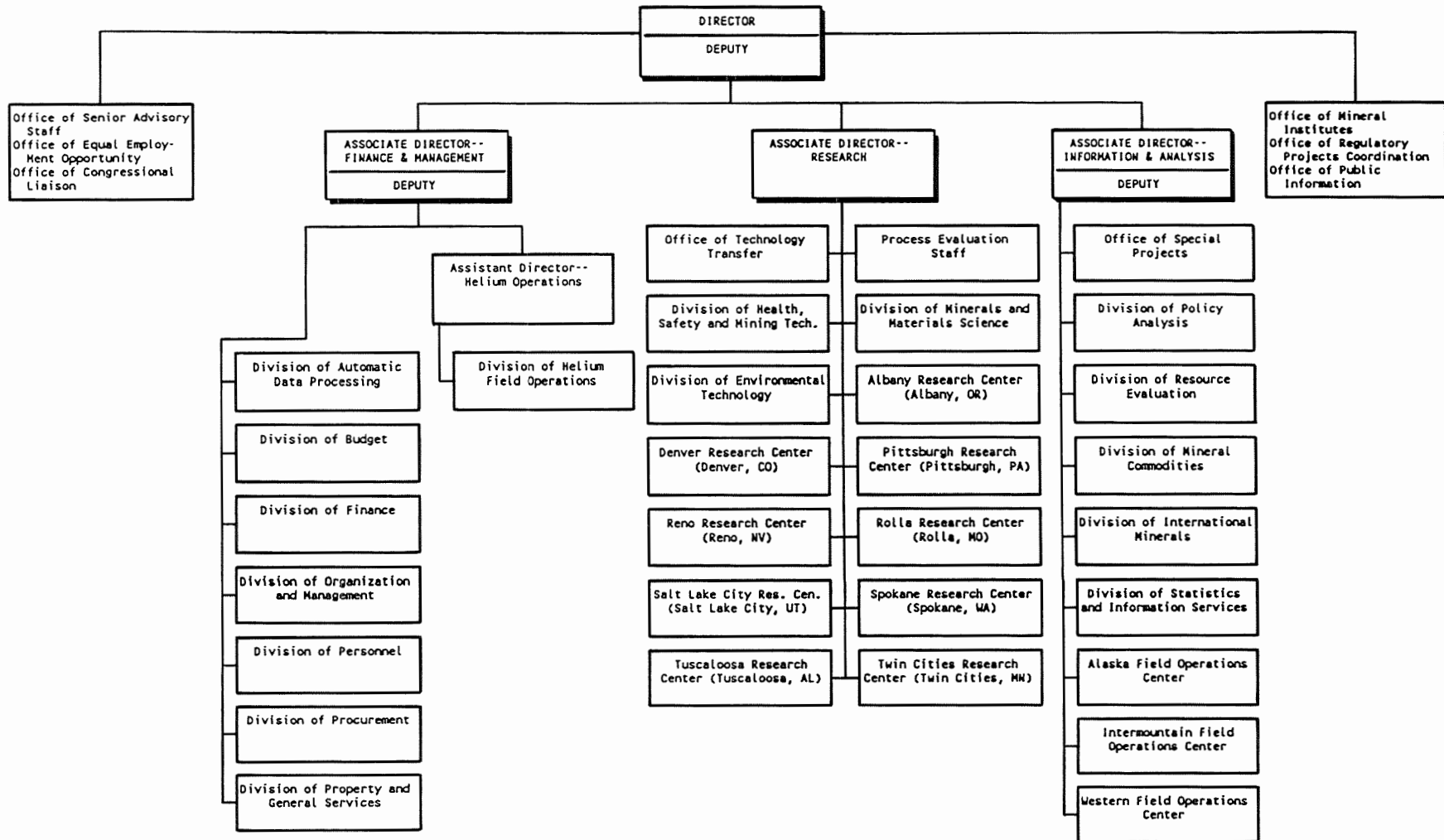
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# BUREAU OF MINES



# LAUNCHING TOTAL QUALITY MANAGEMENT IN THE BUREAU OF MINES: A CASE STUDY

Quality Improvement Report: October 1990 Through September 1992

By Julie N. Walker<sup>1</sup> and Sheri L. Harris<sup>2</sup>

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## ABSTRACT

This U.S. Bureau of Mines report reviews the first 2 years of the agency's progress in implementing total quality management (TQM), which the agency refers to as Quality Improvement (QI). All employees have been trained in basic TQM concepts, a cadre of facilitators has been selected and trained, and 13 Bureauwide teams are addressing specific issues that were identified by Bureau employees nationwide as problem areas. Also in place are a Quality Council composed of the Bureau's top executives, a Quality Management Board, and eight QI Working Groups to provide a national QI infrastructure. There are also Quality Steering Groups at each Bureau location nationwide to address local concerns.

In addition to the narrative text, the texts of salient memoranda and other documents are included as appendixes.

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## INTRODUCTION

Total Quality Management, or Quality Improvement as the Bureau of Mines calls it, has been defined as a "strategic, integrated management system for achieving customer satisfaction which involves all managers and employees and uses quantitative methods to continuously improve an organization's processes." Basically, it is a way of doing business that looks for constant improvement in the quality of service to the customer. All Quality Improvement plans and processes revolve around three important principles: achieving customer satisfaction, involving all employees, and making constant improvement.

Particularly from the perspective of customer satisfaction, quality in the Federal Government is an absolute must. As Secretary of Commerce Barbara Franklin put it at a national Federal TQM conference held in May 1992, quality is something every American taxpayer demands and deserves. And we, the public servants of the taxpayer, must deliver. The Federal Government is a multi-billion-dollar business and the largest component of the American service industry. By incorporating only a few principles of total quality management, the Federal Government stands to gain tremendously in terms of dollars saved and in the quality of products delivered.

Thankfully, the Government is not lagging behind in today's quest for a quality culture. Today, every major Department in the U.S. Government has some sort of Total Quality Management or Quality Improvement effort going. A Federal Quality Institute report in 1992 revealed that the number of inquiries from Federal Government agencies about Quality Improvement practices and concepts has doubled within the last 2 years. Three agencies of the Federal Government have been honored with the President's Award for Quality, including the latest winner for 1992, the Internal Revenue Service at Ogden, UT. (The President's Award is the Federal Government's equivalent to industry's prestigious Malcolm Baldrige Award.) Many other agencies have received Quality Improvement Prototype Awards for their early efforts to implement a quality program within their organizations. In short, the continuing journey toward improvement and striving for quality is being taken by many in the Federal Government.

The U.S. Bureau of Mines joined these other agencies when it embarked on its Quality Improvement journey in late 1990. Customer-driven goals are not new in concept to the Bureau, which has long recognized that its customers do indeed deserve quality service. Soon after the agency was formed in 1910, it was given the congressional

mandate to conduct investigations on mining, minerals processing, and mineral utilization with a clearly defined mission of improving the health and safety of mine workers and of conserving mineral resources. During its 82 years of operation, Bureau scientists and analysts have been working closely with customers in industry, in the Congress, and at other research and Government organizations to achieve this mission.

At present, the Bureau of Mines is comprised of about 2,550 employees, most of whom work at 9 research centers, 3 field centers, and the headquarters office. Its major efforts are directed at research to ensure a healthy, safe work environment for the industry, to develop new processes and techniques for making the minerals and mineral materials industry of the United States more competitive, and to make mining and minerals processing compatible with the environment. The Bureau also conducts studies to assess the minerals potential of public lands in the United States, to track trends in worldwide mineral production and use, and to evaluate the competitiveness of various U.S. industries in comparison with foreign mineral producers. The Quality Improvement process is being used as a tool to help Bureau employees achieve current objectives in the highest quality manner possible.

Already, the Bureau has seen some major accomplishments and successes in implementing and supporting a Quality Improvement culture. It has a new, clearer vision of where the agency should be in the future and of how it needs to conduct its business, and this vision has been communicated and understood throughout the agency, helping us to operate as "one" Bureau of Mines. Focusing on its customers as important, vital components of its business, it is asking these customers what their expectations of the Bureau are and how it can better serve their needs. The Bureau is also taking a hard look at its products and services and is striving to make quality its number one priority. Indeed, it is recommitted to delivering quality service to all those it serves.

As President George Bush said recently about the Government's Quality Improvement effort, "The improvement of quality in products and the improvement of quality in service—these are national priorities as never before." The Bureau of Mines is committed to supporting this national priority, and it is committed to providing uncompromising quality to its customers. This report offers a summary of the Bureau's history to date in its Quality Improvement journey along with a discussion of recent accomplishments, both tangible and intangible.

## ACKNOWLEDGMENTS

The authors are grateful to Robert E. Doyle, Jr., for reviewing the manuscript and supplying the material for the Guiding Principles and Lessons Learned sections; Mr. Doyle was a founding member of the Quality Council, and his insights were invaluable. Two members

of the Quality Management Board, Lewis V. Wade and Armond A. Sonnek, reviewed the manuscript technically; their assistance and encouragement are likewise appreciated.

## GUIDING PRINCIPLES

The Bureau of Mines undertook its Quality Improvement journey in a way radically different than that of other Bureaus within the Department of the Interior. As we look back, it is the guiding principles described below that characterize our QI effort and distinguish it from others, making it truly unique, certainly within the Interior Department, in its implementation.

### BUREAUWIDE APPROACH

Because of the value the Director placed on "One Bureau of Mines," the agency rejected the typical pilot approach and took the bold step of implementing QI Bureauwide. Despite the magnitude of the undertaking, the complexity of coordinating a Bureauwide effort, and the possibly enhanced opportunity for failure, if QI makes sense, then limiting its application to a pilot site would minimize rather than maximize its potential benefits. A Bureauwide approach would, it was decided, underscore the significance and value of functioning as one integrated organization pursuing a shared vision.

### BROAD EMPLOYEE INVOLVEMENT

Although many organizations within the Bureau were already practicing some of the principles of QI, they were at varying levels of understanding and sophistication. Therefore, another underlying principle of the Bureau's approach was to train all employees in the tenets of QI so they would all have a common understanding of the terminology, the concept, and its implementation, and an overall appreciation of what the Bureau was intending to accomplish with the introduction of this new way of conducting business. As a consequence, no Quality Improvement Teams were initiated until all employees had been trained, so that everyone would be given an equal opportunity to volunteer and to participate in the QI process.

### CROSS-SECTIONAL AND GEOGRAPHIC REPRESENTATION

For a Bureauwide approach to be most effective, it was felt that QI teams should comprise a cross section of the

workforce. Members of the Quality Management Board, Quality Working Groups, trainers, and facilitators were all representative of the Bureau of Mines workforce, both geographically and organizationally. Conscious efforts were made to mix teams and training classes so that a diversity of views from all segments of the workforce could be presented. Moreover, this approach offered an opportunity for Bureau employees to learn about how their own work related to that of their fellow employees. Notwithstanding the coordination, planning, and financial obstacles inherent in such an approach, the Quality Council felt strongly that such an approach was important to living the commitment to "One Bureau of Mines."

### SELF-TRAINING

A decision by the Quality Council was made early in the process that we would have a cadre of Bureau volunteers serve as trainers for our own people in the principles and practices of QI. At some risk, considering the nonprofessional trainers, the new subject matter, and that this was the agency's first effort at empowerment, the Bureau selected interested individuals not normally involved in training, but who volunteered because they wanted to be a part of the QI effort. As with the facilitators later, the groups represented a cross section of employees from all locations and a wide range of grade levels (from GS-5 to GM-15).

This experience represents one of our early successes with QI. It is one of our first examples of empowering employees and also demonstrated the personal value and benefit derived from the QI process. Not only did the group perform well and successfully complete the training, but the esprit de corps developed gave them a new sense of ownership and contribution to the future of the Bureau. Many of the trainers benefited in terms of their personal growth and professional development. Their success provided evidence that indeed the QI process can work.

## EVENTS OF 1990

Mandated by Secretary of the Interior Manuel Lujan, Jr., but appealing to many who had heard of its successes in industry and other Government agencies, total quality management was introduced to the Bureau of Mines in a November 23, 1990, memorandum from Director T S Ary. In introducing what the Bureau had decided to call the Quality Improvement (QI) Process, Director Ary stated:

. . . the world has become more complex and dynamic. Change is evident all around us. Both public and private sectors are experiencing intense competition for scarce resources and rising customer expectations for quality services and products. For our Bureau to prosper into the future, we must adapt and respond to these changes. We simply cannot rest on our reputation, but we must commit ourselves to continuously improve the way we do business.

To this end, we have embarked upon a process to help us improve the quality of our services and products. Importantly, this quality performance process will require your participation and involvement. Quality and meeting our customers' needs and

expectations the first time and every time, are everybody's business, managers and employees alike.

The full text of this memorandum is given in appendix A; other salient memoranda are reprinted in subsequent appendixes.

Director Ary did not come to work that November morning with the sudden inspiration that a Quality Improvement effort should be launched that day. The idea had been discussed at a Department of the Interior senior management retreat earlier that fall. The Federal Quality Institute, the Government's focal point for total quality management, had been contacted for assistance in setting up and implementing a quality improvement process for the Bureau of Mines.

The Federal Quality Institute made it clear from the beginning that launching a quality improvement effort would take time, and although it did not specifically quote the proverbial expression "the more haste, the less speed," the implication was certainly there. Also, the Christmas holidays were about to begin. In consequence, further action was deferred until early 1991.

## 1991 MANAGEMENT MEETING

### CONFERENCE PRELIMINARIES

On the first working day of 1991, Director Ary issued the agenda for a general management conference to be held January 29-31 in Gettysburg, PA. The covering memorandum noted that a major objective of the conference would be to formally introduce a Bureauwide Quality Management Program. The first two groups formed to help launch the quality improvement process were also announced at this time, as described in the following paragraphs.

#### QUALITY COUNCIL

The Quality Council was established to provide policy, executive leadership, and direction to quality improvement efforts by setting Bureauwide policy, goals, and strategy, and by providing resources required for all quality improvement activities. The membership, representing each Bureau Directorate, included T S Ary, Director, Bureau of Mines; Robert E. Doyle, Jr., Special Assistant to the Director; David S. Brown, Associate Director—Information and Analysis; David R. Forshey, Associate Director—Research; and Walter J. Lander, Associate Director—Finance and Management.

### QUALITY MANAGEMENT BOARD

The Quality Management Board was established to implement the quality improvement policy, goals, and strategies established by the Quality Council by (1) directing and coordinating the activities of Quality Working Groups created to address specific issues and/or problems, and (2) recommending, for approval by the Council, specific actions to be taken by various Bureau groups to meet quality improvement goals. Its members were chosen to represent a geographic mix of headquarters and field personnel across Directorates. Chartered to operate Bureauwide, the Board both reinforced the "one Bureau of Mines" concept and set a pattern that would be followed when the subsequent Quality Working Groups and Quality Improvement Teams were formed.

The initial membership, which was approved by the Quality Council, included Robert E. Doyle, Jr., Special Assistant to the Director; Robert S. Kaplan, Chief, Division of Minerals and Materials Science; Douglas D. Bolstad, Research Director, Spokane Research Center; Lewis V. Wade, Research Director, Twin Cities Research Center; and Edwin E. Maust, Jr., Chief, Division of Organization and Management. After the tragic death of Maust, shortly after the conference, he was replaced by

Acting Chief, Division of Organization and Management, Glenn C. Pritchard, and five additional members were named: Armond A. Sonnek, Assistant Director—Helium Operations; Carl H. Wallace, Chief, Branch of Personnel—Denver; L. Michael Kaas, Chief, Division of Resource Evaluation; Jacqueline S. Waitz, Management Officer, Information and Analysis; and Robert B. Hoekzema, Chief, Anchorage Branch, Alaska Field Operations Center.

Two weeks later, a followup memorandum to the management conference attendees introduced a binder of information about quality management principles and applications, which would be referenced by the Federal Quality Institute during its portion of the conference.

### HIGHLIGHTS OF THE CONFERENCE

The Bureau of Mines employee newsletter *Miner Details* had commissioned one of the conference attendees (Jon Stone, Chief, Minerals Availability Field Office) to report on the meeting. His account, which reached all Bureau of Mines employees, is reprinted below, and a synopsis distributed to the conference attendees appears as appendix B.

Senior Bureau management met in Gettysburg, PA, in late January. A major objective of the conference was the introduction of the Bureauwide quality improvement program. Guest speaker James Weathersbee of the Federal Quality Institute, a group of people on loan from Federal agencies that have implemented Total Quality Management (TQM), led a seminar addressing TQM Awareness.

Seminar participants reviewed and used techniques that will be utilized throughout the Bureau as TQM

is implemented. These techniques included identifying driving forces and barriers to the program. The importance of understanding the Bureau's customers and their needs and meeting those needs was stressed. Group-oriented, problem-solving techniques typically used in organizations employing TQM were employed. Case studies of implementing TQM in other Federal agencies, including the Forest Service, were highlighted.

Charles Kendig, quality officer for Xerox Corp., concluded the introduction to TQM. He stated that the company was near bankruptcy in the early 1980's when it initiated its program. Largely by focusing on meeting customer needs and using participative management to solve problems, Xerox has since emerged as a strong player in a very competitive marketplace.

An afternoon was devoted to the recent National Research Council report on "Competitiveness of the U.S. Minerals and Metals Industry." Using techniques commonly employed in TQM environments, the conference participants were divided into work groups to discuss options for a Bureau response.

Director T S Ary opened the final day of the conference with comments on where the Bureau has been and where it is going. He strongly indicated his commitment to "one Bureau of Mines" and the breaking down of communication barriers between organizations. He stated that we are "starting out on a long journey" with TQM but that he is convinced that it will be worth the work.

### THE EMPLOYEE QUESTIONNAIRE

The Federal Quality Institute had advised the Bureau of Mines that all employees should be invited to respond to a quality assessment survey designed to ascertain their perceptions of the Bureau. The survey contained 70 statements, and the employees were invited to indicate their views of the Bureau's culture by saying how strongly they agreed (or disagreed) with such statements as "People in the Bureau are aware of its overall mission," and "people in my work unit get the facts and the information they need to do a good job."

Responses were mailed directly to the Federal Quality Institute, which forwarded them to the Office of Personnel Management for tabulation and interpretation. At no point was there any chance that an individual response could be identified; in fact, a later objection was raised that confidentiality was protected to the point that the survey was less meaningful than it might otherwise have

been. For example, there was no way to distinguish views expressed at the headquarters activity from those elicited at various field facilities and thus provide a comparative analysis by location.

A summary of the results that was distributed to each employee on April 15, 1991, indicated that the Bureau had scored best in customer orientation and next best in strategic focus and workforce. Communications and leadership and management had the lowest scores. Seventy-four percent of Bureau employees had responded, which is considered extremely high for a survey of this type, reflecting employee interest and desire to improve Bureau operations. Although the full report of the survey was not distributed to each employee, it was made readily available to anyone who wished to peruse it; copies of the questionnaire and the summary of results appear as appendix C.

## THE FIRST QUALITY WORKING GROUPS AND THEIR 1991 ACTIVITIES

Participation in quality improvement began to move out of management circles following a March 7, 1991, memorandum to all employees (appendix D), which reported on the status of the QI effort to date and called for volunteers for four Quality Improvement Working Groups: Communications, Implementation, Training, and Vision. These groups were soon formed, and much of the remainder of the Bureau's QI story for 1991 is the story of their activities, as detailed in the following pages. Each working group was chaired by a member of the Quality Management Board.

### COMMUNICATIONS WORKING GROUP

Operating under the motto "Quality Improvement Begins With Communications," the Communications Working Group met six times in calendar 1991 and conducted additional business in several conference calls. Members were representative of Bureau organizations throughout the country and included David J. Askin, Branch of Procurement—Denver; Luis Coppa, Division of Resource Evaluation, Washington, DC; Sheri L. Harris, Office of Technology Transfer, Washington, DC; Belle L. Liebert, Pittsburgh Research Center; Matthew N. Plis, Intermountain Field Operations Center; Howard O. Poppleton, Albany Research Center; Lewis V. Wade (chairperson), Twin Cities Research Center; and Julie N. Walker, Office of Public Information, Washington, DC.

Recognizing that the communications area had not scored particularly well on the employee questionnaire, the working group has striven from the beginning to create an atmosphere whereby communications are freely and openly supplied, reliable, welcome, and eagerly anticipated. The focus in 1991 was on written communication on QI matters, but other media, such as video and a slide show, were employed as needed. To a limited extent, the working group addressed other Bureau communication issues; for example, a Bureauwide survey was conducted to determine how quickly information reached various headquarters offices and field locations.

Newsworthy items about QI were featured in the Bureau's bimonthly employee newsletter *Miner Details*, and the working group launched a QI-oriented newsletter, *Daybreak*, which appears in the alternate months, thus providing employees with a continuous flow of information on QI matters. Both newsletters rely heavily on employee contributions, thus affording a wide variety of contributors a chance to be heard.

The working group participated in authoring many of the memoranda needed as the QI effort got fully under way during 1991, and assisted other working groups in their communications efforts. The videotape of Director

Ary used to launch most training sessions was scripted at the working group's third meeting, and a prototype was made with assistance from staff at the Twin Cities Research Center. Later, a Washington office member of the group oversaw production of the actual tape at the U.S. Department of the Interior.

In connection with its meetings, the working group visited Government agencies in the vicinity that had a total quality management program well under way, acquiring a body of ideas for possible later implementation at the Bureau of Mines. A delegation from the group attended the National Quality Month Symposium, held at NASA's Goddard Space Center, Beltsville, MD, in October 1991, where additional insights were gained.

Also in connection with its meetings, the group conducted seminars with employees at the Albany Research Center, which were very effective at eliciting employee concerns during the earlier stages of QI. At a later meeting at the Pittsburgh Research Center, a slide show was presented to supervisory personnel detailing the progress of QI to date; this was so successful that a repeat performance was requested the following day for those who had been unable to attend the original showing.

At the request of the Director, the Communications Working Group reviewed suggestion programs in effect at other agencies with a view to possible applications at the Bureau of Mines. Subsequently, this assignment became the subject of a Quality Improvement Team (QIT). A member of the Communications Working Group prepared a set of recommendations, based on the group's research, to assist the QIT in its efforts.

### IMPLEMENTATION WORKING GROUP

Charged with developing an overall strategy for the Quality Improvement activity within the Bureau of Mines, the Implementation Working Group was composed of Sara A. Dillich, Division of Minerals and Materials Science, Washington, DC; Mark E. Heck, Pittsburgh Research Center; Robert S. Kaplan, Division of Minerals and Materials Science, Washington, DC (co-chair); Michael J. McKinley, Division of Statistics and Information Services, Washington, DC; Richard J. Thompson, Western Field Operations Center; Ivette E. Torres, Division of International Minerals, Washington, DC; Carl H. Wallace, Branch of Personnel—Denver (co-chair); and Barbara J. Yano, Division of Property and General Services, Washington, DC.

The implementation plan developed by the group and distributed to principal officials Bureauwide on November 25, 1991, was summarized in the January 1992 issue of *Daybreak*, the Bureau's QI newsletter, and thus made

available to all employees. Following are the major tasks as highlighted in the *Daybreak* summary:

Completion of employee awareness orientation.

Communication of the Implementation Plan to employees through line managers throughout the Bureau.

Solicitation and selection of volunteers to be facilitators.

Solicitation and selection of Bureauwide quality improvement problems and issues that will serve as the basis for several Quality Improvement Team topics.

Chartering of the first Bureauwide Quality Improvement Teams.

Training facilitators.

Establishing Barriers, Customers, Standards and Measurements, and Rewards/Recognition Quality Working Groups.

Assessing/reassessing program to track changes in the Bureau's "quality culture," assessing performance of the Quality Improvement plan, and appraising the success of the Quality Improvement Teams.

The full text of the Implementation Plan appears as appendix E, along with the covering memorandum.

Although the Implementation Working Group's planning was completed in 1991, most of the plans were carried out in 1992 and are described more fully later. As a final act, the Implementation Working Group was dissolved following completion of its planning tasks and replaced in 1992 by the Operations Working Group directly, and indirectly by a number of new working groups and Quality Improvement Teams.

### TRAINING WORKING GROUP

Because it was considered vital that all Bureau of Mines employees receive at least an orientation to Quality Improvement before implementation of QI got under way, the Training Working Group had a very busy year in 1991. Members included Sandra T. Absalom, Division of Statistics and Information Services, Washington, DC; Douglas D. Bolstad, Spokane Research Center (chair); Peter G. Chamberlain, Division of Health, Safety, and Mining Technology, Washington, DC; Sheryl L. Grey, Twin Cities Research Center; Joyce A. Mason, Division of Organization and Management, Washington, DC; Margaret Thomas, Division of Personnel, Washington, DC; Evelyn L. Whiteley, Division of Finance, Denver; and Bradford B. Williams, Intermountain Field Operations Center.

The first chore was to train a group of "awareness orienting" teams, which was done the week of July 22-26 at the Xerox International Center for Management and Training Development in Leesburg, VA. McManis Associates, Inc., the outside contractor enlisted by the Bureau to

help formulate and facilitate QI startup, conducted the training. The 24 trainee trainers went on to form 11 teams, which conducted QI orientation sessions nationwide for their fellow employees. These trainers, most of whom volunteered for the task, represented a cross section of the Bureau both organizationally and geographically; included were Marlene D. Ackman, Selena Billington, Peter G. Chamberlain, Andrea E. Clark, Donald R. Clarke, Elaine T. Cullen, Richard A. Dick, Beverly J. Flori, Jeffrey Y. Foley, Dennis W. Hinnah, Bradley Johnson, Maraline J. Keeling, Max C. Lewis, Eileen M. Martin, Joyce A. Mason, Louis A. Mauney, Clark Neuharth, Judith F. Owens, Thomas Phillips, Clark A. Roberts, Barbara A. White, Evelyn L. Whiteley, Gary M. Wilemon, and Nicholas T. Zilka.

The Training Working Group also arranged for the printing of the notebooks provided to each participant in the Bureauwide training sessions and provided the overheads and videos used during the Orientation sessions.

The original goal had been to have all employees receive general QI training by the end of fiscal year 1991; although this slipped a little, it was met very soon thereafter. At yearend 1991, therefore, only one more training job remained before the Bureau would be ready to actually implement QI. This was to train a group of 50 facilitators, who would work with the Quality Improvement Teams when they were formed to help them reach their objectives effectively. Arrangements for this facilitator training were made in 1991, again with McManis, and the training itself was conducted in January 1992.

A challenge to traditional ways of doing business, the 1991 training activities are widely regarded as one of the Bureau's first truly successful QI efforts. The trainers comprised a true cross section of Bureau employees, geographically, organizationally, and even in terms of their Government grades. The training sessions provided an opportunity for lower level employees to be heard, and they offered excellent ideas as well as a different perspective. New networks were established and sustained among the trainers, and both trainers and trainees emerged with a greater awareness of the Bureau of Mines, its mission, and its people, together with a greater appreciation of how their work impacts others in the Bureau.

### VISION WORKING GROUP

The Vision Working Group had the unique task of developing the language that would describe the Bureau's vision, mission, and values. Members included Ronald F. Balazik, Division of Mineral Commodities, Washington, DC; L. Michael Kaas, Division of Resource Evaluation, Washington, DC (chair); Sandra L. McGill, Reno Research Center; John N. Murphy, Pittsburgh Research Center; Thomas Phillips, Division of Minerals and

Materials Science, Washington, DC; Gary C. Reisner, Division of Budget, Washington, DC; and James Ridenour, Western Field Operations Center.

Constrained to work in a time frame that would allow the three statements to be published in the training materials to be distributed during the all-employee orientations being arranged by the Training Working Group, the Vision Working Group conceived the motto "Minerals and More . . ." for the Bureau as a whole. For the statements themselves, they came up with the following language:

#### **USBM Vision**

We will champion the importance of minerals and materials to ensure a strong, competitive America through—

- Cutting-edge technologies
- Balanced government policies
- An enlightened citizenry
- Applying our expertise to other national purposes
- A total commitment to quality

#### **USBM Mission**

Our mission is to help ensure our country has an adequate, dependable supply of minerals and materials to

meet its national security and economic needs at acceptable social, environmental, and economic costs.

We do this by promoting and encouraging private enterprise in the development of viable and stable mineral industries through the transfer of innovative extraction, processing, recycling, and environmental technologies; our use of cooperative partnerships with industry, academia, and government; our timely, authoritative worldwide mineral intelligence; our advocacy of public policies based on good science and sound economics.

#### **USBM Values**

We value the ability and potential of each member of the Bureau team.

We take pride in our products and services and are committed to their constant improvement.

We are committed to satisfying the people we serve.

We serve the public with integrity, professionalism, and social responsibility.

We believe that innovation is essential to our success.

## **IMPLEMENTING QUALITY IMPROVEMENT**

So much was going on at the QI front as 1992 dawned that there are numerous perspectives from which to recount the history of the second year's activities. For the sake of continuity, this account describes the new working groups set up at that time and then proceeds to the host of new QI activities that are now underway.

#### **BARRIERS WORKING GROUP**

Established in February 1992, this group was to identify barriers to change in the Bureau of Mines and barriers to the implementation or advancement of Quality Improvement in the Bureau. Barriers identified by Bureau employees in the agencywide survey and during the orientation training sessions received prime consideration by the group. Results of the group's efforts will be used by the Quality Management Board in selecting and prioritizing subjects to be addressed by Bureauwide Quality Improvement Teams. Members were David E. Cornelius, Helium Field Operations; Gladys F. Cottle, Spokane Research Center; Annette P. Graham, Division of Policy Analysis, Washington, DC; Khamis Y. Haramy, Denver Research Center; Maylene E. Hubbard, State Activities, Tuscaloosa; Jacqueline H. Jansky, Pittsburgh Research

Center; Clara W. Jones, Research, Washington, DC; George R. Schottler, Intermountain Field Operations Center; Jacqueline S. Waitz, Information and Analysis, Washington, DC (chair); and Patricia M. Williams, Division of Personnel, Washington, DC.

#### **CUSTOMERS WORKING GROUP**

This working group was established at yearend 1991 to identify primary Bureau customers, i.e., those most important to the realization of the Bureau's mission, vision, and long-term viability. An important starting point was the customers identified during the all-employee orientation training. It was anticipated that this group would lay the groundwork for future Bureauwide strategic planning. Members included Elaine T. Cullen, Spokane Research Center; Robert B. Hoekzema, Western Field Operations Center (chair); Garrett R. Hyde, Division of Minerals and Materials Science, Washington, DC; Darlene Leftridge, Information and Analysis, Washington, DC; Christopher Mark, Pittsburgh Research Center; James J. Olson, Twin Cities Research Center; Joseph L. Ritchey, Western Field Operations Center; and Robin Winston, Branch of Personnel—Denver.

## OPERATIONS WORKING GROUP

Established at yearend 1991, this group replaced the Implementation Working Group, which dissolved at this time. The group got off to a flying start, addressing such diverse matters as facilitator use, procedures for handling new Bureauwide Quality Improvement Opportunities, underutilized QI volunteers, and strategic planning. Members included Marlene D. Ackman, Pittsburgh Research Center; Donald W. Baggs, Alaska Field Operations Center; Barbara A. Cook, Office of Public Information, Washington, DC; Kathleen M. Kovalesky, Western Field Operations Center; Richard E. Siemens, Reno Research Center; Lewis V. Wade, Twin Cities Research Center (co-chair); Carl H. Wallace, Branch of Personnel—Denver (co-chair); and Darlene F. Wilson, Branch of Procurement—Denver.

## REWARDS AND RECOGNITION WORKING GROUP

This working group was established at yearend 1991 to study the existing Performance Management System (PMS) in the Bureau, the Incentive Awards program, and delegations of authority for rewarding and recognizing employees. The group was also to recommend an integrated system for rewarding and recognizing employee contributions to QI. Members included Douglas D. Bolstad, Spokane Research Center (co-chair); Joseph R. Brown, Branch of Property and General Services—Denver;

Edmond Chin, Division of International Minerals, Washington, DC; Sidney O. Newman, Division of Health, Safety, and Mining Technology, Washington, DC; Karen A. Niezgod, Pittsburgh Research Center; John L. Sznopak, Minerals Availability Field Office; Timothy R. Spisak, Helium Field Operations; and Carl H. Wallace, Branch of Personnel—Denver (co-chair).

## STANDARDS AND MEASUREMENTS WORKING GROUP

Established at yearend 1991, this group was to investigate and recommend measurement techniques and the development of standards for use by the Quality Improvement Teams as they conduct their work. Members were Leon E. Esparza, Twin Cities Research Center; Darrell Esprit, Pittsburgh Research Center; Elizabeth A. Hardy, Division of Resource Evaluation, Washington, DC; Kenneth E. Hay, Spokane Research Center; Gwendolyn D. Hood, Tuscaloosa Research Center; Robert S. Kaplan, Division of Minerals and Materials Science, Washington, DC (co-chair); Jacqueline McClaskey, Division of Statistics and Information Services, Washington, DC; Glenn C. Pritchard, Division of Organization and Management, Washington, DC (co-chair); Rajeshwar Swarup, Office of Process Evaluation, Washington, DC; and Mark M. Toughiry, Helium Field Operations.

Summaries of these groups' activities in 1992 appear later, along with accounts of the 1992 activities of the Communications, Training, and Vision Working Groups.

## FINDING AND TRAINING 50 FACILITATORS

The actual work needed to improve quality in various areas was to be done by Quality Improvement Teams. For these teams to function effectively, the Bureau had followed the advice of the Federal Quality Institute and selected from a group of Bureau volunteers a cadre of facilitators to be trained in techniques that would help the teams in their efforts to solve the Quality Improvement Opportunities presented to them.

The first step toward selecting these facilitators was taken on November 25, 1991, when Director Ary signed a memorandum on the dual subject of "Implementation of Quality Improvement/Call for Facilitators" (appendix E). The Director noted that each Bureau location nationwide would be allocated 1 facilitator for approximately each 50 employees.

Although the memorandum expressed the hope that the facilitators would be volunteers, it urged "that the

individual desires of our employees and the advantages to the Bureau of each selection be weighed carefully." To assist in this weighing, a list of selection criteria was provided: Credibility and respect in organization; ability to relate to people at all levels; ability to coach, nurture, be a mentor; enthusiasm for and desire to do a quality job; ability to plan, organize, and complete tasks in a timely manner; communication skills; interpersonal relationship skills; impartiality/fairness. Commitment to the QI process was essential; grade was not to be considered a factor.

The 50 facilitators ultimately selected represented a cross section of grade levels and disciplines. They received a week of training, again provided by McManis Associates, at the Ramada Renaissance in Herndon, VA. The training focused on problem solving and managing team dynamics and was characterized as an exciting and energetic week from which the facilitators emerged as ambassadors for Quality Improvement.

The following list of facilitators and their locations is adapted from a listing that appeared in the January 1992 *Daybreak*:

### RESEARCH

**Albany, OR:** Arnold Adams, Hedwig E. Maupin, Darlene A. Schaffer

**Denver, CO:** R. Lindsay Mundell, Jennifer S. Riefenberg

**Pittsburgh, PA:** Rita Y. Baileys, Dianna L. Baumann, Andrew B. Cecala, Ronald S. Conti, Alan G. Mayton, John J. McClelland, Cynthia A. Mytrysak; alternates Linda Chasko and Robert H. Peters

**Reno, NV:** Anne P. Desmond, Russell B. Dix

**Rolla, MO:** Freddy W. Benn, Sheryl A. Parker

**Salt Lake City, UT:** Allan E. Petersen, Judith A. Price

**Spokane, WA:** Nadine R. Hawley, John C. Kerkering

**Tuscaloosa, AL:** Sandeep K. Sharma, Gary M. Wilemon

**Twin Cities, MN:** Ann M. Carigiet, Leon E. Esparza, Bruce D. Hanson, Daniel Millenacker; alternate Stephen A. Swan

**Washington, DC:** Carla H. Kertis, Michael J. Magyar

### INFORMATION AND ANALYSIS

**Denver, CO:** Thomas G. Goonan (MAFO), Barbara J. Hite (IFOC); alternate Terry J. Kreidler (IFOC)

**Juneau, AK:** Kenneth M. Maas

**Spokane, WA:** Burton B. Gosling, Andrew M. Leszykowski

**Washington, DC:** Anthony V. Cammarota, Joseph C. Daniels, Daniel L. Edelstein, Thomas M. Gunther, Barbara A. White

### FINANCE AND MANAGEMENT

**Amarillo, TX, and vicinity:** Billie E. Barker, Jr., Patti M. Bonner, John W. Hermes, John C. Litchfield, Connie H. Neely

**Denver, CO:** Susan Burita, Linden E. Snyder

**Washington, DC:** Joyce A. Mason, Thomas H. McKean

### OFFICE OF THE DIRECTOR

**Denver, CO:** Mary Ann Vasquez, Equal Employment Opportunity (EEO)

**Pittsburgh, PA:** Debra K. Wesolowski (EEO)

**Washington, DC:** David A. Quick, Office of Public Information

## 1992 MANAGEMENT MEETING

About the time the facilitators were being trained, the 1992 Management Meeting was held, this time in Washington, DC. Not surprisingly, much attention was given to Quality Improvement at the meeting; the following account by participant Robert E. Doyle, Jr., is reprinted from the March 1992 issue of *Daybreak*.

During the last week of January the Bureau's senior management team met to reaffirm their commitment to Quality Improvement. They discussed the development of a process for strategic planning that builds on the vision and mission of the Bureau and provides more definitive programmatic guidance for the next 5 to 10 years. The team reviewed QI's progress and the more important activities scheduled to occur over the next several months.

Since QI was first introduced in the fall of 1990, much has been accomplished in the planning and preparation of the work force for this new way of conducting business. An implementation strategy was developed to guide our efforts in addressing such important matters as vision, communications, training, standards and measures, rewards, etc. One of our underlying QI objectives is to foster broad employee participation in the QI process, and indeed since its introduction more than 140 different employees have been involved as trainers, facilitators, and Quality Working Group members. In the months ahead broader employee participation is expected as local Quality Steering Groups are formed and Quality Improvement Teams [are] initiated to begin focusing on some of the . . . 180 improvement opportunities identified by Bureau employees.

Integral to the QI process is the formulation of a strategic plan. QI provides the framework for addressing fundamental management questions dealing with the vision and mission of the Bureau, its customers, our current programs, and the future role of the Bureau in the changing world environment. An outside panel of Bureau customers was invited and provided candid comments on the Bureau's role in meeting their needs and expectations. The frank and enlightening dialogue was a good opportunity for managers to collectively hear how others view our products, services, and . . . ability to respond to their changing needs.

After 3 days of discussion and collaboration, the managers agreed upon a process for the development of a strategic plan. A commitment was made to undertake this process and issue a written plan during 1992. At the conclusion of the conference the Quality Management Board was tasked with developing guidance for a Bureau-wide strategic plan. A draft plan is expected to be developed by the end of June, and a final document [to be] available by late fall to serve as an effective underpinning for the next budget cycle.

## SELECTING THE QUALITY IMPROVEMENT OPPORTUNITIES

As 1991 drew to a close, Bureau employees throughout the country were asking what would happen next—specifically, when would QI actually go into action. On December 17, their question was answered by a memorandum from the Director to each employee Bureauwide that asked for opportunities, issues, and problems that could be addressed by Bureau of Mines Quality Improvement Teams (appendix F). These ideas were to be sent to the Chairman of the Quality Management Board by January 21, 1992.

The Quality Management Board received 180 potential QI opportunities and reviewed them in early February 1992. Thirteen Bureauwide topics were selected to receive initial attention, and this selection was approved by the Quality Council on February 13. A February 26, 1992, memorandum to all employees from the Chairman of the Quality Management Board (appendix G) explained in detail what had been done with all the suggested opportunities. For example, 29 had been identified to be of concern to specific Directorates, and 22 as being unique to geographic locations or offices; these 51 opportunities were

referred back to local organizations for appropriate QI consideration. Another 20 submissions were forwarded to existing Working Groups active on the subjects suggested.

Among the 109 suggested opportunities that were judged to be of Bureauwide significance, there was enough overlap that combining them was in order, and the Quality Management Board had emerged with a total of 38 Bureauwide opportunities; 13 of these were selected as the ones that would be addressed by the Bureau's first Quality Improvement Teams. The 13 were chosen based on (1) their urgency, impact, measurability, and persistence and (2) considerations of possible early success, internal-external customer balance, feasibility-resource availability, and that implementation of the Teams' recommendations would be within Bureau control.

The memorandum also encouraged employees to continue submitting ideas and potential QI opportunities. Although the employees were encouraged to submit their ideas to local Quality Steering Groups for review and prioritization, they were welcome to submit them directly to the Quality Management Board instead.

## FORMING THE QUALITY IMPROVEMENT TEAMS

Two weeks after the announcement of the Bureauwide Quality Improvement Opportunities, the Chairman of the Quality Management Board issued a memorandum calling for volunteers for the Quality Improvement Teams that would address the 13 topics that had been selected for initial attention. The memorandum gave the name, location, and phone number of an "initiator" for each team; in most cases, this was the person who had originally submitted the topic. The initiators would be responsible for selecting the members of the team, mostly from the volunteer responses, for arranging for 2 of the 50 facilitators to assist the team, and for scheduling the team's

initial meeting. The team itself was to decide upon its subsequent leader.

The 13 teams and their topics are profiled in the following paragraphs; a memorandum to the initiators giving guidelines for starting the teams appears as appendix H. Each team interfaces with a specific member of the Quality Management Board; these members are noted in the profiles, as are the facilitators for each team. In general, team compositions represent a cross section of Bureau of Mines locations and activities; the codes used to identify the various facilities are explained in appendix I.

### ADP (NOW IRM) EQUIPMENT ACQUISITION

**Opportunity:** Employees of the Bureau of Mines often feel limited in their ability to carry out their programs in a timely fashion because of the approval processes associated with certain activities, in particular the acquisition of ADP-related items. The focus of this team is to study current practices and, where appropriate, make recommendations for improving the ADP approval process. The team later chose a name that covered all ADP-related items (hardware, software, and services) and is now the IRM (Information Resources Management) Acquisitions QIT.

**Team:** David W. Lockard, WFOC; J. Roger Loebenstein, WDC Division of Mineral Commodities; Larry E. Oelschlager, Denver ADP; Jeffrey Osmint, WDC Division of Statistics and Information Services; Michael E. Salovich, TCRC; Rose E. Valeiro, MAFO; Darlene F. Wilson, Denver Procurement. The initiator, Charles T. Hillman, WFOC, was unable to continue as a member of the team. The team has decided to rotate the leadership quarterly, by alphabetical order of last names of team members.

**Facilitators:** Thomas G. Goonan, MAFO; Burton B. Gosling, WFOC.

**Board contact:** Lewis V. Wade, TCRC.

### ALTERNATE PERFORMANCE EVALUATION SYSTEMS

**Opportunity:** The Bureau's performance management system, including the GWF and PMRS individual performance appraisal processes, is believed to be unfair and discouraging. It is also perceived as complicated, time consuming to administer, paper intensive, and often inconsistently applied. It is criticized as ineffective in holding employees accountable for poor performance and as not providing for equitable superior performance recognition. The need for group performance appraisal and recognition in our QI environment is not addressed by the current system. The PMRS should be an effective, credible process for appraising individual and group performance and provide a fair, consistent basis for rewards as well as the correction of performance problems. It must also meet the minimum requirements set forth in law and regulation.

**Team:** LaRae G. Burnett-Hennek, SLRC; Maria I. DeRosa, PRC; Rena I. Geroyan, IFOC; Kenneth E. Hay, SRC; Zareh Mozian, WDC Division of Mineral

Commodities; R. Lindsay Mundell, DRC; Howard O. Poppleton (initiator), ALRC; Bert R. Staples, ALRC. This team has decided to rotate its leadership at each face-to-face meeting.

**Facilitators:** Arnold Adams, ALRC; Gary M. Wilemon, TURC.

**Board contact:** Carl H. Wallace, Denver Personnel.

### CAREER DEVELOPMENT

**Opportunity:** Quality Improvement in the Bureau of Mines can be most effective when the vast potential of its employees is utilized. Training, counseling, and leadership can help maximize the development of individuals and teams and open up career opportunities. The Bureau's Individual Development Plan (IDP) process is a tool that has not yet fully realized its potential in linking organizational needs to individual development. The goal of the QIT in this area is to identify areas where the Bureau's employee development process can be improved and recommend changes that if implemented will make it a better process.

**Team:** Max C. Lewis (initiator and co-leader), ALRC; Linda Alderdice, TCRC; Anne M. Allen, AFOC/A; Joyce K. Durrant, SRC; Barlane R. Eichbaum (co-leader), RERC; David Izon, WDC Division of International Minerals.

**Facilitators:** Cynthia A. Mytrysak, PRC; Darlene S. Schaffer, ALRC.

**Board contact:** Douglas D. Bolstad, SRC.

### CORRESPONDENCE ERRORS

**Opportunity:** This Opportunity pertains to three primary areas of concern: (1) the need for better (more realistic) correspondence review procedures, especially those procedures involving the Director's correspondence, (2) the need for better (less duplicative) coordination of correspondence requested of the field by headquarters, and (3) the need to better track the movement of correspondence through the Bureau. Satisfactory resolution of these problems will minimize the duplication of correspondence-related work, enhance secretarial and supervisory morale, create more timely and cost-effective approaches toward doing business, and cultivate more efficient and effective work processes.

**Team:** William O. Stewart (initiator), WDC Division of Health, Safety, and Mining Technology; Karla D. Basante, WDC Directorate of Information and Analysis; John R. M. Hill, SRC; Eileen M. Martin, PRC; Ann L. Potter, WDC Directorate of Finance and Management; Jean L. Rau, DRC; Delores A. Stancil, WDC Directorate of Information and Analysis; Jacquennette J. Tate-Thomas, WDC Division of Health, Safety, and Mining Technology. This team has decided to rotate its leadership.

**Facilitators:** Carla A. Kertis, WDC Division of Health, Safety, and Mining Technology; David A. Quick, WDC Office of Public Information.

**Board contact:** Glenn C. Pritchard, WDC Division of Organization and Management.

### IDENTIFICATION AND DEVELOPMENT OF NEW MANAGERS

**Opportunity:** To identify current methods used within the Bureau of Mines to select and develop managers, to compare current practices with other potential methods, and to recommend to management the most effective and equitable practices. To identify methods for selecting and developing new supervisors and managers for the Bureau of Mines that will enable our organization to advance more effectively along the path toward excellence.

**Team:** Keith L. Harris (leader), WDC Division of Statistics and Information Services; Harry F. Brooks, ALRC; Barbara M. Carrico, WDC Division of Statistics and Information Services; Margaret A. Dixon, PRC Personnel; Catherine C. Kilgore, MAFO; Eddie Martin (initiator), TURC; William B. Schmidt, WDC Division of Environmental Technology; Theodore L. Triplett, TCRC; Patricia M. Williams, WDC Personnel; Preston E. Wilson, DRC.

**Facilitators:** Barbara J. Hite, IFOC; Mary Ann Vasquez, Denver EEO.

**Board contact:** Robert S. Kaplan, WDC Division of Minerals and Materials Science.

### IMPROVED COMMUNITY OUTREACH

**Opportunity:** The Community Outreach Quality Improvement Team will review the existing procedures used by the Bureau to select and implement Outreach activities and will provide recommendations to the Quality Management Board for improving the efficiency and responsiveness of the Bureau's Outreach process.

**Team:** Elaine T. Cullen (initiator and leader), SRC; Charles B. Daellenbach, ALRC; Charles F. Davidson, SLRC; Stephen A. O'Hare, ALRC; Bobby J. Railey, WDC Office of Public Information; Karen S. Radcliffe, TCRC; David C. Scott, IFOC; Gary M. Wilemon, TURC; Joan H. Williams, ALRC; Daniel S. Witkowsky, MAFO.

**Facilitators:** Susan A. Compton, Denver Finance; Barbara A. White, WDC Division of Policy Analysis.

**Board contact:** Robert B. Hoekzema, WFOC.

### NEW EMPLOYEE ORIENTATION

**Opportunity:** This team will examine the practices used throughout the Bureau to orient new employees. Both successful and unsuccessful methods should be evaluated. Orientation techniques in other agencies and in industry can also be explored. The team will recommend ways by which new employees can most effectively and efficiently be made aware of the role of the Bureau, the full scope of its programs, its history and culture, and its customers.

**Team:** Steven A. Fechner (initiator), AFOC/A; Karen J. Agvilar, TURC; Martin J. Campbell, ALRC; Joseph A. Gilchrist, PRC; Michael J. Gobla, IFOC; L. Jeanne McCubbin, HFO; Theresa V. Savoy, WDC Personnel; Florence L. Wilder, WFOC. This team has decided to rotate its leadership.

**Facilitators:** Russell B. Dix, RERC; R. Lindsay Mundell, DRC.

**Board contact:** L. Michael Kaas, WDC Division of Resource Evaluation.

### PAYCHECK PROCESS

**Opportunity:** The Bureau offers its employees a number of alternative methods by which they can receive their pay. These include direct deposit in a financial institution, receipt of a check at work, and receipt of a check at home through the U.S. Mail. Although most people are motivated by a variety of factors in addition to pay, pay problems (either late arrival of a paycheck or incorrect direct deposit) can result in considerable demotivation for an employee. Efforts to resolve individual pay problems also can result in significant amounts of time being diverted from activities more directly supporting the Bureau's mission. This team will explore the following issues: (1) What is the scope and effect of pay-related problems experienced at each Bureau location? (2) Can improvements be made to the process, including mailing,

to ensure that pay is accurate and timely? (3) Can local authority to deal with nonreceipt or late receipt of pay be enhanced?

**Team:** Dorothy L. Cornelius (leader), WDC Personnel; Barbara L. Herforth, PRC; Marci A. McCorkle, PRC; Teresa L. Miller, ALRC; Pauline F. Smith, Denver Finance; Judith A. Woodland, WDC Division of Policy Analysis. The initiator, Mark Heck, PRC, transferred to another agency and thus did not continue as a member of the team.

**Facilitators:** Ronald S. Conti, PRC; Daniel Millenacker, TCRC.

**Board contact:** Robert E. Doyle, Jr., WDC Research.

#### **QI INDIVIDUAL PERFORMANCE AND RECOGNITION (NOW EVALUATION AND RECOGNITION FOR QI ACTIVITIES)**

**Opportunity:** As the Bureau begins its QI journey, volunteers are participating in various aspects such as facilitators, team members, etc. In addition, as QI evolves into all aspects of normal programmatic work, employees' performance will have to be defined and measured in broader terms. The goal of this QIT is to identify mechanisms whereby individual efforts in QI are promoted, recognized, and fairly evaluated.

**Team:** Thomas W. Henry, Sr. (initiator and leader), ALRC; Richard B. Grabowski, WFOC; Debora L. Knoch, TCRC; Melba R. McKinney, ALRC; Patricia J. Pitkin, Denver EEO; Espiridion G. Valdez, RERC.

**Facilitators:** Dianna L. Baumann, PRC; Jennifer S. Riefenberg, DRC.

**Board contact:** Douglas D. Bolstad, SRC.

#### **SUGGESTION PROGRAM**

**Opportunity:** The Bureau's process by which employee suggestions are initiated, reviewed, implemented, and rewarded is inefficient, ineffective, and lacking in credibility. Furthermore, the existing suggestion program appears to conflict with the Quality Improvement Opportunity initiation process. The suggestion process should be easy for employees and managers to use, provide for fair, rapid disposition of suggestions, and be seen as a complement to Quality Improvement processes.

**Team:** Rosemary C. Geier (leader), TCRC; Donald R. Clarke, MAFO; John P. Dunford, SRC; Shonta E. Osborne, WDC Division of Statistics and Information Services; Joseph B. Peterson, TURC; Robert Topoleski, PRC; Thomas R. Whittleton, WDC Office of the Director; Michele Wiggins, WDC Personnel. The initiator, Michael S. Miller, WFOC, was unable to continue as a member of the team.

**Facilitators:** Bruce D. Hanson, TCRC; Nadine R. Hawley, SRC.

**Board contact:** Carl H. Wallace, Denver Personnel.

#### **TIMEKEEPING PERSONPOWER**

**Opportunity:** The present manual system for preparation and correction of time and attendance reports is both cumbersome and costly. Excessive hours are needed in the daily checking and compilation of hours worked. In addition, time and attendance records must be finalized and forwarded to payroll prior to the end of the pay period. Thus, corrected time and attendance sheets are the norm rather than the exception. Significant hours and costs are incurred in this duplicative process.

**Team:** William C. Larson (initiator and co-leader), TCRC; Jeanne M. Davis, Denver Finance; Anthony Dinatale, WFOC; De Etta M. Hannaman, TCRC; Deborah A. Lowanse, PRC; Sally J. Stephenson, Pittsburgh State Activities; Joy M. Tonecha, PRC; David A. Vogeler (co-leader), RORC; Sandi A. Wikstrom, TCRC.

**Facilitator:** Ann M. Carigiet, TCRC.

**Board contact:** Armond A. Sonnek, WDC Finance and Management (Helium).

#### **TIMELINESS/QUALITY OF PUBLICATIONS**

**Opportunity:** This team will examine the publication processes used in the Bureau and recommend ways to improve timeliness and quality. Many problem areas and suggestions for improvement have been submitted during the QI opportunity identification process. These range from eliminating bottlenecks and unnecessary levels of review and editing to providing better photographs and graphics. Failure to maintain schedules for important periodic publications was cited as a cause of diminished Bureau prestige. Alternative media, such as CD-ROMs, for dissemination of information have been proposed. The team will need to scope out the full range of opportunities

relating to publications and focus on recommendations that can produce a high impact.

**Team:** Marie Barrett (initiator and leader), WDC Office of Technology Transfer; M. Elizabeth Clare, WDC Division of Statistics and Information Services; Cathy M. Clark, ALRC; Clarence E. Ellis, IFOC; Douglas M. Ginley, MAFO; Scott F. Sibley, WDC Division of Mineral Commodities; D. Ross Spears, TURC; William K. Tolley, SLRC.

**Facilitators:** Joyce A. Mason, WDC Division of Organization and Management; Alan G. Mayton, PRC.

**Board contact:** L. Michael Kaas, WDC Division of Resource Evaluation.

### TIMELINESS OF RESOURCE ALLOCATION

**Opportunity:** The issue of the timeliness and the process utilized in developing resource allocations in the budget process affects every Bureau organization. This team will

examine the process utilized within the Bureau to develop and approve allocations of resources to organizations. It will identify and describe the process the way that it currently exists within the Bureau; identify problems within that process that interfere with timely allocation of resources; and recommend how the process should be handled.

**Team:** Rodney D. Rosenkranz (initiator and leader), WFOC; Rosemarie Amasino, WDC Information and Analysis; Christine J. Beyke, RORC; Paul E. Fluet, WDC Research; Shirley A. LaBere, WDC Division of Budget; Thomas Phillips, SLRC; Ransom F. Read III, WDC Division of Resource Evaluation; Robert C. Steckley, MAFO; Patricia B. Winters, TURC; Franklin B. W. Woodbury, WDC Division of Policy Analysis.

**Facilitators:** Leon E. Esparza, TCRC; Kenneth M. Maas, AFOC/J.

**Board contact:** Jacqueline S. Waitz, WDC Information and Analysis.

## LOCAL QUALITY STEERING GROUPS

The Bureau of Mines has facilities in over a dozen locations nationwide (appendix I), and most of these had established local quality steering groups (QSG's) by early 1992. These groups varied in nature depending on local culture, union relationships, etc. Accounts of their early activities appeared in the May 1992 issue of *Daybreak*, from which the following paragraphs are extracted. (In a few instances, additional information known to the authors has been supplied.) It is interesting to note the somewhat different approaches taken from area to area, depending on local culture and conditions.

### ALASKA

The Alaska Field Operations Center has established an overall QSG to consider all issues important to the Field Center, and individual Branch Committees in both the Juneau and Anchorage Branches. Branch Committees identify issues and QI opportunities and forward them to the QSG for consideration and appropriate action.

The Center has been active in attempting to improve the quality of its work. In accordance with accepted TQM concepts, as a first step the entire staff was involved in establishing a Vision for the Field Center. The process of establishing this Vision was accomplished through several

meetings led by a Bureau-trained QI facilitator, and included a thorough inventorying and polling of current and potential customers. A prioritization of the customers' importance and needs resulted in the establishment of a prioritized list of functions for future goals and operations, and the in-house publication of a Vision document. The Vision process was conducted with the intention of being compatible and in concert with the overall Bureau strategic planning.

### ALBANY, OREGON

The QSG at the Albany Research Center meets weekly and has completed and published its charter. Aided by the facilitators on-site at the Center, attempts have been made to solicit from each of the divisions ideas (opportunities) for local Quality Improvement Teams. The QSG has agreed that it will commission QIT's based upon the highest priority submitted by each of the divisions. In addition, other QIT's will be commissioned as appropriate. The QSG will consider all of the ideas submitted by the divisions for possible QIT's.

Albany's facilitators have also conducted a practice QIT meeting within each of the divisions to give members a better feel for the process.

### AMARILLO, TEXAS

Helium Field Operations has formed QSG's at three locations: the Amarillo Helium Plant, Cliffside Gas Field, and Exell Helium Plant. Two other QI committees have also been created. One is called the Non-Bargaining Unit QSG, which consists mostly of Fillmore Headquarters personnel. The other is the Helium Quality Management Board, which is the focal point for communications on QI matters and which coordinates the operations of the steering groups.

These groups have, in essence, existed for several years, meeting as required to solve specific problems. Perhaps the greatest service they have provided is to ameliorate difficult situations before they got out of hand.

### DENVER, COLORADO

The Denver QSG was formed in January 1992. Its formation was initiated and guided by the Denver Area Executive Staff (DAES), a local management organization which represents all Bureau Divisions in the Denver area. The QSG meets weekly for 2 hours.

One of the functions of the QSG is to serve as a communications link to the DAES and the Quality Management Board. The group has established procedures for formulating teams and assigning facilitators as new opportunities arise. The group has received six Quality Improvement Opportunities to date. One dealt with a local issue (snow emergency procedures), and consequently a call for volunteers to serve on a local QIT has been issued to all Denver area employees. Three of the Quality Improvement Opportunities involved Bureauwide issues and have been submitted to the Quality Management Board. The remaining 2 were directly related to some of the 13 Bureauwide Quality Improvement Teams already formed, and therefore they were sent to the people in charge of those teams.

### PITTSBURGH, PENNSYLVANIA

Pittsburgh's QSG met initially on March 12, 1992. The group consists of five members from management and five from the bargaining unit. Thus far, (1) a charter has been written, (2) QI training was scheduled for group members in early May, (3) a means of communicating to all local employees has been established by posting minutes on bulletin boards, (4) a QI mailbox has been set aside in the mailroom to enable employees to direct their suggestions, (5) memos have been dispatched regarding local Quality Improvement Opportunities and seeking team member volunteers, and (6) local facilitators have been contacted

in answer to their suggestions for local Quality Improvement Opportunities taken from the orientation sessions.

### RENO, NEVADA

The QI process is progressing nicely at the Reno Research Center. A representative five-member Quality Steering Group has been meeting regularly and has chosen two facilitators after interviewing all volunteers. From a Centerwide "barrier bashing" survey held last year, the issue of storage was chosen for the first QIT project. The team was chosen from volunteers and is currently meeting regularly under the guidance of the two facilitators. A survey was held to determine the next issue to be addressed by a second team. Volunteers are now being solicited to deal with the chosen topic, awards.

### ROLLA, MISSOURI

Rolla's QSG formed recently and issued its first call for local Quality Improvement Opportunities in early May. The QSG also received and prioritized two opportunities that were offered before the call; these were forwarded to the Quality Management Board for consideration as Bureauwide issues.

### SALT LAKE CITY, UTAH

Although the Salt Lake City Research Center did not form its QSG until June, by May it had two Quality Improvement Teams getting under way, addressing the issues of communications at the Center and technology transfer. A data base was being developed that would indicate the expertise of employees at the Center so that a person knowledgeable on a particular issue could be quickly located.

### SPOKANE, WASHINGTON

Three QSG's have been established in Spokane, one for the Spokane Research Center, one for the Western Field Operations Center, and an umbrella group called the Spokane Area QSG.

The Spokane Research Center QSG has established its charter and is focusing its energy on taking at least four local Quality Improvement Opportunities through the process of becoming QIT's. Other issues being addressed include training for QSG members, developing Quality Improvement Opportunity handling protocol, prioritizing the Quality Improvement Opportunities, and pacing QI activities (controlling the burnout and overextension of individuals and of the Center). The QSG is enlisting the

aid of the four local facilitators, who will provide training sessions on processing Quality Improvement Opportunities and creating successful QIT's. The facilitators have conducted team building exercises and have greatly enhanced the QSG's meeting effectiveness.

The Western Field Operations Center QSG created its charter in February and shortly thereafter issued a call for volunteers for five local QIT's to work the following topics: Implementation of local and wide area networks, training, external and/or internal customer identification, planning process review, and alternative office hours. A sixth local QIT was formed to deal with office supply management; it successfully reorganized the Center's supply room, reevaluated the procedures used to maintain it, and planned to monitor its operation. Finally, the QSG is establishing a library devoted to QI-related material.

The Spokane Area QSG is responsible for coordinating interoffice QI activities for the Spokane Research Center and the Western Field Operations Center; membership consists of three people from each Center's QSG. Local facilitators are planning to brief the members on the QI process and their personal experiences with it.

#### **TUSCALOOSA, ALABAMA**

The Tuscaloosa QSG received six Quality Improvement Opportunities in response to its first call for ideas. They prioritized the opportunities and selected one to be given to a newly created local QIT, which will address the issue of inequitable assignment of technicians and students. Members for this QIT were chosen, and the first meeting was held in early May. Other Quality Improvement

Opportunities pertaining to Bureauwide issues were passed along to the Quality Management Board for consideration.

#### **TWIN CITIES, MINNESOTA**

The Twin Cities QSG announced the formation of its first three local QIT's in late April. The team topics were selected from a list of locally submitted "Q.I...Deas." The teams will address the issues of awards, office space, and timekeeping. Membership for the teams has been selected, and each has held its first meeting. The QSG has decided on a procedure through which the teams' recommendations will be made to the Center. Each team will be asked to give a presentation on its recommendations at an all-employees meeting. The QSG has made an optional offer to the teams of dry-running their presentation to the steering group, but this is not mandatory.

The QSG is pursuing the training of two new facilitators, having found that the Twin Cities original group of facilitators are quickly becoming saturated with calls for their services.

#### **WASHINGTON, DC**

The Washington QSG has identified several ideas for which local QIT's will be formed. The chairperson stressed that the referral process is continual and reminded all concerned that Quality Improvement Opportunities can be sent to anyone on a QSG or to a Quality Management Board or Quality Council member, noting that any of these individuals will know how to forward the suggestions to the proper place.

### **THE MILESTONE REPORT AND DEVELOPMENTS THROUGH SEPTEMBER 30, 1992**

By early July 1992, with almost 40 separate entities involved in QI, so many QI activities were in progress nationwide that a special milestone report was prepared,

largely for internal use. Much of the following information was originally developed for this document. In general, it brings each group up to date as of September 30, 1992.

### **QUALITY IMPROVEMENT WORKING GROUPS—1992 ACTIVITIES**

#### **BARRIERS**

Established in February 1992, the Barriers Working Group had been charged with identifying barriers to change in the Bureau of Mines and barriers to the implementation and advancement of Quality Improvement

in the Bureau. By summer the group had identified the "top 10" barriers to change, based on barriers identified by Bureau employees during the orientation sessions of the previous year, and was preparing a final report on these barriers. The report was to be available by the end of fiscal year 1992.

## COMMUNICATIONS

One of the four original working groups, the Communications Working Group continued its efforts to enhance both QI communications and Bureau communications generally. In the works through September 30 were publication of the QI newsletter *Daybreak*; assisting networking among steering groups, facilitators, and Bureauwide QIT's; publishing a handbook for new initiators of QIT's; developing a plan for handling Quality Improvement Opportunity communications; writing a script for a QI videotape; writing a draft of a QI brochure; establishing QI libraries at Bureau field facilities and headquarters; and publishing the present history.

## CUSTOMERS

Established at yearend 1991, the Customer Working Group had developed a Bureauwide external customer database and provided customer definitions and guidelines to Quality Improvement Teams, Steering Groups, and Principal Officials by the end of fiscal year 1992. The Group will provide guidelines for prioritizing customers and obtaining customer feedback during fiscal year 1993.

## OPERATIONS

The Operations Working Group had replaced the Implementation Working Group at yearend 1991. By the end of the fiscal year on September 30, 1992, it had addressed the problems of facilitator use, procedures for handling new Bureauwide Quality Improvement Opportunities, interim performance standards that addressed QI-related activities, underutilized volunteers for QI activities, strategic planning, empowerment, and QI funding. In the works were installing an ongoing process for handling Quality Improvement Opportunities Bureauwide, realizing a network for ensuring that QI Operations information was communicated, supporting issuance of a Bureau strategic plan, implementing processes to ensure maximum utilization of QI volunteers, developing information on QI costs and making funding recommendations, and relieving the Quality Management Board of operational concerns.

## QUALITY IMPROVEMENT TEAMS—1992 ACTIVITIES

When the 13 Quality Improvement Teams were formed in the first few months of 1992, efforts were made to select volunteers who would provide nationwide representation. To some extent, this created problems when the teams began to meet, since meeting dates had to be selected that

## REWARDS AND RECOGNITION

Established at yearend 1991, the Rewards and Recognition Working Group was in the process of initiating an effectiveness analysis of the Bureau's existing rewards and recognition system at the end of September 1992. Also in the works were benchmarking the effectiveness of other Government and non-Government rewards and recognitions systems, drafting a strategic plan for improving the existing Bureau system, and identifying and recommending new and improved alternatives to the existing Bureau system.

## STANDARDS AND MEASUREMENTS

Also established at yearend 1991, the Standards and Measurements Working Group launched its activities by taking a week-long course in Statistical Process Control. By the end of the fiscal year on September 30, it had prepared a bibliography of others' efforts in the area, developed a list of measurement techniques that would be used in the Group's final report, surveyed Bureau customers and the 13 Quality Improvement Teams with regard to applicable measurement techniques, and prepared a preliminary outline for the document reporting its findings.

## TRAINING

The Training Working Group focused its 1992 activities on providing Leadership Training for supervisors and managers. Classes were scheduled in Washington, DC, and Denver, CO, from July through December, with McManis Associates again providing the training. Since the students were free to sign up for sessions that suited their schedules, there was no set goal for the end of fiscal year 1992; rather, 15 classes were scheduled for 360 people by December 18.

## VISION

The Vision Working Group has been in a "standby" mode. It anticipates participating in the consolidation of the Bureau's Strategic Plan, which has been scheduled for the end of calendar year 1992.

fit the schedules of eight or more people for most teams. Travel cost considerations played some role as well, and the overall result was that teams tended to meet bimonthly. While allowing time for between-meeting assignments to be carried out, this tended to push the conclusions of

team activities beyond the end of not only the fiscal, but also the calendar, year. The following paragraphs include the projections of the teams' activities that were available at the end of the fiscal year on September 30, 1992.

### **IRM (FORMERLY ADP EQUIPMENT) ACQUISITIONS**

The IRM Acquisition Team (formerly the ADP Equipment Acquisition Team) completed its problem identification process in August, but expected to remain in a data-gathering mode through the end of 1992. It developed the following mission statement: "This QIT will develop an efficient and effective IRM approval/ acquisition process to meet the IRM needs of Bureau employees." A flow-sheet has been developed that shows in detail the purchasing approval process for the Bureau of Mines.

### **ALTERNATE PERFORMANCE EVALUATION SYSTEMS**

The Alternate Performance Evaluation Systems Team has conducted a statistical employee survey to get customer input and is using the results to identify the root causes of the problems in this area.

### **CAREER DEVELOPMENT**

The Career Development Team has held two meetings. In late August, the team surveyed a randomly selected 33 pct of Bureau employees to learn their experiences with and views of career development in the Bureau. Survey responses were evaluated and prioritized at the September meeting. The team hoped to develop a plan for generating solutions that can be evaluated and prioritized in a future meeting. Although it is too soon to predict a completion date, spring 1993 is the target.

### **CORRESPONDENCE ERRORS**

The team conducted a correspondence survey in three field centers and four Washington division or branch offices to determine the number and types of errors occurring in Bureau correspondence. An amazing 51 percent of correspondence surveyed contained errors. The team therefore developed an initial problem statement: "Of the 300 pieces of correspondence surveyed, 51 percent had errors, 40 percent of which were format, grammar, and punctuation. These errors result in reworking and time delays and may reflect poorly on the organization if not detected." Exercises to determine the root causes of correspondence errors uncovered many possibilities: arbitrary and excessive formats, lack of pride in work, lack

of training, and unavailability of reference materials. Possible solutions discussed included improved training (perhaps in conjunction with orientation), a mentoring program, an up-to-date correspondence manual, improved communications within the workplace, and use of Work-Perfect templates or macros. The team expected to offer solutions to part of the problem in fiscal year 1993.

### **IDENTIFICATION AND DEVELOPMENT OF NEW MANAGERS**

The Identification and Development of New Managers Team held a conference call in late July to discuss a meeting date and place. Team members met in September to select a team leader, finalize the team's charter, develop standard operating procedures, ascertain data requirements, set goals, and develop a plan of action. The team expected to meet at least quarterly and to finalize its recommendations, which will include the potential impact on the Bureau of Mines, by mid-1993.

### **IMPROVED COMMUNITY OUTREACH**

The Improved Community Outreach Team began its work by developing a working definition of "outreach," and by establishing interim goals that addressed that definition. Key to identifying what processes could be recommended to improve the Bureau's program was the establishment of a baseline, i.e., what was going on in the Bureau, how did the individual Centers view outreach, what were the strengths and weaknesses of local programs, how effective were they, who were the key players, and what barriers to improvement could be identified. A synopsis of this information was provided to team members by mid-September, in preparation for the team's planned meeting the first week of October.

The Outreach Team identified several side issues that had a significant impact on the outreach problem. It was recognized that the Bureau needed a workforce that was well versed in the business of mining and materials if it was going to educate the public in these areas. In working with the New Employee Orientation Team, it was discovered that the majority of Bureau employees, while perhaps experts in their own field, did not feel they had adequate knowledge of the more global mining industry. This was seen as a serious barrier. As the team began to gather information about education programs, it also became obvious that there was a vast resource in this area that was largely untapped by the Bureau. This resource included other government agencies at Federal, State, and local levels, as well as associations, schools, and progressive companies within the mining or minerals industry. The team has made a commitment to gather information

from these groups and to educate itself on the many aspects of mining in this country.

### **NEW EMPLOYEE ORIENTATION**

The New Employee Orientation Team got off to a quick start in May 1992, developing a mission statement, defining the problem, developing questionnaires, completing an impact evaluation, reviewing current orientation programs, and identifying components of a new employee orientation program. By June it had conducted interviews of new employees and obtained their views on what should be done for orientation, and had revised the problem definition based on these interviews. At the September meeting, an initial proposal of a possible solution was formulated, presentations were made by two other QI teams (Community Outreach and Correspondence Errors) in order to coordinate Bureau QI efforts, and an informal presentation of the proposed orientation program was made to a representative from Personnel. Final recommendations were expected to be made in Spring 1993.

### **PAYCHECK PROCESS**

By the end of fiscal year 1992, the Paycheck Process Team had interviewed employees to identify paycheck problems, networked with the Timekeeping Personpower Team to avoid overlap, and developed a data collection system survey form to track the extent of problems in receipt of paychecks.

### **EVALUATION AND RECOGNITION FOR QI ACTIVITIES (FORMERLY QI INDIVIDUAL PERFORMANCE AND RECOGNITION)**

The team has prepared an employee survey, which it hoped to get out during September 1992. It planned to meet again in November.

### **SUGGESTION PROGRAM**

By midsummer, the Suggestion Program Team had defined its purpose, constructed a problem statement, and diagrammed the cause and effect of poor implementation of the current Bureau of Mines suggestion program. It planned to devise, distribute, collect, and measure an

all-employees suggestion program questionnaire and to draft possible solutions for improved implementation by the end of 1992.

### **TIMEKEEPING PERSONPOWER**

The Timekeeping Personpower Team began by developing a flowchart of the timekeeping and payroll process and developed a questionnaire that was sent to the timekeepers and block control points. The results of the questionnaire were reviewed at the team's July meeting and provided a benchmark from which the team was able to prepare its problem statement and better understand the employee issues involved with the timekeeping process. The questionnaire also confirmed that the present timekeeping system is labor intensive, time consuming, and subject to errors. A recommendation report is being drafted; once the recommendations have been finalized and approved by the team, a video will also be prepared as a briefing mechanism.

### **TIMELINESS/QUALITY OF PUBLICATIONS**

The Timeliness/Quality of Publications Team decided at its initial meeting in May to focus on timeliness issues, with emphasis on the Minerals Yearbook, which had been the victim of publication delays for some time. By December the team expected to be able to identify hangups and problem areas and to begin work on developing feasible solutions and recommendations.

### **TIMELINESS OF RESOURCE ALLOCATION**

The Timeliness of Resource Allocation Team has completed a flowchart of the basic budget process, including the authorization process, for the three Directorates. Problems affecting the budget process have also been identified. At the end of fiscal year 1992 the team was monitoring and collecting data in order to evaluate the budget process for fiscal year 1993. In addition, team members were contacting other Federal agencies to review, and possibly benchmark, their budget processes. A goal of the team was to develop preliminary recommendations for improving the budget process by the end of calendar year 1992.

## **LOCAL QUALITY STEERING GROUPS**

By June 1992 every Bureau activity throughout the country had a Quality Steering Group; fairly extensive information on their activities was given earlier, and is not repeated here. Interested readers are referred to the Bureau's QI newsletter, *Daybreak*, which summarizes

the activities of the QSG's in alternate issues. Between times, most of the groups keep in touch with each other in monthly conference calls, to share their experiences with different approaches to their diverse problems.

## MONEY MATTERS

Other than the salaries of the Bureau employees actively involved in QI activities and the \$35,000 paid the Federal Quality Institute for its assistance in launching the Bureau's QI effort, the main expenses for QI in fiscal years 1991 and 1992 were for training and travel.

Three major training initiatives were undertaken: Training the cadre of Bureau employees to in turn orient their fellow employees to QI concepts, training the group of facilitators, and the specialized training provided to the Bureau's managers and supervisors in the latter part of 1992. In all three cases, the training was performed by McManis Associates; the costs of the training contracts were \$274,246 for the trainer and facilitator training and related services, and \$379,406 for the leadership training.

The training itself involved considerable travel. The cadre of trainers was drawn from throughout the Bureau of Mines (see appendix I for locations) to a training site in the Washington, DC, area; subsequently, the trainers visited all Bureau locations to conduct the orientation sessions. The facilitator training was likewise conducted in the Washington area, again requiring travel on the part of most attendees. The leadership training was conducted in both Washington and Denver, somewhat reducing the need for travel but certainly not eliminating it.

Another need for travel arose as the Quality Working Groups and later the Quality Improvement Teams formed and began to meet. One consideration in assembling the groups and teams was to provide agencywide representation; in consequence, most meetings involved travel on the part of all committee members except those who happened

to work in the location selected for that particular meeting. Figures developed by the Operations Working Group in mid-1992 indicated that a single group or team meeting could incur up to \$8,700 in travel costs, and actual travel costs for the first 10 months of fiscal year 1992 exceeded \$370,000. (This included travel costs for both meetings and training.)

Further major training expenses are not anticipated, but travel will remain a factor for most Bureau of Mines QI activities. Although the teams and working groups conduct business by conference call to the extent feasible, there seems to be no substitute for periodic face-to-face interaction. The fact that the agency has as many employees spread out nationwide as some agencies have at a single installation certainly complicates the situation.

For those interested in overall totals, QI expenses of record were \$371,263 in fiscal year 1991; in the first 11 months of fiscal year 1992 they were \$910,387, including \$376,594 for salaries and related expenses, \$397,487 for travel, and \$124,341 for training. The 1991 figure is known to be on the low side, as some of the earlier expenses were charged to individual office accounts and cannot be specifically identified. As a senior management official recently noted, the cost items are reflective of management's commitment to the QI process, as was the conscious decision to trade off the higher costs of the cross-cultural approach to QI activities against the benefits derived from mixing cultures and creating a cross section of the workforce.

## LESSONS LEARNED

As the Bureau ended the second full year of its Quality Improvement effort, it was clear that the QI process had forced the organization to come to grips with its mission and vision of the future; and to begin to answer the questions—where are we going, what are the strategies for getting there, and do our operational objectives reflect a coordinated "pulling together" in the same direction?

Although many individual organizations within the Bureau have had their own visions and plans for the future, an overall strategy to guide and direct the agency as a unit pursuing a shared vision and common mission was missing. Now that we have a vision, we must complete the current work underway to develop a cohesive strategic plan for the Bureau that will provide the road map to that future.

QI presents a challenge to the organizational culture by introducing "change." QI represents a new way of doing business; it alters the existing relationships among

managers and employees in the way work is accomplished and consequently can engender fear, anxiety, and resentment by individuals who become uncomfortable or insecure, or who fear loss of power, authority, or importance in the organization. It is important not to underestimate the significance of change and the potential impact it can have on individuals and their productivity. That is why communications are so important.

## COMMUNICATIONS ISSUES

The Bureau's employees had made it clear through the survey instrument, in training classes, and through newsletter feedback that communications within the Bureau needed to be strengthened if the Bureau was to realize its full potential as an organization. Employees want to know what is happening so they can better understand events within the Bureau and how those events might impact

their work. Similarly, communications are paramount to the successful implementation of QI to allay anxiety created by change and fear of change, to keep employees informed, to provide knowledge so they can participate in the changes taking place, and so that they can be the beneficiaries and not the victims of change.

### **INTERNAL VERSUS EXTERNAL FOCUS ORIENTATION**

The initial issues and topics (opportunities) selected for QI teams were primarily internally oriented. Although employees are most familiar with these issues, most organizational products are used by outside customers. Therefore, there is a need to redirect our efforts to those external issues and customers as the Bureau progresses on the QI journey.

### **ISSUE DOCUMENTATION**

Quality Improvement Opportunities selected for study by Quality Improvement Teams should be data driven. In

some cases the Bureau's initial approach was to accept at face value the issues, problems, and/or opportunities submitted by employees without seeking factual documentation of the issues or problems. The QIT's subsequently formed were charged with developing the data to support the proposal. Consequently, progress toward resolving these opportunities tended to be slow and deliberate as teams compiled data to substantiate the problem before they attempted to address root causes and possible solutions. Also, in terms of trying to demonstrate immediate results, this approach risks more early failures because teams are pursuing perceived problems that have not been fully grounded in data. Better documentation of the issue or problem at the outset will help focus the team's efforts and increase the likelihood of early success. It will also eliminate the possibility of a team's focusing on process rather than substance, and thus diverting its energies from harnessing the full effectiveness of the QI process.

## **DISCUSSION**

This account of the Bureau of Mines Quality Improvement journey to date would be incomplete if it left out some of the intangible benefits the agency has derived from pursuing QI.

Bureau employees have developed new skills through their QI training and experiences. The team approach to problem solving prevalent in the QI process is helping develop employee expertise; reinforcing "buy-in" to the process; providing energy, education in facilitation, team dynamics, and team-building skills; and helping employees come up with the best solutions by using problem-solving tools in both QI and non-QI activities.

Communications have been enhanced throughout the Bureau, partly owing to the cross-representation of Bureau

employees on QI teams and working groups. Both geographically and organizationally people are sharing ideas, concerns, and suggestions, and information is flowing more freely than ever before. Again, there is an increasing payoff in both QI and non-QI contexts.

Overall, employees' awareness of why they are doing their jobs and who will use their products has been significantly enhanced to the extent that many in the Bureau now endeavor more than ever before to deliver a quality product. Most of the TQM literature stresses that people need to feel valued and part of the program; QI has certainly done this for a large proportion of the Bureau of Mines.

## **SUMMARY**

At 2 years into its Quality Improvement journey, the Bureau of Mines has made notable progress on a number of fronts. Eight national working groups are in place and functioning to address issues specific to QI, and local Quality Steering Groups have been formed at each individual location. The 13 national Quality Improvement Teams initially chartered to address specific issues are

making good progress toward reaching their goals, with many recommendations scheduled for the next few months. In addition, there has been a major spinoff benefit in that a small agency whose 2,556 employees are spread out throughout the Nation has become much more closely knit through its manifold QI interactions, with corresponding enhancement of unity and morale.

## APPENDIX A.—QUALITY IMPROVEMENT PROCESS



OFFICE OF THE DIRECTOR

## United States Department of the Interior

BUREAU OF MINES  
2401 E STREET, NW.  
WASHINGTON, D.C. 20241

November 23, 1990

## Memorandum

To: All Employees, Bureauwide

From: Director, Bureau of Mines

Subject: Quality Improvement Process

During my years in industry and more recently as Director, I have appreciated our Bureau's well deserved technical and professional reputation. Its contributions to our country over the years have been many and significant. However, the world has become more complex and dynamic. Change is evident all around us. Both public and private sectors are experiencing intense competition for scarce resources and rising customer expectations for quality services and products. For our Bureau to prosper into the future, we must adapt and respond to these changes. We simply cannot rest on our reputation, but we must commit ourselves to continuously improve the way we do business.

To this end, we have embarked upon a process to help us improve the quality of our services and products. Importantly, this quality performance process will require your participation and involvement. Quality and meeting our customers' needs and expectations the first time and every time, are everybody's business, managers and employees alike.

The Federal Quality Institute, the Government's focal point for total quality management, is assisting us in setting up and implementing a quality improvement process that meets our mission and program requirements. The Federal Quality Institute will be conducting initial quality awareness sessions which will, over time, be provided to all Bureau employees by our own quality trainers.

Additionally, I will be sending you within the next several months a confidential questionnaire which will give you an opportunity to assess perceptions about the Bureau. Your assessment will help us in our planning for our quality improvement.

I believe in the Bureau, its mission, its people and our ability to make a significant, positive difference in our Nation's future. I look forward to working with you and sharing with you as we, together, build a stronger, more progressive, more innovative Bureau.

Director

**APPENDIX B.—QUALITY IMPROVEMENT GROUP DISCUSSIONS**

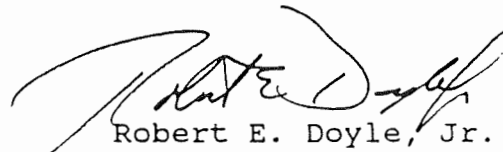
March 8, 1991

Note

To: Management Conference Attendees  
From: Special Assistant to the Director  
Subject: Quality Improvement Group Discussions Conducted  
at the Bureau's Management Conference

Attached is a synopsis of the Quality Improvement group discussions derived from the input you provided during the Quality Improvement awareness sessions conducted at our Management Conference in Gettysburg.

You may find this to be helpful background information for understanding the Bureau's Quality Improvement planning efforts now underway.



Robert E. Doyle, Jr.

Attachment

Management Conference - Gettysburg, PA  
 Second TQM Awareness Seminar - Synopsis

The TQM portion of the Management Conference was conducted by the Federal Quality Institute. Conference attendees were divided into two groups - Group 1 and Group 2. TQM-related activities were performed in these two groups. Group discussions centered around the following subjects: 1) paradigms, 2) TQM driving forces, 3) Bureau vision, 4) expressed values applied to Bureau vision, 5) current and future state of the Bureau, 6) strengths and weaknesses, 7) barriers to TQM implementation, and 8) action plans to counteract barriers. The information listed below is a synopsis of the discussions relating to the above topics.

1. Paradigms - models or patterns - breaking paradigms is important for TQM implementation

Group 1

- o Minerals are essential. Always need mines
- o Addition of chemicals to float minerals
- o I know what they want
- o Mining engineers know best
- o Mining is destructive
- o USGS always leads
- o Administrative work less important than program work
- o Headquarters doesn't understand the field (vice verse)

Group 2

- o 1872 Mining Law
- o Personnel will never agree with "that"
- o U.S. needs a strong minerals program
- o Department (rigid lines)
- o Funding will decrease
- o BOM know best what industry and society needs
- o FTEs not available
- o Minerals shall be mined
- o Bureau operates on sequential decision-making
- o Personnel has ways for success (magical/mystical)
- o Must have supervisors and managers
- o The boss knows best
- o If the Director wants it that way, give it
- o Not enough resources, not enough people
- o If it works this way, why change it
- o Administrative managers are not innovative or creative
- o Administrative managers don't know programs

2. Driving Forces - what's pushing Bureau towards TQM

Group 1

- o Budget limitations
- o Improved results of programs
- o Allows employee input into decision-making
- o Top management impetus
- o Improve quality
- o Employee retention and recruitment
- o Top executive commitment
- o Pride
- o Congressional criticism
- o Told by President and OMB
- o Improved productivity
- o Employee professionalism
- o Instinct for organizational survival
- o Mechanism to tap other expertise
- o Dissatisfaction with status quo
- o Industry needs our help more than ever
- o Desire to do job better
- o A vision by top Quality Council
- o Fear of being left out
- o Getting new and lower level employees on board
- o Increase pride and recognition of organization
- o Desire to do a better job
- o Desire not to remain ignorant
- o Headlines reporting success of others

Group 2

- o Need to establish direction in BOM
- o Need to reduce cost because of reduced resources
- o Current most popular management technique (stylish)
- o My own desire to improve
- o TQM successes to date
- o Management's desire to implement
- o Productivity improvement
- o Good capable people who want to improve
- o Survival issue
- o Desire for more work satisfaction
- o Need to meet challenges of the future
- o Encouraging teamwork
- o Enhance communication with Congress
- o Need to be competitive
- o Endemic Desire to do well
- o It's good management
- o Leads to improved quality

-3-

- o Survival
- o Group Synergy
- o Taxpayer demand for value for dollars
- o We've seen it work in the private sector
- o Available goals
- o Organizational development
- o Create organizational climate to attract best and the brightest
- o Work force may see it as a way of personal development
- o OMB/Depart. says we will do TQM
- o We've seen it work in the private sector, why not here
- o Declining budgets

3. Vision - a statement of the future - a vision statement is simple, forceful, positive, inspiring, stretching

Group 1 - Final Vision Statement

We will improve the quality of life through the best use of mineral resources (add value statements, e.g., teamwork, technology enhancement, etc.)

Group 2 - Final Vision Statement

The Bureau is a respected organization with a committed work force and an integrated sense of purpose serving the nation's material and minerals needs by being a recognized world leader on geotechnology. (Also to be integrated, national interest, specific identification of non-traditional areas, innovative approaches, and accomplishment reflections.)

4. Expressed Values

Group 1

- o Scientific objectivity
- o Challenge of transforming ideas into needed and useful products and services.
- o Enjoy working for small agency
- o Agency is not a political hot-potato.
- o Synergy between BOM mission and DOI mission.
- o Providing assistance to mining industry.
- o Only real mineral game in town.
- o Required affinity to private sector.
- o Nice place to work - like a family
- o Challenge of developing one BOM
- o Feeling of accomplishment
- o High level of professionalism.

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- o Challenging self-initiating tasks.
- o Being a player.
- o Enhancing the ability of industry to implement better conservation in the extraction of resources.
- o Thrill of seeing developed technology put to practice.
- o Very human agency - warts and all.
- o Honor of doing public's business.
- o Allows opportunity to communicate with total industry from top to bottom.
- o Commitment and support from top executive in agency.
- o Rewards for people to help professionally mature.
- o Variety of interesting assignments.

#### Group 2

- o Maintain non-regulatory profile.
- o Expanded utilization of capabilities.
- o Preserve BOM an organizational entity.
- o Broad recognition for abilities/capabilities.
- o Involvement of all or a great number of Bureau employees.
- o National interest
- o Proud Service to Public.
- o Preserve BOM as an organizational entity.
- o Impacts policy decisions that have a minerals component.
- o Impacts minerals policy decisions that have a mineral component.

#### 5. Current/Future State

##### Group 1 - Current State

- o Educate nation on use of minerals.
- o Resource evaluation.
- o Forge partnerships with industry in pursuit of advanced technology.
- o Mineral economic arm of US Government.
- o Interest young people in joining BOM.
- o Assist minorities in development in the field of science.
- o Promote recycling.
- o Promote compatible land uses.
- o Identify new resources.
- o Trying to improve the marketing of products.
- o Advocacy with regard to regulations.
- o Information gathering and dissemination of minerals data (worldwide)
- o Research and technology.

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- o Improving mineral awareness
- o Fund mineral institutes.
- o Publish scientific studies.
- o Expand customer bases.
- o Assist other agencies.
- o Technology transfer.

Group 1 - Future State (not identified)\*

Group 2 - Current and Future States (not identified)\*

6. Strengths and Weaknesses

Group 1 - Strengths

- o Acting support of management for quality.
- o Minerals know-how of people and professionalism.
- o Esprit de corps of people.
- o Mix of professional disciplines.
- o Well-equipped labs.
- o Ability to change.
- o World-wide reputation.
- o Lean and hungry
- o Adequately funded.
- o Plenty of work.
- o Geopolitical awareness.
- o Reasonable geographic distribution to provide service.
- o Lot of historical data.
- o Management commitment to do what's right.
- o Credibility of workforce.
- o Strong Congressional and OMB support.
- o Stability of organization.
- o Sense of history.
- o Little competition in what BOM does.
- o Close ties to industry and universities.

Group 1 - Weaknesses

- o Evolutionary development.
- o Recruitment problems (humans resources management)
- o Nine Research Centers.
- o Parochial filed structure.
- o Behind ADP technology curve.
- o Lack of unified view.
- o Workforce too homogeneous.
- o Poor job of identifying and developing management talent.
- o High facility upkeep cost.
- o Lack of bureauwide training policy and plan.

\* due to time constraints

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- o Lack of Congressional and industry support.
- o Gap in professional development
- o Limited FTEs.
- o Low visibility to public.
- o Limited resources compared to other research organizations.
- o Lack of state-of-the-art equipment.
- o Lack of mobility of employees.
- o Short-term outlook.
- o Poorly organized clientele.
- o Non-technical communication skills (lack of)
- o Weak understanding of customers.
- o Lack of effective measurement systems.

Group 2 - Strengths and Weaknesses (not identified)\*

7. Barriers - impediments to implementing TQM

Group 1 - Combined Barriers - Non-ranked

1. Turf Protection
2. Fear of change, employee resistance.
3. Nothing wrong, paradigm paralysis
4. Unwillingness of management to empower/delegated and lack of trust.

Group 2 - Combined Barriers - ranked

1. Lack of Trust
2. Cynicism
3. Lack of Unity/Commitment by management
4. Lack of Strategic Vision/Plan
5. Inertia

8. Action Plan for Barriers

Group 1

Barrier 1 - Turf Protection (Supervisory Turf)

- o positive reinforcement - rewards for success.
- o education - benefits of TQM - why it is necessary. newsletter, formal training.
- o mentoring
- o retraining/new career path/e.g., dual ladder.
- o time/feedback.
- o immediate involvement
- o fostering compromise - establish mediator.

\*due to time constraints

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Barrier 1 - Turf Protection (Interorganizational Turf)

- o Interorganizational groups - QIT's
- o Immediate involvement.
- o Positive reinforcement.
- o Compromise.

Barrier 2 - Overcome fear of change.

- o Director's video to provide info, vision, and code of behavior.
- o TQM bulletin to continue communication and share successes.
- o education, leadership and give voice to those not afraid.
- o reward change.

Barrier 3 - Nothing's Wrong

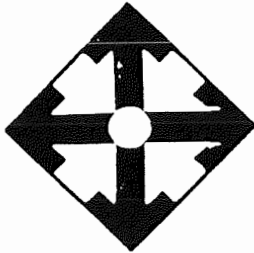
- o Run survey and feed back of employees.
- o Rand survey and feedback of external and internal customers.
- o Study NRC Competitiveness Report.
- o Feedback that there are problems (qualified).

Barrier 4 - Unwillingness of Management to Delegate, Empower.

- o Demonstrate willingness to accept recommendations from lower level team's (even if it bombs) (therefore the topics and possible solutions must be within management view of acceptable bounds.)
- o Reward accomplishment (signal value) even if less than perfect and don't punish failure.
- o Early-on feedback to and from the top should be provided to lower probability.
- o Refine, reuse delegation of authorities chapter in Manual as appropriate.

Group 2 - no action plans for barriers were developed

**APPENDIX C.—EMPLOYEE QUESTIONNAIRE AND RESULTS  
OF THE CULTURAL SURVEY**



Federal Quality Institute  
P.O. Box 99  
Washington, D.C. 20044-0099

Dear Bureau of Mines Employee:

Recently, your Director sent a memorandum to you that addressed the subject of quality improvement and explained why the Bureau is embarking on a quality improvement process. The memorandum also stated that the Federal Quality Institute (FQI) was assisting the Bureau in setting up and implementing this process, and your participation and involvement in this process was very important.

As a starting point, the FQI is issuing the enclosed quality assessment survey which is designed to ascertain your perceptions of the Bureau. Since your responses will provide a cornerstone in developing a plan for Bureauwide quality improvement, please give these statements careful consideration. Experience indicates that about 20 minutes are required to answer all 70 questions. It is important that each employee answer the questions; insert the answer sheet in the enclosed, stamped, preaddressed envelope; seal it; and place it in a mailbox by February 1.

The FQI will collect your responses and forward them to the Office of Personnel Management for tabulation and interpretation. When the responses have been tabulated and interpreted, the summary results will be furnished to the Bureau. Bureau management will never see the individual responses. All responses will be totally confidential and anonymous. The summary results will be published to all employees through an appropriate medium.

Thank you for taking the time to respond to this survey.

Sincerely,

James A. Weathersbee  
Federal Quality Institute

Enclosures

## Directions for Completing the Quality Assessment Survey

Please review carefully the statements in the survey and then enter your response to each on the separate answer sheet. The scale at the top of each page of the survey may be referenced as you indicate your responses on the answer sheet. For each statement, blacken with a #2 pencil the numbered circle 1,2,3,4,5, or 6 on the answer sheet that corresponds to what you feel best indicates your extent of agreement with the statement. There are no right or wrong answers.

In order to ensure confidentiality, complete only the section of the answer sheet which corresponds with the survey statements. Do not complete the section requesting your name, sex, birth date, or other identifying information.

As you complete the survey, please refer to the following definition of terms, as necessary.

- Work Unit - your immediate organizational unit, e.g., office, division, branch, section, or unit.
- Customer - anyone who receives, uses, or buys the work that your work unit, or the Bureau, performs. Examples of customers are the Department, other Federal agencies, the minerals and mining industry (or other members of the private sector), another Bureau work unit, or another Bureau employee, including supervisors.

In all cases, consider that your customer relies on and judges the quality of the work you do.

When you have completed the survey, place only your answer sheet in the attached envelope.

Thank you.

## QUALITY ASSESSMENT SURVEY

A list of statements will be presented. Use the scale shown at the top of each page to indicate your answers on the attached answer sheet. There are no right or wrong answers. Blacken the circle 1,2,3,4,5, or 6 on the answer sheet that you feel best indicates your extent of agreement with the statement.

|  | Scale             |          |                   |                |       |                |
|--|-------------------|----------|-------------------|----------------|-------|----------------|
|  | 1.                | 2.       | 3.                | 4.             | 5.    | 6.             |
|  | strongly disagree | disagree | somewhat disagree | somewhat agree | agree | strongly agree |
| 1. People in the Bureau are aware of its overall mission.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 2. In general, Bureau customers believe that we care about what they think.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 3. People in the Bureau are aware of how their jobs contribute to the Bureau's mission.                                | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 4. It's in everyone's best interests that the Bureau be successful.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 5. People in the Bureau are aware of how the Bureau's mission contributes to the Department of the Interior's mission. | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 6. In general, Bureau customers would not "go elsewhere" even if it were possible.                                     | 1                 | 2        | 3                 | 4              | 5     | 6              |

## Scale

1. strongly disagree
2. disagree
3. somewhat disagree
4. somewhat agree
5. agree
6. strongly agree

## People in the Bureau:

- |       |  |   |   |   |   |   |   |
|-------|--|---|---|---|---|---|---|
| 7.    | try to plan ahead for changes (such as in policy) that might impact our mission performance.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 8.    | try to plan ahead for technological changes (such as new developments in computer software) that might impact our mission performance. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9.    | regularly work together to plan for the future.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 10.   | see continuing improvement as essential.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 11.   | care about what will happen to the Bureau after they are reassigned.   | 1 | 2 | 3 | 4 | 5 | 6 |
| <hr/> |  |   |   |   |   |   |   |
| 12.   | Creativity is actively encouraged in the Bureau.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 13.   | Innovators are the people who get ahead in the Bureau.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 14.   | The quality of our work is second only to mission accomplishment as the overriding focus of the Bureau.                                | 1 | 2 | 3 | 4 | 5 | 6 |
| 15.   | Every member of the Bureau is concerned with the need for quality.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 16.   | Continuous quality improvements within the Bureau can lead to more productive use of our resources.                                    | 1 | 2 | 3 | 4 | 5 | 6 |
| 17.   | People in the Bureau know how to define the quality of what we do.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 18.   | Every member of the Bureau needs to contribute to quality improvement.   | 1 | 2 | 3 | 4 | 5 | 6 |

## Scale

1. strongly disagree
2. disagree
3. somewhat disagree
4. somewhat agree
5. agree
6. strongly agree

## People in the Bureau:

- |  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 19. live up to high ethical standards            | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. like to do a good job.                       | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. Emphasize doing things right the first time. | 1 | 2 | 3 | 4 | 5 | 6 |
- 

## The leader(s) in the Bureau (people at the highest level):

- |  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 22. are committed to providing top quality services/products/work. | 1 | 2 | 3 | 4 | 5 | 6 |
| 23. regularly review the quality of work produced.                 | 1 | 2 | 3 | 4 | 5 | 6 |
| 24. ask people about ways to improve the work produced.            | 1 | 2 | 3 | 4 | 5 | 6 |
| 25. follow-up on suggestions for improvement.                      | 1 | 2 | 3 | 4 | 5 | 6 |
- 

## The leader(s) in the Bureau (people at the highest level):

- |  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 26. set examples of quality performance in their day to day activities.                | 1 | 2 | 3 | 4 | 5 | 6 |
| 27. regularly review the Bureau's progress toward meeting its goals/objectives.        | 1 | 2 | 3 | 4 | 5 | 6 |
| 28. attempt to find out why the Bureau may not be meeting a particular goal/objective. | 1 | 2 | 3 | 4 | 5 | 6 |

## Scale

1. strongly disagree
2. disagree
3. somewhat disagree
4. somewhat agree
5. agree
6. strongly agree

## People in my work unit:

- |     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| 29. | turn to their supervisors for advice about how to improve their work.                   | 1 | 2 | 3 | 4 | 5 | 6 |
| 30. | know that their supervisors will help them find answers to problems they may be having. | 1 | 2 | 3 | 4 | 5 | 6 |
| 31. | are challenged by their supervisors to find ways to improve the system.                 | 1 | 2 | 3 | 4 | 5 | 6 |
- 

## The supervisors in my work unit:

- |     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| 32. | make the continuous improvement of our work top priority.           | 1 | 2 | 3 | 4 | 5 | 6 |
| 33. | regularly ask our customers about the quality of work they receive. | 1 | 2 | 3 | 4 | 5 | 6 |
- 
- |     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| 34. | The structure of the Bureau makes it easy to focus on quality.                                      | 1 | 2 | 3 | 4 | 5 | 6 |
| 35. | The way we do things in the Bureau is consistent with quality.                                      | 1 | 2 | 3 | 4 | 5 | 6 |
| 36. | People in my work unit understand how a quality emphasis leads to more productive use of resources. | 1 | 2 | 3 | 4 | 5 | 6 |
| 37. | People in my work unit can describe the Bureau's quality and productivity policy.                   | 1 | 2 | 3 | 4 | 5 | 6 |

|     |   | Scale             |          |                   |                |       |                |
|-----|---|-------------------|----------|-------------------|----------------|-------|----------------|
|     |   | 1.                | 2.       | 3.                | 4.             | 5.    | 6.             |
|     |   | strongly disagree | disagree | somewhat disagree | somewhat agree | agree | strongly agree |
| 38. | People in my work unit believe that quality and productivity improvement is their responsibility. | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 39. | People in my work unit take pride in their work.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 40. | People in my work unit share responsibility for the success or failure of our services/products.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 41. | People in my work unit believe that their work is important to the success of the Bureau.         | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 42. | We have good relationships between other Bureau organizational work units.                        | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 43. | Co-workers in the Bureau cooperate with each other to get the job done.                           | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 44. | A spirit of cooperation and teamwork exists in the Bureau.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 45. | We have good relationships with other Departmental bureaus that we work with.                     | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 46. | Supervisors in my work unit request employee opinions and ideas.                                  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 47. | People in my work unit are involved in improving our services/products/work.                      | 1                 | 2        | 3                 | 4              | 5     | 6              |

## Scale

1. strongly disagree
2. disagree
3. somewhat disagree
4. somewhat agree
5. agree
6. strongly agree

- |  |             |
|--|-------------|
| 48. We have the appropriate personnel in my work unit to get the job done properly.          | 1 2 3 4 5 6 |
| 49. The work goals or standards in my work unit are generally fair.                          | 1 2 3 4 5 6 |
| 50. The supervisors in my work unit do a good job of setting work expectations.              | 1 2 3 4 5 6 |
| 51. People in my work unit are friendly with one another.                                    | 1 2 3 4 5 6 |
| 52. People in my work unit enjoy their co-workers.   | 1 2 3 4 5 6 |
| 53. We have the right tools, equipment, and materials in my work unit to get the job done.   | 1 2 3 4 5 6 |
| 54. The materials and supplies we need in my work unit are delivered on time and as ordered. | 1 2 3 4 5 6 |
| 55. The distribution of work among the people in my work unit is well balanced.              | 1 2 3 4 5 6 |
| 56. In my work unit, we have enough time to perform our jobs in a professional manner.       | 1 2 3 4 5 6 |
| 57. My work unit is structured properly to get the job done.                                 | 1 2 3 4 5 6 |

|   | Scale             |          |                   |                |       |                |
|---|-------------------|----------|-------------------|----------------|-------|----------------|
|   | 1.                | 2.       | 3.                | 4.             | 5.    | 6.             |
|   | strongly disagree | disagree | somewhat disagree | somewhat agree | agree | strongly agree |
| 58. People in my work unit are rewarded for good work.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 59. People in my work unit are paid fairly for the work that they do.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 60. Attempts are made to promote the people in my work unit who do good work.                                   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 61. People in my work unit receive promotions because they earned them.   | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 62. Supervisors in my work unit give credit to people when they do a good job.                                  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 63. There are penalties for people in my work unit who do not perform well.                                     | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 64. There is quick recognition for people in my work unit for outstanding performance by an individual or team. | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 65. People in my work unit know who their customers are.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 66. People in my work unit care about our customers.  | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 67. There are effective communication channels between organizational units in the Bureau.                      | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 68. People in my work unit do not have to rely on the "grapevine" or rumors for information.                    | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 69. People in my work unit have ample opportunity to exchange information with their supervisors.               | 1                 | 2        | 3                 | 4              | 5     | 6              |
| 70. People in my work unit get the facts and the information they need to do a good job.                        | 1                 | 2        | 3                 | 4              | 5     | 6              |



OFFICE OF THE DIRECTOR

## United States Department of the Interior

BUREAU OF MINES  
2401 E STREET, NW.  
WASHINGTON, D.C. 20241

April 15, 1991

## Memorandum

To: All Employees, Bureauwide

From: Director, Bureau of Mines

Subject: Results of the Cultural Survey

I am pleased to announce that the results are back from the Cultural Assessment Survey of all Bureau employees. If you would like more detailed information a report of survey questions and the raw data will be made available through the office of the Director of each field installation and each Associate Director's office in headquarters. As I indicated in my earlier memorandum, I am pleased to briefly share with you the background and results of the survey.

Employee Participation

Of the 2280 survey forms distributed, 1678 were completed and returned. This 74 percent response is considered to be extremely high for a survey of this type, and I greatly appreciate your participation. This clearly tells me that Bureau employees are committed to working for a better organization. Thank you for taking the time to make your views known.

Cultural Survey Objectives

We conducted the survey for two principal purposes: (1) to establish a baseline for measuring the climate within the Bureau as we begin this Quality Improvement journey (this survey will be repeated periodically as we proceed with our Quality Improvement efforts to assess the changes that may guide our future actions), and (2) to define early on areas where improvement is most needed so that we can begin to better focus our Quality Improvement efforts.

### Survey Results

The following table summarizes the average scores by grouping of categories as follows:

|                           |      |
|---------------------------|------|
| Customer Orientation      | 4.20 |
| Strategic Focus           | 3.78 |
| Work Force                | 3.72 |
| Communications            | 3.47 |
| Leadership and Management | 3.36 |

In reviewing the data it is important to remember that responses are given on a six point scale where 6 is the best. Your responses indicate that overall the climate in the Bureau is good. It comes as no surprise to many of us that within the "work force" category our people received the highest score; i.e., "social interaction" and "attitudes/morale," for the Bureau's strength is its people. It is also good to see "Customer Orientation" so high on the list.

Obviously, there are opportunities to improve, and the data indicates several areas in which we can strengthen and enhance our organizational performance. Your responses reflect that employees understand the advantages and necessity to focus on quality. The responses also indicate a lack of information and understanding about the Bureau's quality and productivity policy, infrastructure, and overall plan for introducing Quality Improvement throughout the Bureau. Recent communiques have been designed to address these issues and more will be forthcoming. As noted in previous correspondence, plans are underway to conduct "Awareness" training for all Bureau employees to help explain the Bureau's Quality Improvement efforts.

Your responses also indicated that we must listen and make more effective use of the work force as a source of ideas and to reward the innovators and risk takers. For the Bureau of Mines, ideas are our lifeblood. We are committed to doing more to encourage, promote and reward creativity.

We also need to do a better job of communicating throughout the Bureau, especially across organizational lines. Your responses imply that there is a greater reliance on unofficial rather than official channels of communication. It is important that we improve our communications so that employees are better informed about matters that affect their performance and work environment.

I also asked Mr. James Weathersbee of the Federal Quality Institute to analyze our current survey results and to reflect on what he sees. Mr. Weathersbee's analysis is consistent with our views, and he offers some helpful advice for improving the Bureau's environment. I found his comments most interesting and encourage you to review them. His analysis is included with the material that will be available at each location.

As a result of this survey, I now believe that we have a better feel of where we are and some of the challenges that lie before us. I thank you for your strong support and look forward with enthusiasm to the exciting times ahead.



Director

## APPENDIX D.—STATUS OF QUALITY IMPROVEMENT ACTIVITIES



OFFICE OF THE DIRECTOR

## United States Department of the Interior

BUREAU OF MINES  
 2401 E STREET, NW.  
 WASHINGTON, D.C. 20241

March 7, 1991

## Memorandum

To: All Employees, Bureauwide

From: Director, Bureau of Mines

Subject: Status of Quality Improvement Activities Within  
 the Bureau of Mines

In my memorandum of January 4, 1991, I expressed to you my strong support for the institution of a Quality Improvement philosophy within the Bureau of Mines. Since that time, a number of activities have been ongoing within the Bureau that are moving us towards implementation of that philosophy. I would like to take this opportunity to update you on the status of those activities.

However, before I begin, let me share with you briefly some of my thoughts as to what I envision as Quality Improvement. Quality Improvement is a philosophy, a way of doing things that recognizes the importance of continuous improvement to excel and to respond to the changing needs of the environment in which we operate. Quality Improvement is about a shared vision of what the future of the Bureau should be. This vision is formed based upon considerations of who our customers are and how we go about serving them and meeting their expectations.

Once that shared vision has been developed, it needs to be broken down into goals and objectives to be pursued by the organization. To ensure that progress is being made toward these goals and objectives, it will be necessary to develop tools or statistical techniques and measures to monitor progress. This benchmarking operation is critical to our ability to, in a guided way, move forward with progress toward that vision. Your participation in the cultural assessment survey was an important part of establishing the initial benchmark for where we are and where we need to go.

Once the vision is in place, the goals and objectives defined, and the benchmarking techniques developed for determining how well we are doing, our major task will be a vigorous and focused pursuit of that vision. As we do this, it will become obvious that there are obstacles such as certain management or administrative practices which stand in the way of realizing our goals and objectives. Quality Improvement is built on the premise that

the people who best know those obstacles and how those obstacles can be overcome are the people actually doing the work. Therefore, it builds upon the formation of teams of employees focused on progress. These teams, called Quality Improvement Teams, become the fundamental working group of our Quality Improvement efforts.

I am excited about the possibilities that will result from introducing Quality Improvement throughout the Bureau of Mines. Obviously, for us to approach this from a most effective point of view requires training for all of the people within the Bureau of Mines. There is much to be gained from this experience, but it is best gained when we are all well grounded in a common understanding of Quality Improvement. I realize that the process and the up-front training activity will require a commitment of employees' time. However, Quality Improvement is everyone's business. A commitment from all employees, supervisors, and managers is essential if we are to be successful in our efforts. I urge each and every supervisor and manager to encourage and foster cooperation and participation of employees in the training and the conduct of Quality Improvement Teams. It is my expectation that annual performance plans may be rewritten to recognize these important activities. I call upon everyone to join me in committing the time and resources to do this right.

While our Quality Improvement process will become clearer as our training and implementation activities expand, I believe we are off to a good start.

Let me return now to the status of activities within the Bureau. These activities include the following:

1. Execution of an agreement with the Federal Quality Institute (September 28, 1990) to provide consulting services during the implementation of Quality Improvement throughout the Bureau.
2. The formation of a Quality Council (January 4, 1991). The purpose of that council is to provide executive leadership and direction to Quality Improvement efforts by setting Bureauwide policies, goals, and strategies and by providing resources required for all Quality Improvement activities.

Membership of the Council:

T S Ary, Director, Bureau of Mines  
Robert E. Doyle, Jr., Spec. Asst. to the Director  
David S. Brown, Assoc. Dir.--Information & Analysis  
David R. Forshey, Assoc. Dir.--Research  
Walter J. Lander, Assoc. Dir.--Finance & Management

3. Initiation of a cultural assessment survey, in conjunction with the Federal Quality Institute, among all Bureau of Mines employees. All employees will receive the results of this survey as soon as they are available, estimated to be April 1, 1991.

4. The formation of a Quality Management Board (QMB) on January 4, 1991. The purpose of the Board is to implement the Quality Improvement policy, goals, and strategies established by the Quality Council by: (1) directing and coordinating the activities of Quality Improvement Teams created to address specific issues/problems, and (2) recommending, for approval by the Council, specific actions to be taken by various Bureau groups to meet Quality Improvement goals. The Board will be drawing heavily upon your participation on those working groups in carrying out the directions of the Quality Council.

The Board's membership is as follows:

Robert E. Doyle, Jr., Spec. Asst. to the Director  
 Robert S. Kaplan, Chief, Division of Minerals and  
 Materials Science  
 Douglas D. Bolstad, Research Director, Spokane Research  
 Center  
 Lewis V. Wade, Research Director, Twin Cities Research  
 Center  
 Glenn C. Pritchard, Acting Chief, Division of  
 Organization and Management  
 Armond A. Sonnek, Assistant Director--Helium Operations  
 Carl H. Wallace, Chief, Branch of Personnel, Denver  
 L. Michael Kaas, Chief, Division of Resource Evaluation  
 Jacqueline S. Waitz, Management Officer, Information and  
 Analysis Directorate  
 Robert B. Hoekzema, Chief, Anchorage Branch, Alaska  
 Field Operations Center

5. Under the terms of an agreement between the Xerox Corporation and the Department of the Interior, the Bureau of Mines is making use of Xerox expertise in the implementation of Quality Improvement.

6. The principal management officials of the Bureau of Mines received introductory Quality Improvement training at a recent Management meeting in Gettysburg, Pennsylvania.

7. The Bureau is committed to training all of its employees in the area of Quality Improvement. The goal is to make available general training on this subject to all employees by the end of fiscal year 1991.

On Friday, February 22, 1991, the QMB met for the first time along with members of the Quality Council. At this meeting, the Board decided to focus its initial activities on the following areas:

1. Quality Improvement Training
2. Implementation of Quality Improvement
3. A vision for the Bureau of Mines
4. Communications

The manner in which the Board will undertake activities in these areas will be to form Quality Improvement Teams. These will be groups of up to 10 interested Bureau of Mines employees who will come together to work through these most important issues.

For the purpose of forming these teams, the following individuals were assigned responsibility for the subject areas chosen:

1. Training - Doug Bolstad; FTS 439-2653
2. Communications - Lew Wade; FTS 789-4610
3. Implementation - Carl Wallace; FTS 776-0295
4. Vision - Mike Kaas; FTS; 634-1150

Within the next week or so, these work group leaders will be seeking to define their objectives and selecting individuals to serve on these teams. Anyone with a strong interest in becoming involved should make that interest known either to his/her immediate supervisor or to any member of the QMB. Please realize that it is possible that we will have more people expressing an interest early on in the process than we will have opportunity for membership on those first Quality Improvement Teams. As more individuals are trained and more experience is gained in implementing Quality Improvement, there will be many opportunities downstream to accommodate those people with an interest in participating in the process.

I will be looking to the QMB to focus strongly on keeping all employees advised of activities in this most important area. The exact nature of such communications and frequency are items that will be left to the Quality Improvement Team on Communications.

I appreciate your attention on this matter and also your patience in giving us an opportunity to start this process correctly. We will be keeping you informed and certainly seek your input and guidance to help us get where we want to be.

  
Director

**APPENDIX E.—IMPLEMENTATION OF QUALITY IMPROVEMENT/CALL  
FOR FACILITATORS; QUALITY IMPROVEMENT  
IMPLEMENTATION PLAN**



United States Department of the Interior

BUREAU OF MINES  
WASHINGTON, D.C. 20241



November 25, 1991

Memorandum

To: Principal Officials, Bureauwide

From: Director, Bureau of Mines

Subject: Implementation of Quality Improvement/Call for Facilitators

Attached is the Bureau's plan for implementing Quality Improvement (QI) in the Bureau of Mines. Because I believe this plan will provide our employees essential information as they decide on how they can best participate in the QI process, I would appreciate your sharing it with all of our employees. I would like to take a few moments at this point to discuss briefly the philosophy underlying development of the plan and to summarize its highlights.

As we proceed with implementation, I cannot stress enough the importance of providing all of our employees with an opportunity to participate in the QI process and to do so at the earliest possible time. Furthermore, the Quality Council and the Quality Management Board believe a cross section of the Bureau's employees must be involved on Quality Working Groups and Bureauwide Quality Improvement Teams. Our QI activities have already effectively involved a cross section of our employees as orientation trainers as well as members of the Quality Working Groups currently working on several of the tasks in the attached Implementation Plan.

In addition, it seems essential to empower our employees to carry out tasks under the QI process from the very beginning of its implementation. Thus, we must have faith in their dedication to these tasks, to our organization, and in their ability to do a job of the highest quality. I think it appropriate for these tasks to be defined in the broadest possible terms and for the employees to be given the authority to implement their recommendations whenever possible. Remember, QI is not an effort to replace management--management is key to its success.

Now that the orientation phase of the QI process is complete, we can move forward to implementation. The attached Implementation Plan describes how we will be "beginning the journey" of QI. It sets forth our road map (the Bureau's vision, values, and mission). It describes our QI infrastructure including the Quality Council, Quality Management Board, facilitators, Quality Working Groups, and Quality Improvement

Teams. Preparatory activity is described calling for the establishment of a number of new Quality Working Groups to consider subjects such as our customers, standards and measurement, and barriers to change. It also presents processes for identifying facilitators and criteria for considering ideas, issues, and problems for assignment to Quality Improvement Teams. The Quality Council and the Quality Management Board consider this Implementation Plan as dynamic and evolutionary; i.e., subject to adjustment as we proceed.

The next step in the implementation process is to train facilitators to work with the Quality Improvement Teams. Each location will be allocated one facilitator for approximately each 50 employees. We hope our facilitators will be volunteers and will be able to commit up to 20 percent of their time to these collateral duty assignments. This commitment almost certainly will require accommodation on the part of supervisors and changes in facilitators' Individual Performance Plans.

Please inform your staff members regarding this opportunity and encourage broad participation on their part. Selections for your location will be made locally. Suggested criteria for selection are presented in Appendix 2 of the plan. The names of those selected should be sent to the current chairman of the Quality Management Board, Dr. Lewis Wade, at the Twin Cities Research Center, by December 9. He will share all the selections with both the Quality Management Board and the Quality Council.

As you select facilitators, I believe it is essential to recognize both the investment the Bureau already has made in our QI awareness trainers and the desires of many other of our employees to participate in the QI process, but who have not yet had an opportunity to do so. Thus, I urge that the individual desires of our employees and the advantages to the Bureau of each selection be weighed carefully. I believe that the more people that we can get involved in the quality journey, the more meaningful and beneficial it will be for all of us. I would encourage you to talk about this Implementation Plan for the quality journey and to cultivate interest and desire to participate on the part of your employees.

The methods of implementing QI at each location are left up to local management. For example, you may choose to accomplish this through the existing management structure or to establish a committee to facilitate the process. One possible model of a committee to facilitate the process is described in Appendix 1 of the Implementation Plan. Whatever way is selected to implement QI at your location, we deem it important to recognize existing collective bargaining agreements where unions represent employees.



Director

Attachment

## QUALITY IMPROVEMENT IMPLEMENTATION PLAN "BEGINNING THE JOURNEY"

### OVERVIEW AND ACTION PLAN

Quality Improvement (QI) is a journey. The purpose of this Quality Improvement Implementation Plan is to provide: a road map to point us in the right direction, an infrastructure to provide the vehicle, preparations to be made before we begin, and a series of first steps required to get us started on the journey. Our road map is almost complete, part of the infrastructure is in place and many of the preparations have already been made. This plan provides for completing the infrastructure and preparations and specifies the actions or first steps required to put us on our way. (Detailed descriptions of the road map, infrastructure components, and preparation tasks follow this overview.)

The Quality Improvement Road Map consists of our new vision, values, and mission statements. Goals and objectives are being developed by the Vision Quality Working Group. Everything that the Bureau does on its quality journey leads to the realization of these important statements. They guide us, inspire us, and give us a focus. Our Awareness Orientation begins with them and they will form the foundation for all that follows.

Our Quality Improvement infrastructure includes a number of components. Some are permanent and are charged with ongoing functions; others are temporary and have either initial tasks to perform or are created to address specific quality improvement opportunities. Permanent components include the Quality Council (QC) which provides overall policy guidance and direction for the QI process, the Quality Management Board (QMB) which carries out the policies and directions of the Quality Council and oversees implementation of the QI process throughout the Bureau, and a Quality Officer who serves as a full-time staff resource to the process. Quality Working Groups have been or will be formed to address specific tasks integral to the implementation of QI and will dissolve when their tasks are complete. One of the most important infrastructure components is the Quality Improvement Team. Quality Improvement Teams will be those groups of employees that will be formed to work on specific Bureauwide or local quality improvement opportunities. Facilitators are employees specially trained in group dynamics and problem solving who will facilitate the work of groups; e.g., Quality Improvement Teams, at all levels. When a quality culture is firmly embedded in the Bureau and all employees are acquainted with related skills, the need for facilitators should diminish.

Quality Working Groups already tasked include Training which is providing for the education and skills development of employees in QI processes, Vision which is developing the statements comprising our "road map," Communication which is

working on keeping the Bureau informed on our progress, and Implementation which was tasked with assembling this implementation or "rollout" plan. Other tasks to be assigned to Quality Working Groups include the identification of Barriers to QI in the Bureau, development of Rewards and Recognition processes for QI, and the initial identification of the Bureau's primary external Customers.

## FIRST STEPS - ACTION PLAN

Our first steps on the journey are specific, time-phased actions which must begin immediately upon approval of the plan. These actions are designed to put us well on our way by February 1, 1992:

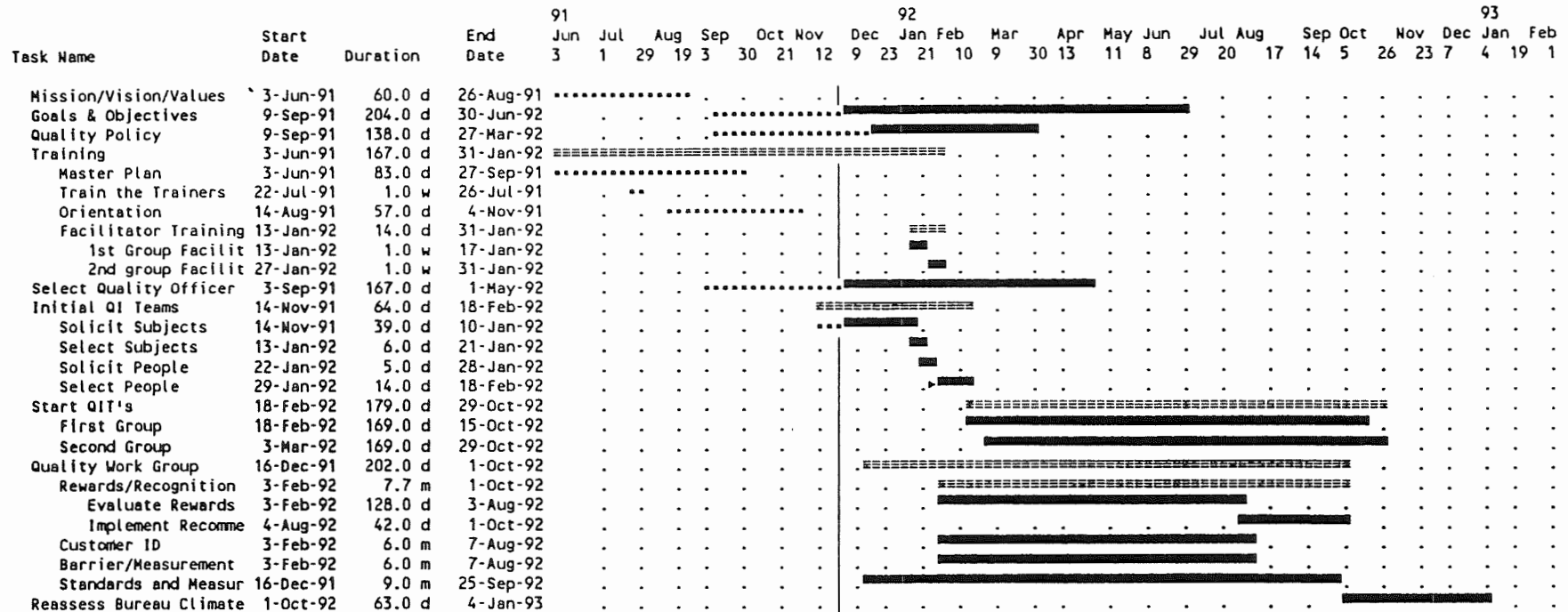
1. **Complete employee awareness orientation.** This process began in August 1991 and concluded on November 1, 1991.
2. **Communicate the Implementation Plan to employees through line managers throughout the Bureau.** Begin as soon as possible; complete by late November 1991; responsibility - QC/QMB. A "Principal Officials" or equivalent memorandum will transmit a copy of this plan and emphasize management's role in supporting the process, empowering employees, and creating a quality culture environment in their respective organizations. A suggested model for local infrastructure called the "Quality Steering Group" is provided as Appendix 1.
3. **Solicit and select volunteers to be facilitators.** Begin in November 1991; complete by January 1, 1991; responsibility - local management. Recommended selection guidelines are provided as Appendix 2.
4. **Solicit and select Bureauwide quality improvement problems/issues.** Begin by late November 1991; complete by late December 1991; responsibility - local management and QMB. Guidance will be provided by memorandum from the Director. Local management will initiate solicitation and prioritize the submissions; the Quality Management Board will select Quality Improvement Problems/Issues for assignment to Bureauwide Quality Improvement Teams.\* Recommended selection guidelines for use in suggesting Quality Improvement Problems/Issues are provided in Appendix 3.
5. **Charter first Bureauwide Quality Improvement Teams.** Begin early mid-January 1992; complete by mid-February 1992; responsibility - QMB. Guidelines for Quality Improvement Team formation and leadership are included in this plan. Because it is beneficial to have facilitators available to assist in their initial efforts, most Quality Improvement Teams will begin work when trained facilitators are available. A Quality Improvement Team functional statement can be found in the "infrastructure" segment of this plan.
6. **Train facilitators.** Accomplish by the end of January. McManis Associates has already been contracted to provide 1 week of training in group dynamics and QI problem-solving skills to 50 facilitators. (Two groups of 25 each will be trained during the weeks of January 13-17 and January 27-31, 1992.)

\*Note: If a local committee exists; i.e., either a Quality Steering Group (see Appendix 1) or a cross-representational one specifically formed for the purpose, it will prioritize the quality improvement problems/issues from its location.

7. **Establish Barriers, Customers, Standards and Measurements, and Rewards/Recognition Quality Working Groups.** Begin at any time, but no later than January 1992; complete by February 1, 1992; responsibility - QMB. Functional statements for these Quality Working Groups are contained in this plan under "Preparation."
8. **Assess/Reassess Progress.** Begin midyear 1992; accomplish by October 1, 1992; responsibility - QMB. Changes in the Bureau's "quality culture," performance of the QI plan, and the success of Quality Improvement Teams chartered to date will be assessed.

The above preparations and first-step actions complete the implementation phase of Quality improvement in the Bureau and make the process "operational." Once underway, we will have many opportunities to examine our progress and to adjust our course. Future QI annual plans will be developed to describe where we go after implementing these initial steps.

Schedule Name : TQI IMPLEMENTATION  
 Responsible :  
 As-of Date : 27-Nov-91 Schedule File : TQMB0829



-----  
 ■ Detail Task    ■■■■■ Summary Task    \*\*\*\*\* Baseline  
 ■■ (Progress)    ■■■■■ (Progress)    >>> Conflict  
 ■■ (Slack)       ■■■■■ (Slack)       .. Resource delay  
 Progress shows Percent Achieved on Actual    ▲ Milestone  
 ----- Scale: 4 days per character -----

## PART 1 - BUREAU OF MINES QUALITY IMPROVEMENT ROAD MAP

Before an organization can effectively begin its quality journey it must have a vision of where it is going, a set of values to guide it along its way, and an understanding of its mission. Statements of our vision, values, and mission have been developed by a quality working group and are presented on the following pages. In addition, it is very helpful to agree on the goals and objectives for our organization and to have a quality policy. These will be developed by the quality working group on vision and submitted to the QMB and then the QC for review.

### Our vision:

MINERALS AND MORE...

We will champion the importance of minerals and materials to ensure a strong, competitive America through:

- o cutting-edge technologies
- o balanced Government policies
- o an enlightened citizenry
- o applying our expertise to other national purposes
- o a total commitment to quality.

### Our values:

We value the ability and potential of each member of the Bureau team.

We take pride in our products and services and are committed to their constant improvement.

We are committed to satisfying the people we serve.

We serve the public with integrity, professionalism, and social responsibility.

We believe that innovation is essential to our success.

### Our Mission:

Our mission is to help ensure our country has an adequate, dependable supply of minerals and materials to meet its national security and economic needs at acceptable social, environmental, and economic costs.

We do this by promoting and encouraging private enterprise in the development of viable and stable mineral industries through the transfer of innovative extraction, processing, recycling, and environmental technologies; our use of cooperative partnerships with industry, academia, and Government; our timely, authoritative worldwide mineral intelligence; our advocacy of public policies based on good science and sound economics.

## PART 2 - QUALITY IMPROVEMENT INFRASTRUCTURE

### Quality Council

The membership and functions of the Bureau's Quality Council are described below. One Council, which has been functioning since January 1991, will serve the entire Bureau of Mines.

#### Membership

Director, Deputy Director (or a designated representative of the Office of the Director), Associate Directors

#### Functions

- o Establish Bureau Quality Improvement policy guidance and direction
- o Allocate resources for the implementation of recommendations from Bureauwide Quality Improvement Teams
- o Schedule occasional briefings by selected Bureauwide Quality Improvement Teams
- o Address situational barriers to the implementation of recommendations from the Bureauwide teams
- o Serve as quality leaders by living the vision. Provide visible, dynamic support for quality by exemplifying the principles of quality and empowering all Bureau employees to achieve it.

### Quality Management Board

This board, which already is functioning, addresses issues that cut either across Directorates or impact more than one geographical location. In addition, the board is responsible for overseeing the implementation of the Quality Improvement Process in the Bureau of Mines. Members of the board will serve 3-year staggered terms so that only three members are replaced each year, except that initially three members will serve a 2-year term and three a 4-year term. The representative of the Office of the Director serves at the Director's discretion.

#### Membership

Three members from each Associate Directorate plus the Deputy Director (or a designated representative of the Office of the Director).

## Functions

- o Implement Quality Council policies and actions
- o Recommend policies and/or strategies to the Quality Council
- o Charter Quality Working Groups as appropriate
- o Provide oversight of Bureau QI training
- o Select Bureauwide and/or cross-cutting problems/issues to be addressed by Quality Improvement Teams
- o Charter Quality Improvement Teams to study Bureauwide issues
- o Select team members/leaders for Bureauwide and/or cross-cutting teams
- o Monitor/champion Bureauwide Quality Improvement Teams
- o Receive all Bureauwide Quality Improvement Team recommendations, forward those that require resources or major policy changes to the Quality Council with their recommendations
- o Review and evaluate the quality process. Recommend appropriate adjustments to the Quality Council.

## Quality Working Groups

Quality Working Groups have been and will be established to assist in implementing the QI process. Those already functioning have produced this Implementation Plan; provided for our training needs; developed vision, value, and mission statements; and initiated communications on our QI efforts. In the near future, additional Quality Working Groups will begin work on recognition in the QI process, barriers to change, our customers, and standards and measurement.

## Membership

Quality Working Groups should consist of up to 10 members, each selected by the QMB, and should represent a cross section of the Bureau's employees from the perspectives of geography, organization, and rank.

## Functions

- o Addresses and develops strategies, plans, and philosophies relevant to the Bureau's Quality Improvement process

- o Makes recommendations to the QMB as appropriate
- o Assists the QC and/or the QMB in implementing the Quality Improvement process.

### Bureau Quality Officer

A Bureau of Mines Quality Officer will be selected by May 1992. Decisions regarding the position description and candidate selection will be made by the Quality Council. The Quality Officer will serve in the Director's Office and report to the Deputy Director.

#### Functions

- o Provide staff assistance to the QC and the QMB
- o Serve as liaison between the QC, QMB, and local activities
- o Serve as Bureau contact person for QI issues
- o Assist in coordination of QI activities in the Bureau of Mines
- o Maintain a clearinghouse of Bureauwide QI suggestions
- o Maintain an archival history on Bureau of Mines QI activities
- o Serve on library user's group to ensure that quality-related publications are available in Bureau libraries.

### Facilitators

Facilitators will be selected from a pool of volunteers. It is expected that this activity will require approximately 20 percent of an individual's time. Supervisors and managers may wish to encourage individuals they feel are appropriate to volunteer. It is recommended that a pool of 50 facilitators be established and trained in January 1992, so that they will be ready to immediately participate in Quality Improvement Teams to be established at that time. One facilitator will be chosen for approximately each 50 employees at a locality. Functions of facilitators are presented below. Recommended guidelines for their selection appear in Appendix 2.

Facilitators will be selected by either local management or a committee designated by local management. Personal interviews of all prospective facilitators are strongly recommended. Supervisory consent is required before an individual is selected. A list of selectees for each locality should be sent to the chairperson of the Quality Management Board.

It is not recommended that a supervisor/manager facilitate a Quality Improvement Team that has as a member an individual in his/her direct line of supervision.

#### Functions

- o Keep discussions "on track" and meetings focused and flowing
- o Explain Bureauwide quality to the team
- o Provide concurrent coaching to the team leader and members in the tools necessary to carry out the Bureau Quality Improvement process; e.g., problem solving, team building, and measurements
- o Monitor need for additional information
- o Stimulate and maintain team activity
- o Serve as an impartial observer.

#### Quality Improvement Teams

A Quality Improvement Team should consist of up to 10 members, depending on the nature/complexity of the issue, and will work on a specific issue or problem. Most members should have firsthand knowledge of the operation or subject being examined. The makeup of the team should represent all aspects of the operation/subject ("part of the solution, part of the problem") including customers and neutral parties, when appropriate. In addition, some members may be selected because they possess necessary information or data collection skills. In the initial phase of Quality Improvement implementation, it is strongly recommended that each team have a trained facilitator assigned to it.

Quality Improvement Teams will consist of volunteers. If skill and/or knowledge are identified as missing from a team, management should exercise leadership to ensure these are available. In the case of local teams, it is suggested management urge team members to seek data and possible solutions from a variety of sources including other Bureau locations. Supervisory consent is required before an individual is selected.

Quality Improvement Teams may address problems/issues that affect a single locality (local teams) or a number of geographical and/or organizational entities. Local teams will be chartered by local management or a specially designated committee (see Appendix 1 for a possible model) while Bureauwide teams will be chartered by the QMB.

## Functions

- o Describe the situation "as it is"
- o Conduct data collection and analysis to establish baseline information and effects of change; highlight any special causes of problems
- o Seek and recommend solutions and/or alternative approaches.

## PART 3 - PREPARATION

### Training

This Quality Working Group, which is functioning already, develops plans for training Bureau personnel with regard to quality improvement. This training includes: orientation for all Bureau employees; as well as problem solving, facilitation, and tools training for facilitators.

### Membership

The working group consists of six to nine members and is chaired by a member of the QMB. Membership represents a cross section of Bureau employees, including representatives of all Directorates, of supervisors and nonsupervisors, and of a variety of geographical locations.

### Functions

- o Identify training needs for implementation and expansion of the quality improvement process
- o Recommend types of training
- o Recommend training methods and approach; e.g., internal vs. contract
- o Schedule training in conjunction with the implementation team
- o Recommend mechanisms for addressing future training issues.

### Communications

The initial purpose of this Quality Working Group is to communicate complete information concerning our QI journey to the entire Bureau of Mines family in a timely, reliable, and effective manner. This will include progress, events, accomplishments, and initiatives. The intent of the Working Group's actions is to create an atmosphere whereby communications are freely and openly supplied, and are reliable, welcome, and eagerly anticipated.

It will serve as a vehicle through individuals, working groups, and Quality Improvement teams in which they can share their experiences and accomplishments with their colleagues in the Bureau. In addition, the group will provide assistance, as requested, to the QMB and the other working groups in the area of communications.

## Membership

The Communications Working Group consists of eight members representing all grade levels within the Bureau of Mines and various disciplinary backgrounds. Members will serve staggered terms and will rotate every 3 years to expand the opportunities for employee participation and to constantly rejuvenate the group so as to generate new ideas.

## Functions

- o Provide the entire Bureau family with regular updates on the status of QI activities through existing and innovative communication mechanisms that will accomplish this goal most effectively
- o Quantitatively and qualitatively assess the effectiveness of various QI communications methods in the Bureau of Mines
- o Based on assessments, identify problem areas or barriers to effective QI communication and develop solutions to these problem areas
- o Assist the QMB and other working groups with the dissemination of information about accomplishments, progress and other QI-specific experiences, and information to all Bureau employees.

## Rewards and Recognition

A Quality Working Group will be established to examine and study the existing Bureau's Performance Management System (PMS), Incentive Awards program, and delegations of authority for rewarding and recognizing employees and to recommend an integrated system for rewarding and recognizing employee contributions to QI.

## Membership

The Awards and Recognition Quality Working Groups should consist of 6 to 10 members, appointed by the Quality Management Board, and should have representatives from each Associate Directorate.

## Functions

- o Determine how the existing PMS can be used to recognize employee contributions, including those of managers and supervisors, in support of the Bureau's QI initiative
- o Assess the Incentive Awards program, particularly in regard to group awards, for short-term use in recognizing accomplishments in QI

- o Recommend additional mechanisms for recognizing QI contributions and successes
- o Recommend charters for one or more Quality Improvement Teams to work on current systems (e.g., PMRS and Incentive Awards) so as to remove disincentives to QI, improve effectiveness, and be more responsive to the needs of managers and employees.

### Vision

A Quality Working Group, which is functioning already, was chartered by the QMB to develop the Bureau's values, mission, and vision statements. This has been completed.

#### Membership

The working group consists of seven members representing all Bureau Directorates.

#### Functions

- o Develop a quality definition
- o Recommend to the QMB and QC a quality policy that fosters a climate of empowerment and accountability within the Bureau
- o Develop goals and objectives for our quality journey.

### Standards and Measurement Techniques

A Quality Working Group will be chartered by the Quality Management Board to investigate and recommend measurement techniques and the development of standards for use by the Quality Improvement Teams as they conduct their work.

#### Membership

The Standards and Measurement Techniques Quality Working Group should consist of 6 to 10 members, appointed by the Quality Management Board, and should have representatives from each Associate Directorate.

#### Functions

- o Identify and recommend appropriate standards and measurement techniques

- o Assist Quality Improvement Teams in establishing standards and measuring progress
- o Coordinate with the Customer Identification Quality Working Group.

### Customer Identification

A Quality Working Group will be chartered by the Quality Management Board to identify primary Bureau customers; i.e., those most important to realization of the Bureau's mission, vision, and long-term viability. Primary customers may be customers common to all Bureau activities, or customers specific to individual directorates or locations. It is anticipated that the activities of this working group will lay the groundwork for future Bureauwide strategic planning.

#### Membership

The customer identification Quality Working Group should consist of 6 to 10 members, appointed by the Quality Management Board, and should have representatives from each Associate Directorate.

#### Functions

- o Develop a working definition of primary customer and, when applicable, criteria for identification of primary customers
- o Analyze and track historical changes in Bureau primary customers
- o Identify current primary customers and the key products and services that we deliver to them
- o Determine and analyze primary customer requirements and expectations
- o Identify key processes and personnel involved with each current primary customer
- o Identify potential competitors for the Bureau's primary customers
- o Anticipate near-future (e.g., next 5-10 years) changes in Bureau primary customers
- o Perform a strategic prioritization of current primary customers
- o Coordinate with the Standards and Measurement Techniques Quality Working Group.

### Barrier Identification

A Quality Work Group will be chartered by the Quality Management Board to identify barriers to change in the Bureau of Mines and barriers to the implementation or advancement of Quality Improvement in the Bureau. Results of the working group may be used by the QMB to select and prioritize Bureauwide Quality Improvement Teams.

#### Membership

The barrier identification Quality Working Group should consist of 6 to 10 members, appointed by the Quality Management Board, and should have representatives from each Associate Directorate.

#### Functions

- o Identify barriers to change in the Bureau of Mines using data collected from the QI orientation sessions, the Bureau climate assessment(s), the problem/issue identification forms, and any other sources available
- o Analyze and categorize barriers according to organizational level and/or location (e.g., Bureauwide, Directorate, research center)
- o Identify and predict effects of barriers on Bureau performance and customer satisfaction
- o Prioritize barriers according to importance and urgency
- o When appropriate, recommend solutions or immediate action to be considered by the QMB.

## APPENDIX 1 - MODEL FOR LOCAL INFRASTRUCTURE

A "Quality Steering Group" may be established at a geographic location. Each such Quality Steering Group would report to local management. Group members would serve staggered terms. The length of term for Group members will be established by either local management or the Group, with the recommended term being between 2 and 4 years.

### Membership

Established by local managers, Quality Steering Groups should represent, to the degree possible, all organizations and all levels at the location. It is recommended that unions be afforded the opportunity to be represented on local Quality Steering Groups, consistent with local collective bargaining agreements. A Quality Steering Group should consist of from 6 to 10 members.

### Functions

- o Establish operating procedures for itself
- o Provide for local implementation of Bureauwide quality policy established by the Quality Council
- o Select facilitators and notify the QMB
- o Solicit and prioritize Quality Improvement problems/issues
- o Forward a prioritized list of all Quality Improvement problems/issues to the QMB
- o Charter local Quality Improvement Teams and notify QMB
- o Keep QMB/Quality Officer informed of issues and problems submitted to Quality Improvement Teams
- o Ensure that personnel are trained in the skills necessary to function effectively as team members.

## APPENDIX 2 - SUGGESTED FACILITATOR SELECTION GUIDELINES

- o Credibility and respect in organization
- o Ability to relate to people at all levels
- o Ability to coach, nurture, be a mentor
- o Enthusiasm for and desire to do a quality job
- o Ability to plan, organize, and complete tasks in a timely manner
- o Communication skills
- o Interpersonal relationship skills
- o Impartiality/fairness
- o Commitment to the QI process

Note: Grade should not be a factor.

Should be used as a guide in deliberations during selection process. However, commitment to the QI process is essential.

### APPENDIX 3 - SOLICITATION AND SELECTION OF QUALITY IMPROVEMENT PROBLEMS/ISSUES

Initially, suggestions for Quality Improvement problems/issues will be invited by the Director in a memorandum to all employees. This memorandum, which also will bring our organization up to date on implementation of the Quality Improvement process, will be distributed during November 1991. Following issuance of the memorandum, topics may be suggested at any time.

#### SUGGESTED SELECTION GUIDELINES

- o Customer(s) impacted by potential improvement (number and importance)
- o Impact on delivery of goods and services to external customers
- o Potential increase in customer satisfaction
- o Amount of potential improvement
- o Return on investment
- o Urgency
- o Ease of technological solution
- o Product and/or service line(s) impacted
- o Potential resistance to change
- o Duration
- o Feasibility (bite size vs. solving world hunger)
- o Significance
- o Measurable

**APPENDIX F.—SOLICITATION OF OPPORTUNITIES, IDEAS, AND PROBLEMS  
FOR BUREAU OF MINES QUALITY IMPROVEMENT TEAMS**



OFFICE OF THE DIRECTOR

United States Department of the Interior

BUREAU OF MINES  
WASHINGTON, DC 20241-0002

December 17, 1991

Memorandum

To: Principal Officials, Bureauwide

From: Director, Bureau of Mines

Subject: The Solicitation of Opportunities, Issues, and Problems for Bureau of Mines Quality Improvement Teams

Attached to this document, is a memorandum from me to all Bureau employees. Consistent with our desire for broader employee participation, I am asking each individual to submit ideas to me through the Quality Management Board. The Board will evaluate all of the ideas to determine the focus of our initial Bureauwide Quality Improvement Teams. I have also asked them to respond promptly to each submission so that employees will know the status of their proposals. Those ideas reviewed by the Board which are determined to be of local interest will be returned to Principal Officials for appropriate action.

To initiate this process, I am asking that you distribute the attached memorandum to all of your employees. In those situations where there is a Union representing employees, it is incumbent upon you to clear the distribution with Union representatives.

Let me take this opportunity to encourage all of you to involve employees in this process of soliciting ideas as much as possible. I again point out to you the model of "Quality Steering Groups" that was discussed in the Implementation Plan attached to my November 25, 1991, memorandum. I believe that the existence of such local Steering Groups will promote increased levels of employee involvement and greater acceptance of the actions resulting from our Quality Improvement efforts.

We are rapidly approaching the time when Quality activity will really begin within the Bureau of Mines. By late-January/ early-February, facilitators will be trained; all Bureau employees will have been oriented in the Quality activity; and we will have selected and commissioned initial Bureauwide Quality Improvement Teams. I look forward to taking another step on this journey in earnest and ask for your continued support and cooperation in that process.

*[Signature]*  
Director

Attachment



OFFICE OF THE DIRECTOR

## United States Department of the Interior

BUREAU OF MINES  
WASHINGTON, DC 20241-0002



December 17, 1991

### Memorandum

**To:** All Employees

**From:** Director, Bureau of Mines

**Subject:** The Solicitation of Opportunities, Issues, and Problems for Bureau of Mines Quality Improvement Teams

Now that the Quality Improvement orientation sessions have been completed, we need to quickly build upon the energy and enthusiasm of those encounters--to begin to apply the Quality Improvement principles to the business of the Bureau of Mines. We would like to begin by thanking all the individuals who worked so hard to see that the orientation experience was a successful one.

We turn now to the next steps. As described in the Implementation Plan recently issued, the expectation we have for the future is that 3 months from today, a number of Quality Improvement Teams, both Bureauwide and local, will be working on issues of importance to all employees.

If the Bureau is to realize the maximum benefit from this Quality journey, it needs to form new alliances within and outside the local organizations. One powerful way to create these alliances is to establish teams of people who normally have not worked together, but who, by their combined energies, might well accomplish more than we have been able to accomplish under our present process. A good example of this effort is the positive energy and outcomes that resulted from the groups of employees who recently conducted the orientation training.

It is considered most important that Bureauwide Quality Improvement Teams be an integral part of the beginning stage of our Quality journey. We need to devote special efforts to be sure that we apply the Quality principles to the business of the Bureau of Mines; i.e., information, research, finance, and management, rather than to issues that are peripheral to our main activities. In fact, focusing our efforts of Quality Improvement on these activities is vital, if we are to realize the maximum benefits of this journey.

The purpose of this memorandum is to ask you to submit opportunities, problems, or issues which will become the subject for Quality Improvement Teams. We have all learned about barrier identification and, with that very fresh in our minds, it would be useful for us to build upon the "barriers-that-limit-us-from-moving-forward" concept and use it as a means to define opportunities for Bureauwide Quality Improvement Teams.

Let me describe to you briefly how it is envisioned that the process will proceed. Any employee can submit her or his proposed subject for a Quality Improvement Team to the Quality Management Board (QMB). Please forward all suggestions to the Chairman of the QMB, Lewis Wade, at the Twin Cities Research Center by January 21, 1992. It is anticipated that the QMB will meet in late January or early February to consider this initial group of proposals and take the following actions:

1. It will select a limited number of cross-cutting or cross-functional ideas appropriate for the immediate formation of Bureauwide Quality Improvement Teams.
2. It will prioritize for further action the remaining ideas appropriate for Bureau of Mines Quality Improvement Teams.
3. Those ideas that the QMB feels would best be dealt with on a local level will be returned to the local Principal Officials for appropriate action.

The Quality Management Board will acknowledge all submissions received and notify the appropriate local Principal Officials, explaining what actions will be taken on each item submitted.

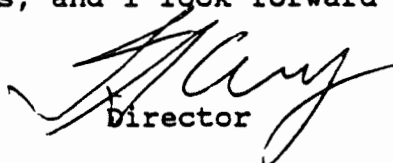
Attached to this memorandum is a list of the criteria that will be used by the Board in reviewing the initial submission of ideas, as well as a form that can be used to submit such ideas.

Employees submitting ideas to the Quality Management Board are also asked to send a copy of that submission to me in Washington. I am very interested in the process, and I want to be sure that I do not lose touch with the ideas and thoughts of Bureau employees.

The QMB will recommend to the Quality Council Bureauwide Teams that should be commissioned by late January or early February, which should roughly coincide with the completion of training for Bureau facilitators. Thus, with the initial teams decided upon and the facilitators trained, we can begin in earnest the Quality Improvement journey with the startup of Bureauwide teams by mid-February.

I have instructed the QMB to provide timely feedback to all employees submitting ideas. It is my hope and intent to see that each of you who takes the time to submit a proposal will receive feedback from the Quality Management Board very soon after its January-February meeting.

I realize that the Quality Improvement activity within the Bureau of Mines will only work when we have the support and commitment of the people of the Bureau of Mines. I ask you to devote your thoughts and energies to this, and I look forward to the continuing journey.

  
Director

Attachments

Quality Improvement Opportunities (Problems/Issues)  
Categorization Process

Step 1.

All Quality Improvement Opportunity (QIO) suggestions will be submitted to the Quality Management Board (QMB). The QMB will determine the breadth of each suggestion and sort them into two groups:

"L" - Issues that are clearly local in nature. Local issues will be returned to the local Quality Improvement Steering Groups (QSG's) for further processing.

"B" - Issues that are Bureauwide in nature. These will be retained by the QMB for further processing:

Step 2.

The QSG's or the QMB will categorize the suggestions as either:

"I" - Issues impacting internal customers

"E" - Issues impacting external customers.

Step 3.

The QSG's or the QMB will examine QIO suggestions and characterize each as to:

Urgency - "L"ow (1 pt.); "M"oderate (2 pts.);  
"H"igh (3 pts.)

Impact (return on investment, potential increase in customer satisfaction, and significance) - "L"ow (1 pt.);  
"M"oderate (2 pts.); "H"igh (3 pts.)

Measurability - "L"ow (1 pt.); "M"oderate (2 pts.);  
"H"igh (3 pts.)

Step 4.

The QSG's or the QMB will rank QIO suggestions according to these four factors. These rankings will be used to help select QIO's for assignment to Quality Inspection Teams.

\* Submitter's Name: \_\_\_\_\_  
Location: \_\_\_\_\_

QUALITY IMPROVEMENT OPPORTUNITY I.D. FORM

1. Title:
  
2. Opportunity Definition:
  
3. Importance/Significance:
  
4. Evidence of Any Problem:
  
5. People Impacted by Problem and Potential Solution:
  
6. Potential Team Members:

\* The submitter's name is optional. However, a name is necessary in order to receive a reply from the Quality Management Board. The location will help redirect issues that are more local in nature to the appropriate site.

## APPENDIX G.—SELECTION OF QUALITY IMPROVEMENT OPPORTUNITIES



## United States Department of the Interior

BUREAU OF MINES  
WASHINGTON, DC 20241-0002



February 26, 1992

## Memorandum

To: All Employees

From: Quality Management Board Chairman

Subject: Selection of Quality Improvement Opportunities

I would like to share with you the status of the selection of Bureau Quality Improvement (QI) Opportunities. In my memorandum of December 30, 1991 I requested all employees to identify potential opportunities in the Bureau for action by Quality Improvement Teams.

I am happy to report that the Quality Management Board received and reviewed 180 potential QI Opportunities. A complete list of the 180 QI Opportunities is attached.

The substance of opportunities submitted showed a sincere appreciation and concern by employees regarding a myriad of Bureau issues. The opportunities ranged in application from Bureauwide to more specific, localized issues.

The Quality Management Board reviewed the 180 potential QI opportunities for possible application to Bureauwide QI Teams. The review process, conducted February 3-7, 1992 involved the following activities (shown graphically on an attachment):

- Bureauwide QI opportunities were identified. Of 180 submissions, 109 were judged to be candidate Bureauwide QI opportunities. Other submissions were identified to be of concern to specific Directorates (29); unique to geographic locations or offices (22). Those were referred back to local organizations for appropriate QI consideration. In addition, twenty submissions were forwarded to existing Working Groups for consideration.
- Individual Bureauwide opportunities were combined into common issues or subjects. A total of 38 Bureauwide opportunities resulted from this combination process. (A list of those 38 opportunities is attached.)

- The resulting potential QI opportunities were prioritized using the following criteria: urgency; impact; measurability; and persistence.
- After that process an overlay check was performed to insure that the initial slate of Bureauwide QI opportunities was sensitive to: early success; internal/external customer balance; feasibility/resource availability; within BOM control.
- Thirteen topics were selected as initial Bureauwide opportunities (see attached list).

Please note that these topics are only the initial Bureauwide QI topics. We hope and expect that local Quality Improvement Steering Groups will take on interesting issues at each facility. We also expect that the remaining Bureauwide QI Candidate Opportunities may soon emerge as additional QI topics.

We encourage you to continue submitting ideas and potential QI opportunities. Employees are encouraged to submit their ideas for potential QI opportunities to their local Steering Groups. The Steering Groups are tasked with reviewing and prioritizing those submissions, and forwarding on to the Quality Management Board those ideas that the Local Steering Groups judge to be of a "Bureauwide" nature. Employees may, if they prefer, submit their ideas directly to the QMB. It should be pointed out that the timeliness of the initial response to a new idea is likely to be faster if the idea is submitted to the local QI Steering Group than if it is submitted directly to the Board, as the Board is likely to meet to discuss such new opportunities probably on the average of once every 2 or 3 months.


The QMB noted that the "QI Opportunity ID Form" was confusing to some employees. Until an improved form is developed, feel free to submit ideas in whatever format you think is appropriate. The Attachment, "What is a 'Quality Improvement Opportunity?'" provides some general guidance which you may find useful when putting your thoughts together.

I realize that some of you have been concerned by the perceived slowness of the QI process. Our Bureau's management has tasked us with a proper start for this process. Now that we have offered the orientation training, completed the facilitator training, and selected the initial QITs, we expect that you will soon be seeing the positive impact of QI in your workplace.

You will be receiving a second "All Employees" memorandum on this topic within 2 weeks. That second memorandum will contain:

1. A more detailed description of the thirteen initial Bureauwide opportunities, including a listing of the specific QI opportunities that resulted in that topic.
2. The designation of thirteen Bureau employees who will be responsible for coordinating the start up of the initial teams.
3. A call for volunteers to serve on the initial thirteen teams.

Thank you for your continued support and interest in the Bureau's journey into quality. A special thanks to those of you who took the extra time and effort to send QI opportunities for our consideration.



LEWIS V. WADE

Attachments (3)

DATE: Feb 24, 1992

QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION | TITLE                                | DISPOSITION                | QIT TOPIC                                |
|--------------------|--------------|--------------------------------------|----------------------------|--|
| 110                |              | (cover sheet for No. 111)            |                            |  |
| 108                | AFOC         | Continuity & retention of skills     | Potential QIT              | Career IDP system                        |
| 109                | AFOC         | (update of No. 108)                  |                            |  |
| 1                  | AFOC         | Efficient phone systems              | Refer to local--AFOC       |  |
| 117                | ALRC         | Improve center funding & proj selct  | Refer to AD--Research      |  |
| 118                | ALRC         | (update of No.117)                   |                            |  |
| 115                | ALRC         | Improved employees health & fitness  | Potential QIT              | Wellness                                 |
| 145                | ALRC         | Bureau outreach                      | Potential QIT              | Improved community outreach              |
| 147                | ALRC         | (identical to No. 72)                |                            |  |
| 72                 | ALRC         | Coordination of information req      | Potential QIT              | Error rate in corospondance              |
| 18                 | ALRC         | Career development plan              | Potential QIT              | Career IDP systems                       |
| 19                 | ALRC         | Focused work force plan              | Potential QIT              | Workforce planning process               |
| 20                 | ALRC         | Performance appraisal system         | Potential QIT              | Alt performance eval sydem               |
| 21                 | ALRC         | Bureau volunteer program             | Potential QIT              | Improved community outreach              |
| 47                 | ALRC         | Means to increase outside funding    | Refer to Customer Work Grp |  |
| 83                 | ALRC         | A new performance eval system        | Potential QIT              | Improve existing performance eval system |
| 17                 | ALRC         | Appraising team performance          | Potential QIT              | Alt performance eval systems             |
| 129                | ALRC         | Means of appraising work on QI       | Potential QIT              | Performance standards for QI activities  |
| 144                | ALRC         | (identical to No. 129)               |                            |  |
| 128                | ALRC         | Effect of QI activities on Factor IV | Potential QIT              | Performance standards for QI activities  |
| 3                  | ALRC         | Enhanced intra-center research       | Refer to AD--Research      |  |
| 2                  | ALRC         | Cooperative ventures                 | Potential QIT              |  |
| 123                | ALRC         | (duplicate of No. 2)                 |                            | Coord w/other agencies                   |
| 34                 | Denver F & M | Better use of training               | Potential QIT              | New employee IDP process                 |
| 111                | Denver--EEO  | Turnover of support personnel        | Refer to local--Den F&M    |  |
| 94                 | DRC          | PI representation of work            | Refer to AD--Research      |  |
| 96                 | DRC          | Management eval by subordinates      | Potential QIT              | Evaluation procedures for supr           |
| 97                 | DRC          | PI evaluation by peers               | Refer to AD--Research      |  |
| 98                 | DRC          | Management downsizing                | Refer to local--DRC        |  |
| 99                 | DRC          | Allow employees to make up time      | Potential QIT              | Flexitime                                |
| 95                 | DRC          | Tech (research) effort recog         | Potential QIT              | Classification process for WF 2000       |

DATE: Feb 24, 1992

## QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION | TITLE                                | DISPOSITION                  | QIT TOPIC                          |
|--------------------|--------------|--------------------------------------|------------------------------|------------------------------------|
| 88                 | DRC          | Streamlining research formulation    | Refer to AD--Research        |                                    |
| 43                 | I & A        | Redesign PEFRS to meet customer exp  | Refer to AD--I & A           |                                    |
| 45                 | IFOC         | Rewards and recognition              | Refer to Rewards Working Grp |                                    |
| 59                 | IFOC         | Barrier identification (PDs)         | Potential QIT                | Classification process for WF 2000 |
| 157                | IFOC         | Objective IPP appraisal              | Potential QIT                | Alt performance eval system        |
| 37                 | IFOC         | Qualified computer spec support      | Refer to local PO--IFOC      |                                    |
| 175                | IFOC         | Management decision review           | Refer to AD--I & A           |                                    |
| 60                 | IFOC         | Barrier identification (poor supr)   | Potential QIT                | Management development planning    |
| 176                | IFOC         | Getting rid of incompetent employees | Potential QIT                | Alt performance eval system        |
| 155                | IFOC         | Mining and land use analysis         | Refer to Customer Work Grp   |                                    |
| 156                | IFOC         | Public perception of Bureau          | Potential QIT                | Improved community outreach        |
| 158                | IFOC         | Improve information mngmnt, historic | Potential QIT                | Management of historic databases   |
| 173                | IFOC         | Improving communications locally     | Refer to local PO--IFOC      |                                    |
| 172                | IFOC         | Accountability                       | Potential QIT                | Alt performance eval system        |
| 171                | IFOC         | Determining priorities--product 1st  | Refer to local PO--IFOC      |                                    |
| 77                 | IFOC         | Rotational assignments to field      | Potential QIT                | Informal rotational process        |
| 44                 | IFOC         | Lack of support staff in this center | Refer to local--IFOC         |                                    |
| 152                | IFOC         | New employee incorp                  | Potential QIT                | New employee orientation           |
| 154                | IFOC         | Minerals advocacy                    | Refer to Customer Work Grp   |                                    |
| 153                | IFOC         | Employee expertise directory         | Potential QIT                | Employee expertise directory       |
| 126                | IFOC         | Convention approval policy revision  | Potential QIT                | Conference attendance              |
| 139                | IFOC         | Use of retired Bureau employees      | Potential QIT                | Emeritus positions                 |
| 138                | IFOC         | Pay banding demonstration in Bureau  | Refer to Barrier Work Grp    |                                    |
| 137                | IFOC         | IPP team appraisals                  | Potential QIT                | Alternate performance eval system  |
| 150                | IFOC         | Improving the quality of photos etc  | Potential QIT                | Quality & timeliness of pubs       |
| 160                | IFOC         | Bureau coordination & cohesion       | Potential QIT                | Improved internal communication    |
| 151                | IFOC         | Customer satisfaction--Cost est syst | Refer to AD--I & A           |                                    |
| 169                | IFOC         | Quality product & personnel go hand  | Potential QIT                | Career IDP system                  |
| 170                | IFOC         | Report review process                | Potential QIT                | quality & timeliness of pubs       |
| 166                | IFOC         | Reimbursable travel expenses         | Potential QIT                | Travel errors                      |
| 165                | IFOC         | Guidelines defing long & short goal  | Refer to Vision Work Grp     |                                    |

DATE: Feb 24, 1992

QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION | TITLE                                | DISPOSITION                  | QIT TOPIC                                 |
|--------------------|--------------|--------------------------------------|------------------------------|---|
| 168                | IFOC         | Bureau publication data base         | Refer to AD--I & A           |   |
| 167                | IFOC         | Redirect programs in accord w/goals  | Potential QIT                | Workforce planning process                |
| 74                 | IFOC         | Organizational structure             | Potential QIT                | Organizational structure                  |
| 163                | IFOC         | Commitment to unified, supported dir | Refer to Vision Work Grp     |   |
| 162                | IFOC         | Cross-division support for programs  | Refer to AD--I & A           |   |
| 164                | IFOC         | Rotations                            | Potential QIT                | Informal rotational process               |
| 174                | IFOC         | Treating professionals like pros     | Refer to local PO--IFOC      |   |
| 161                | IFOC         | Product identification--minerals app | Refer to AD--I & A           |   |
| 35                 | IFOC         | Bureau vs USGS                       | Refer to Customer Work Grp   |   |
| 52                 | IFOC         | Employee-rating immediate supervisor | Potential QIT                |   |
| 49                 | IFOC         | Getting necessary supplies           | Refer to local--IFOC         |   |
| 50                 | IFOC         | Too many managers & layers of mngmt  | Potential QIT                | Multi-level managers                      |
| 51                 | IFOC         | Better work environment              | Refer to local--IFOC         |   |
| 149                | IFOC         | Spatial information management       | Refer to AD--I & A           |   |
| 148                | IFOC         | Work week schedule mod               | Potential QIT                | Flexitime                                 |
| 159                | IFOC         | Development of GIS in field centers  | Refer to AD--I & A           |   |
| 75                 | IFOC         | Dual path career opportunities       | Potential QIT                | Classification process for WF 2000        |
| 76                 | IFOC         | Network and E-mail support           | Refer to local--IFOC         |   |
| 61                 | IFOC         | Operations improvement: non-supr     | Potential QIT                | Classification process for WF 2000        |
| 12                 | IFOC         | Vision purpose & action; customer ID | Refer to Customer Work Grp   |   |
| 13                 | IFOC         | Strong culture, strong values        | Potential QIT                | Wellness                                  |
| 71                 | MAFO         | The user-friendly Bureau             | Potential QIT                | Quality & timeliness of pub               |
| 33                 | PRC          | Improved IPP                         | Potential QIT                | Improved existing performance eval system |
| 32                 | PRC          | Center control of funding            | Refer to AD--Research        |   |
| 130                | PRC          | Timely & accurate pay for employees  | Potential QIT                | Paycheck process                          |
| 78                 | PRC          | Potential for the loss of important  | Refer to Barriers Work Grp   |   |
| 134                | PRC          | Bureau-industry liaison teams        | Refer to AD--Research        |   |
| 102                | PRC          | Project review and selection         | Refer to AD--research        |   |
| 178                | RORC         | Research project valuation           | Refer to AD--Research        |   |
| 90                 | SLRC         | Excess baggage                       | Refer to Operations Work Grp |   |
| *79                | SRC          | Supervisory position eval/selection  | Potential QIT                | Selection of new supervisors              |

DATE: Feb 24, 1992

## QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION | TITLE                                | DISPOSITION                | QIT TOPIC                         |
|--------------------|--------------|--------------------------------------|----------------------------|-----------------------------------|
| 180                | SRC          | Job rotation policy                  | Potential QIT              | Informal rotational process       |
| 53                 | SRC          | Marketing the Bureau                 | Refer to Customer Work Grp |                                   |
| 68                 | SRC          | Improved performance mngmt system    | Potential QIT              | Alt performance eval system       |
| 69                 | SRC          | Improved qual thru work schd         | Potential QIT              | Flexi-time                        |
| 41                 | SRC          | Change or eliminate rating system    | Potential QIT              | Alt performance eval system       |
| 42                 | SRC          | Smoke-free work env                  | Refer to local PO--SRC     |                                   |
| 40                 | SRC          | In-house exercise facility           | Potential QIT              | Wellness                          |
| 22                 | SRC          | Coopcration vs competition           | Potential QIT              | Cross-functional teamss           |
| 81                 | SRC          | Delegate authority...property        | Potential QIT              | Off-site government property use  |
| 82                 | SRC          | Delegate approval..off-site use      | Potential QIT              | Off-site gov property use         |
| 58                 | SRC          | Flexi time for SRC                   | Potential QIT              | Flexi-time                        |
| 38                 | SRC          | Physical fitness facility in bldg    | Potential QIT              | Wellness                          |
| 39                 | SRC          | Flexi-time                           | Potential QIT              | Flexitime                         |
| 29                 | SRC          | Recruitment and professional growth  | Potential QIT              | Workforce planning process        |
| 15                 | TCRC         | Reform low-bid requirements          | Potential QIT              | Procurement process               |
| 16                 | TCRC         | Improving the project proposal proc  | Refer to AD--Research      |                                   |
| 14                 | TCRC         | Improving tech transfer              | Refer to Customer Work Grp |                                   |
| 132                | TCRC         | Bureau subtitle: the minerals source | Refer to Vision Work Grp   |                                   |
| 131                | TCRC         | Proposal review                      | Refer to AD--Research      |                                   |
| 133                | TCRC         | Low-bid, low-performance             | Potential QIT              | Procurement process               |
| 107                | TCRC         | Creation of Word Perfect library     | Potential QIT              | Sharing of software               |
| 106                | TCRC         | Acknowledge transmitted document     | Potential QIT              | Error rate in corresponsance      |
| 177                | TCRC         | Author- vs editor-defined review     | Potential QIT              | Quality & timeliness of pubs      |
| 67                 | TCRC         | Enhancement of listening skills      | Potential QIT              | Career IDP system                 |
| 113                | TCRC         | Automation of the time keeping syst  | Potential QIT              | Timekeeping manpower reg          |
| 36                 | TCRC         | Implementing BOM initiatives         | Refer to Customer Work Grp |                                   |
| 91                 | TCRC         | Streamline Bureau review & reporting | Potential QIT              | Quality & timeliness of pubs      |
| 30                 | TCRC         | Tech feedback from users of BOM res  | Potential QIT              | Improved community outreach       |
| 84                 | TCRC         | Computer quality improvement group   | Potential QIT              | Sharing computer software         |
| 92                 | TCRC         | Headquarters document control        | Refer to AD--Research      |                                   |
| 101                | TCRC         | Improvement of performance rating..  | Potential QIT              | Alternate performance eval system |

DATE: Feb 24, 1992

QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION | TITLE                                | DISPOSITION                | QIT TOPIC                          |
|--------------------|--------------|--------------------------------------|----------------------------|------------------------------------|
| 100                | TCRC         | Streamlining time & attendance sys   | Potential QIT              | Timekeeping/manpower regs          |
| 135                | TCRC         | Local patent filing process          | Refer to AD--Research      |                                    |
| 122                | TCRC         | Inefficiency and waste in procurmnt  | Potential QIT              | Procurement process                |
| 121                | TCRC         | Consistent performance standards     | Potential QIT              | Alt performance eval systems       |
| 23                 | TCRC         | Improving the way we research        | Refer to AD--Research      |                                    |
| 127                | TCRC         | Professional development             | Potential QIT              | Conference attendance              |
| 48                 | TURC         | Barrier                              | Refer to Barrier Work Grp  |                                    |
| 146                | TURC         | Upgrade of secretarial staff         | Potential QIT              | Classification process for WF 2000 |
| 65                 | TURC         | Functional and effective per ser     | Refer to local--TURC       |                                    |
| 63                 | TURC         | Grp supervisors a part of BOM mngmt  | Refer to AD--Research      |                                    |
| 62                 | TURC         | Pre-selection of management          | Potential QIT              | Management Development planning    |
| 64                 | TURC         | Employee development & career pln    | Potential QIT              | Career IDP system                  |
| 66                 | TURC         | EEO is management resp               | Potential QIT              | EEO management                     |
| 24                 | WFOC         | Editing WFOC reports                 | Potential QIT              | Quality & timeliness of reports    |
| 25                 | WFOC         | Procurement of PCs etc               | Potential QIT              | ADP equip acquisition              |
| 26                 | WFOC         | Publication of MLA reports           | Refer to AD--I & A         |                                    |
| 79                 | WFOC         | Education program                    | Potential QIT              | Improved community outreach        |
| 55                 | WFOC         | Customer satisfaction                | Refer to Customer Work Grp |                                    |
| 54                 | WFOC         | Product accountability               | Potential QIT              | Timeliness for resource allocation |
| 80                 | WFOC         | Proposed programmatic emphasis       | Potential QIT              | Improved community outreach        |
| 116                | WFOC         | Congress funded long-term proj       | Potential QIT              | Coordinate w/other Fed agencies    |
| 116                | WFOC         | Put BOM in Dept of Commerce          | Refer to Barriers Work Grp | Refer to Barriers Work Grp         |
| 116                | WFOC         | Accountability                       | Potential QIT              | Improve existing perf eval system  |
| 116                | WFOC         | Establish database of personnel qual | Potential QIT              | Employee expertise directory       |
| 116                | WFOC         | Career ladder                        | Potential QIT              | Classification process for WF 2000 |
| 116                | WFOC         | More center control of....           | Potential QIT              | Multilevel managers                |
| 116                | WFOC         | Cease bickering with USGS            | Potential QIT              | Coordinate w/other Fed agencies    |
| 116                | WFOC         | Establish liaison with other gov     | Potential QIT              | Coordinate w/other fed agencies    |
| 114                | WFOC         | Consolidation of suggestion actvts   | Potential QIT              | Suggestion program                 |
| 28                 | WFOC         | Improvement of "QI Opportunity form" | Refer to Operations Wk Grp |                                    |
| 27                 | WFOC         | Time sheet accuracy                  | Potential QIT              | Timekeeping manpower regs          |

DATE: Feb 24, 1992

## QUALITY IMPROVEMENT OPPORTUNITY SUBMISSIONS

| ASSIGNED<br>NUMBER | ORGANIZATION      | TITLE                                | DISPOSITION                | QIT TOPIC                       |
|--------------------|-------------------|--------------------------------------|----------------------------|---------------------------------|
| 7                  | WO                | Great QI con game/fiasco             | Refer to Barriers Work Grp |                                 |
| 6                  | WO-Min Commod     | Telephone service                    | Refer to local PO--WO      |                                 |
| 5                  | WO-Min Commod     | National Security Council Data       | Refer to AD--I&A           |                                 |
| 4                  | WO-Min Commod     | Stairwell safety & security          | Refer to local PO--WO      |                                 |
| 46                 | WO--Br of Library | Improved customer service            | Refer to Customer Work Grp |                                 |
| 57                 | WO--Br of Matrl   | Efficiency of human traffic          | Refer to local--WO         |                                 |
| 56                 | WO--Br of Matrl   | Smoking room traffic                 | Refer to local--WO         |                                 |
| 89                 | WO--chief stf of  | Centralized purchasing periodicals   | Refer to local--WO         |                                 |
| 70                 | WO--Commodities   | CD ROM publication                   | Potential QIT              | Quality & timeliness of pub     |
| 87                 | WO--Commodities   | FAX-on-demand                        | Potential QIT              | Personnel FAX                   |
| 85                 | WO--Commodities   | Promoting the importance of mining   | Potential QIT              | Improve community outreach      |
| 86                 | WO--Commodities   | Recognition of the taxpayer as cust  | Refer to Customer Work Grp |                                 |
| 136                | WO--Commodities   | Managers eval by subordinates        | Potential QIT              | Eval procedures for supervisors |
| 120                | WO--Commodities   | Duplication of effort                | Refer to AD--I & A         |                                 |
| 119                | WO--Commodities   | Improve time & qual of DMC pubs      | Potential QIT              | Quality & timeliness of pubs    |
| 124                | WO--Commodities   | Timeliness in Annual Rept pub        | Potential QIT              | Qual and timeliness of pubs     |
| 143                | WO--Commodities   | Bureau recycling program             | Refer to local--WO         |                                 |
| 93                 | WO--Commodities   | QI: get chiefs involved 1st          | Refer to Barriers Work Grp |                                 |
| 9                  | WO--Cong Liaison  | Vision--Evol of Natl Def Stockpile.. | Refer to local--WO         |                                 |
| 8                  | WO--Cong Liaison  | Issue paper content improvement      | Refer to local PO--WO      |                                 |
| 11                 | WO--Ofc of IT     | Improved IT thru Bureauwide int      | Potential QIT              | Organizational structure        |
| 125                | WO--Policy Anal   | Telephone answering manners          | Refer to local--WO         |                                 |
| 104                | WO--Res Eval      | Outreach plans to improve customer.. | Potential QIT              | Improved community outreach     |
| 103                | WO--Res Eval      | Minerals Yearbook timeliness         | Potential QIT              | Quality & timeliness of pub     |
| 112                | WO--Reseach       | (duplicate; succeeded by No. 11)     |                            |                                 |
| 140                | WO--Research      | Human factors--competitiveness       | Potential QIT              | Workforce planning process      |
| 141                | WO--Research      | MOA review process                   | Potential QIT              | Multilevel managers             |
| 31                 | WO--Research      | Better cost analysis                 | Refer to AD--Research      |                                 |
| 73                 | WO--Research      | Team approach to research            | Refer to AD--Research      |                                 |
| 105                | WO--Research      | Improved response time for Dir corr  | Potential QIT              | Error rate in corresponsance    |
| 10                 | WO--Resource Eval | Simplification of IPP paperwork      | Potential QIT              | Improve existing perf eval syst |

**THE 38 BUREAUWIDE QUALITY IMPROVEMENT OPPORTUNITY CANDIDATES**

Travel errors  
Timekeeping manpower regulations  
ADP equipment acquisition  
Error rate in correspondence  
Quality and time of publications  
Sharing of software  
Management of historical database  
Cross-functional teams  
Multi-level managers  
Off-site government property use  
Improve community outreach  
Timeliness for resource allocations  
Coordination with other Federal agencies  
Flexitime  
Wellness  
Improve existing performance system  
Alternate performance evaluation systems  
Evaluation process of supervisors  
Performance standards for QI activities  
Employee expertise directory  
Workforce planning process  
Conference attendance  
New Employee Individual Development Plan Process  
Career Individual Development Plan System  
Informal Rotational Process  
Refer to Human Resources

Suggestion Program

Paycheck Process

New Employee Orientation

Selection of new supervisors

Management Development Planning

Classification process for Workforce 2000

Emeritus Positions

Personnel FAX

EEO Management

Procurement Process

Organizational Structure

Improved internal communications

THE THIRTEEN  
INITIAL QI OPPORTUNITIES

Careeer Development

Suggestion Program

Paycheck process

New employee orientation

Indentification and development of new supervisors

Alternate Performance Evaluation Systems

QI - Individual Performance and Recognition

Timekeeping manpower

ADP Equipment Acquisitions

Correspondence errors

Timeliness/Quality of Publications

Improved Community Outreach

Timeliness of Resource Allocation

What is a "Quality Improvement Opportunity?"

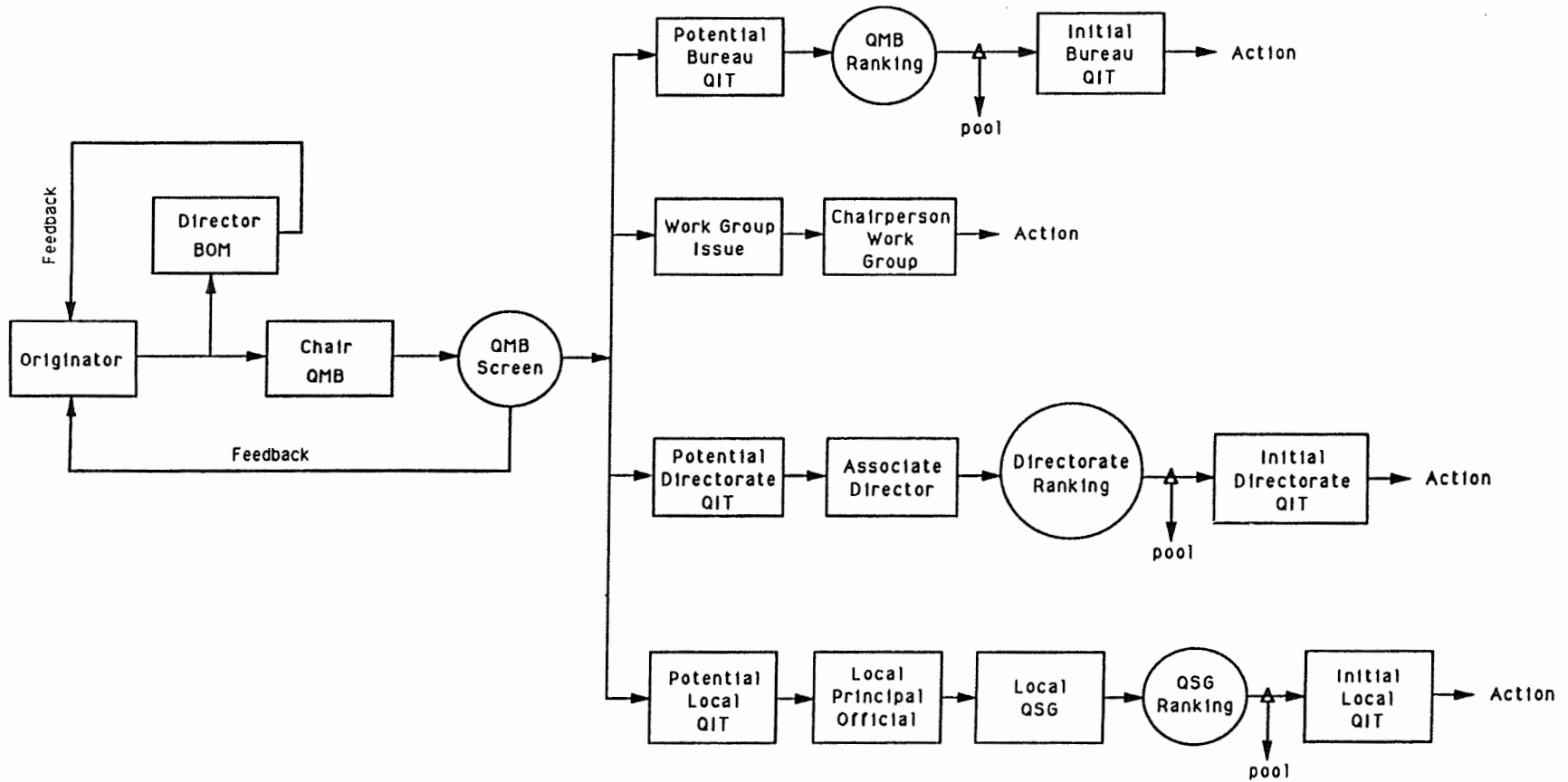
Quality Improvement (QI) is founded on the premise that the people who actually do the work of an organization are the best source of ideas on how to do the work better. In a quality environment, doing the work better means identifying what the customer expects and then improving work processes to meet or exceed the customer's product or service expectations. "Quality Improvement Opportunities" (QIO's) are the ideas for service and product improvement which drive the Bureau's QI effort.

Any idea for improvement in the way we do business is always welcome. However, a QIO is most useful when it has the following characteristics:

1. QIO's are customer focused. We all have customers, internal and external to the Bureau, and we are customers ourselves. Quality improvement benefits customers. The identification of QIO's should start with a knowledge of who the customer is and what the customer wants.
2. QIO's are process problems. How a customer's needs and expectations are met is always the result of a process. When a process does not deliver the service or product expected by the customer, the process needs improvement. A QIO begins when a process needing improvement is identified.
3. QIO's are "bite size." Every process is part of a greater process. To be of manageable proportions, the subject process should not be dividable into sub-processes.
4. QIO's are measurable. The difference between "what is" and "what should be" should be definable and measurable in concrete terms.
5. QIO's do not presuppose why a process is flawed. The QIT assigned to study the process will apply a fact-finding process that will pinpoint the cause.
6. QIO's are not "suggestions" in the traditional sense. As hard as this may seem, the old "suggestion program" paradigm should be set aside. A number of problem solving techniques will be applied by the QIT to develop a recommended solution(s).

The qualities of urgency, impact, persistence, and measurability and the characteristics of scope (Bureau-wide/ local) and customer focus (internal/external) are factors considered by the QMB in the assignment of QIO's to QIT's.

# Q. I. Opportunities Selection Process



## APPENDIX H.—GETTING STARTED ON A QUALITY IMPROVEMENT TEAM



### United States Department of the Interior

BUREAU OF MINES  
WASHINGTON, DC 20241-0002



April 6, 1992

#### Memorandum

To: Initiators, Bureau-Wide Quality Improvement Teams

From: Bureau Quality Improvement Working Groups on  
Communication and Operations

Subject: Getting Started on a Quality Improvement Team

We are pleased to welcome you as an "initiator" for a Bureau-wide Quality Improvement Team. As you are probably aware from recent memorandums, 13 quality improvement opportunities were selected by the Quality Management Board to be addressed as subjects of Quality Improvement Teams. These teams were selected from 180 potential quality improvement opportunities that were submitted to the Board in response to its first call.

This overwhelming response and the wealth of ideas and concern emerging through the initial call reflects the high interest and sincerity of Bureau employees to improve the way our agency does business. These 13 teams signal only the beginning of many future Bureau-wide and local quality improvement team activities. For your information, all 13 of these teams, a short paragraph describing their goals, and the persons assigned to initiate them are listed as an attachment to this memorandum.

As an initiator of a Bureau-wide Quality Improvement Team (QIT), you are being asked to help get that team started. This does not mean that you must become the team leader or that you are required to remain on that team. What it does mean is that you will select team facilitators and team members and that you will set up a time and place for the initial meeting. It also means that you will be instrumental in drafting a charter or mission statement for the team that will be submitted to the Quality Management Board. It is hoped that this memorandum will give you some ideas to get started on your QIT journey.

**Facilitators:** To get the Bureau's first 13 QITs off on a good start, all of the facilitators are being polled as quickly as possible by the Operations and Communications Quality Working Groups to determine who is interested in serving on a specific QIT. The names of interested facilitators are being collected and will be provided to each initiator. You can expect to see these lists on April 7.

The relationship between initiator and facilitator will be a cooperative one. The initiator will use his/her own judgement in selecting from the list and the facilitator(s) will work with him/her toward finalizing the selection. For the initial 13 QITs, we suggest that initiators use teams of two facilitators, therefore, two persons should be selected from the facilitator list per QIT. This will offer benefits to the facilitators by enabling a larger number of these persons to quickly use and augment their training skills. It also enhances the QIT itself by providing the team with the benefits of two people's facilitation experience.

**Team Members:** You probably saw recently an all employee memorandum dated March 13 that asked for volunteers to serve as QIT members. The memorandum asked volunteers to contact the initiator of the QIT they are interested in. The deadline for volunteers has been extended to April 10.

You may have already heard from some volunteers. Team member selection is left to your best judgement. Please keep in mind when making your selections, however, that team members should include persons who are part of the issue or problem and those who are part of potential solutions. The members can be implementers of the process as well as process customers. They should reflect varying degrees of expertise within the subject area, and offer cross-representation from the many programs and geographic areas within the Bureau of Mines. In short, the team should be as well-rounded as possible.

We also ask that when you begin making your selections, you keep in mind that some of the volunteers may have volunteered for other QI activities and have been turned down. This is simply a matter of numerous employees expressing interest in a limited number of positions. Unfortunately, not everyone can participate at the same time. We want to keep enthusiasm in QI activities high. We therefore ask that you give some consideration to employees who applied for previous QI opportunities, but not have not been accepted. Members of the Operations and Communications Working Group are working on a database that identifies these persons. A copy of the "available" volunteer list will be provided to you around April 7.

**Funding and Time:** Please keep your supervisor informed of your activities in association with the QIT. Participation in a QIT is regarded as a collateral duty assignment. It is anticipated that team membership may consume up to 20% of a member's time for as long as the QIT is functioning. Initiators and team members should discuss travel costs and other issues of expenses with their Principal Officials.


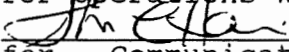
**The Team Process:** To assist you in getting the QIT started, we offer you a simplified model of a team planning process in the attachment. Feel free to use this model, modify it or use your own judgement. The model is intended only to provide guidance if needed and is not a mandated way of proceeding.

Bear in mind for the future, that the Quality Management Board is very interested in the team progress and should be advised regularly of the status of the QIT. The Bureau family will also be anxious to hear your progress. Members of the Quality Working Groups will be contacting you to assist in disseminating any information regarding the status of the QIT as you see appropriate.

In closing, we want to strongly assure you that in your capacity as an initiator as well as an involved employee in the QI process, you are not alone out there. There are many resources at your disposal to lend a hand with the challenges and adventures ahead. A member of the Quality Management Board has been assigned to help you along the way. In addition, the members of the Quality Working Groups, local Quality Steering Groups, and facilitators are there to assist in any way they can and to provide a support network. A list of the names and telephone numbers of these persons is provided in the attachment.

Remember that your QITs are addressing some complex issues. Members of QITs need to realize that your contributions may appear small at first and take a considerable amount of time to produce. However, all your efforts are important and necessary for the process to be effective. The early stages of any team effort represent the largest contribution of the team in terms of gathering data, networking, and defining the problem.

We wish you well in your journey.

  
for Operations Working Group  
  
for Communications Working  
Group

Because of space limitations and to avoid repeating information given in the main text of this report, only one of the attachments mentioned in this memorandum is reprinted herein.

Model for Quality Improvement Team Process--  
Model Procedure for Initiators

1. Touch base with assigned Quality Management Board liaison. Discuss his/her expectations and initiator expectations relative to the accomplishments of the QIT.
2. Discuss initiator activities with immediate supervisor and keep supervisor informed of progress.
3. Feel free to contact persons both inside and outside of the Bureau who may have some insight on QIT subject or are involved in the process/problem/issue for facts, data, ideas, and approach for background purposes. These same persons may be helpful resources to the QIT as it progresses.
4. Contact local steering group, introduce yourself as initiator, and keep group informed of progress.
5. Select facilitators from list supplied by the QMB or other means being used to generate list of interested facilitators. For the initial 13 QITs, teams of two facilitators are suggested to help provide on-the-job experience.
6. Strategize on team expectations and mission with facilitator(s).
7. Develop a draft mission statement with the facilitator for discussion with team at first meeting.
8. Determine types of team members needed to help team accomplish its mission.
9. Seek volunteers to serve on team. For the initial 13 Bureau-wide QITs, the call for volunteers has already been made.
10. Review list of previously "passed over" volunteers supplied by the QMB. Give special consideration to these individuals where appropriate.
11. Select team members from volunteers. Use facilitator to help with selection if desired.
12. Coordinate with team members to set a date, time, and place for the first team meeting.
13. Work with your facilitators before the first team meeting to develop background data (reason QIT was formed, background on problems the QIT will address, expectations from others such as Board, steering group, and persons involved currently in process/issue/problem area).
14. Meet with team. Finalize mission/charter statement for team. Select team leader. Begin with background of problem and develop solution ideas from there.
15. Keep Quality Management Board and local steering group informed of your progress.
16. When the QIT completes its mission and formulates recommendations, these recommendations will be provided to the QMB if the QIT is Bureau-wide and/or the local Quality Steering Group if the QIT is a local one. The Board or Steering Group will be tasked with implementing the recommendations.

## APPENDIX I.—U.S. BUREAU OF MINES FACILITIES

|        |   |
|--------|---|
| AFOC/A | Alaska Field Operations Center, Anchorage Office.   |
| AFOC/F | Alaska Field Operations Center, Fairbanks Office.   |
| AFOC/J | Alaska Field Operations Center, Juneau Office.      |
| ALRC   | Albany Research Center, Albany, OR.                 |
| DRC    | Denver Research Center, Denver, CO.                 |
| HFO    | Helium Field Operations, Amarillo, TX.              |
| IFOC   | Intermountain Field Operations Center, Denver, CO.  |
| MAFO   | Minerals Availability Field Office, Denver, CO.     |
| PRC    | Pittsburgh Research Center, Pittsburgh, PA.         |
| RERC   | Reno Research Center, Reno, NV.                     |
| RORC   | Rolla Research Center, Rolla, MO.                   |
| SLRC   | Salt Lake City Research Center, Salt Lake City, UT. |
| SRC    | Spokane Research Center, Spokane, WA.               |
| TCRC   | Twin Cities Research Center, Minneapolis, MN.       |
| TURC   | Tuscaloosa Research Center, Tuscaloosa, AL.         |
| WDC    | Washington, DC                                      |
| WFOC   | Western Field Operations Center, Spokane, WA.       |

Located in Washington, DC, Bureau of Mines headquarters moved to a new building in the late fall of 1991. Those wishing further information about the Bureau of Mines in general or about its Quality Improvement activities should write or call—

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