Terry Dwelle, M.D. State Health Officer North Dakota Department of Health State Capitol 600 East Boulevard Avenue Bismarck, ND 58505-0200

Dear Dr. Dwelle:

On June 25, 2007, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the North Dakota Agreement State Program. The MRB found the North Dakota Agreement State Program adequate to protect public health and safety and compatible with the U.S. Nuclear Regulatory Commission's (NRC) program.

As noted in the enclosed final IMPEP report and as discussed during the MRB meeting, the North Dakota Radiation and Indoor Air Branch (the Branch) completed a number of overdue inspections during the review period. The root causes of overdue inspections are the loss of an experienced inspector and the subsequent training of a new inspector. Experience from IMPEP reviews of other Agreement State programs demonstrates that the loss of key personnel, especially in smaller programs, can have a detrimental effect on a program. However, North Dakota was able to fill the vacancy in an expedient manner and minimize the impact to the Branch. The MRB commended the Branch for its efforts to maintain stability during the transition between inspectors. The MRB also voiced concerns about the continued stability of the Branch, given its small size.

Since the time of the review, the MRB was notified of the departure of the Branch Manager. The Branch Manager position is currently the only vacancy in the Branch, but it is a very critical vacancy. The former Branch Manager was instrumental in balancing the Branch's workload after the departure of the experienced inspector to minimize the overall impact to the Branch. Any further attrition, especially while the Branch Manager position remains vacant, could be detrimental to overall performance by the Branch. The MRB concerns are lessened knowing that the State is already undertaking efforts to fill the Branch Manager position and has a contingency plan in place in the interim.

The Branch's actions in other areas of the Agreement State program were noted by the MRB. The State should take pride in the high level of technical quality of inspections, licensing actions, and response to incidents and allegations exhibited by the Branch during the review period. The Branch was able to maintain this level of technical quality even during the staff transition period. A high level of technical quality, especially in the area of response to incidents involving radioactive material, can instill a high level of public confidence in an Agreement State program.

To maintain a high level of technical competency, it is imperative to recruit and retain an adequate number of qualified and motivated individuals. In the NRC's experience of reviewing Agreement State programs, the ability to recruit qualified applicants and maintain a stable staffing level can be inhibited by low salaries and/or limited potential for career growth.

Section 5.0, page 10, of the enclosed final report contains a summary of the IMPEP review team's findings. The review team made no recommendations in regard to program performance for the North Dakota Agreement State Program.

Based on the results of the current IMPEP review, the next full review of the North Dakota Agreement State Program will take place in approximately 4 years, with a periodic meeting tentatively scheduled for April 2008. Typically, periodic meetings take place approximately 2 years after an IMPEP review, but because of the relatively short amount of time that has elapsed since the Branch was able to catch up on its inspections and the management transition, the MRB directed that a periodic meeting be held sooner.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Agreement State Program. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

#### /RA/

Martin J. Virgilio Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance Programs Office of the Executive Director for Operations

Enclosure: North Dakota Final IMPEP Report

cc: Arvy Smith, Deputy State Health Officer North Dakota Department of Health

David Glatt, Chief North Dakota Environmental Health Section

Terry O'Clair, Director North Dakota Division of Air Quality

Gary Robertson, Washington Organization of Agreement States Liaison to the MRB

# INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM REVIEW OF NORTH DAKOTA AGREEMENT STATE PROGRAM

April 17 - 19, 2007

# **FINAL REPORT**

U.S. Nuclear Regulatory Commission

#### 1.0 INTRODUCTION

This report presents the results of the review of the North Dakota Agreement State program. The review was conducted during the period of April 17-19, 2007, by a review team consisting of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the Agreement State of Texas. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the *Federal Register* on October 16, 1997, and the February 26, 2004, NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the review, which covered the period of April 25, 2003, to April 19, 2007, were discussed with North Dakota management on the last day of the review.

A draft of this report was issued to North Dakota for factual comment on May 15, 2007. The State responded by e-mail on May 31, 2007, from Kenneth W. Wangler, Manager, Radiation and Indoor Air Branch (the Branch). The Management Review Board (MRB) met on June 25, 2007, to consider the proposed final report. The MRB found the North Dakota Agreement State Program adequate to protect public health and safety and compatible with NRC's program.

The North Dakota Agreement State program is administered by the Branch, Division of Air Quality (the Division), Environmental Health Section (the Section), North Dakota Department of Health (the Department). Organization charts for the Department and the Division are included as Appendix B.

At the time of the review, the North Dakota Agreement State Program regulated 67 specific licenses authorizing Agreement materials. The review focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of North Dakota.

In preparation for the review, a questionnaire addressing the common and non-common performance indicators was sent to the Branch on December 20, 2006. The Branch provided a response to the questionnaire on April 5, 2007. A copy of the questionnaire response may be found in the NRC's Agencywide Document Access and Management System using Accession Number ML071230758.

The review team's general approach for conduct of this review consisted of: (1) examination of the Branch's response to the questionnaire; (2) review of applicable North Dakota statutes and regulations; (3) analysis of quantitative information from the Branch's licensing and inspection database; (4) technical review of selected regulatory actions; (5) field accompaniments of one Branch inspector; and (6) interviews with staff and management to answer questions or clarify issues. The review team evaluated the information gathered against the established criteria for each common and applicable non-common performance indicator and made a preliminary assessment of the Agreement State program's performance.

Section 2.0 of this report discusses the State's actions in response to recommendations made following the previous IMPEP review. Results of the current review of the common performance indicators are presented in Section 3.0. Section 4.0 discusses the results of the review of the

applicable non-common performance indicators, and Section 5.0 summarizes the review team's findings.

#### 2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on April 25, 2003, no recommendations were made by the review team.

## 3.0 COMMON PERFORMANCE INDICATORS

IMPEP identifies five common performance indicators to be used in reviewing NRC Regional and Agreement State radioactive materials programs. These indicators are: (1) Technical Staffing and Training, (2) Status of Materials Inspection Program, (3) Technical Quality of Inspections, (4) Technical Quality of Licensing Actions, and (5) Technical Quality of Incident and Allegation Activities.

#### 3.1 Technical Staffing and Training

Issues central to the evaluation of this indicator include the Branch's staffing level and staff turnover, as well as the technical qualifications and training histories of the staff. To evaluate these issues, the review team examined the Branch's questionnaire response relative to this indicator, interviewed Branch management and staff, and reviewed training plans and records. The review team also considered any possible workload backlogs in evaluating this indicator.

The Branch consists of three technical positions: the Branch Manager, a fully qualified Environmental Scientist III, and an Environmental Scientist II in training. The Branch Manager and staff are responsible for all radioactive materials licensing, inspection, and emergency response activities.

In August 2005, the Branch lost an experienced staff member to a higher paying position with the Federal government. The vacated position was open until December 2005, when it was filled by an employee from within the Division. Between December 2005 and June 2006, the new staff member was not able to fully devote his time to the Branch. Vacancies within the Division caused the individual to be shared between his former program and the Branch. Since June 2006, the new staff member has been fully dedicated to the Branch. The Branch was fully staffed at the time of the review.

Training and qualification requirements for Branch staff are established in a Training Regimen Checklist which sets forth essentially the same training and qualification recommendations detailed in the NRC's Inspection Manual Chapter (IMC) 1246, as well as indication of ability to perform specific inspections independently. As of April 2007, the new staff member had completed five of nine NRC courses required by the Branch and several supplemental training courses. The other technical staff member and Branch Manager have taken the NRC courses deemed appropriate for their tasks. The Branch Manager is committed to continuing training for the staff, as appropriate.

The Branch Manager has accompanied the new staff member during inspections, reviews all licensing actions performed by the new staff member, and will determine when the individual is

proficient enough to work independently. The new staff member is expected to be fully trained to perform industrial type licensing actions and inspections within the year. The review team concluded that the Branch has a well balanced staff, and a sufficient number of personnel to carry out regulatory duties, when the new staff member is fully trained and proficient to work independently.

Approximately 75 percent of the radioactive materials program's operations are funded through fees. The review team noted that the Branch had stable funding throughout the review period due to the dedicated revenue from licensee fees; however, this funding is dedicated to equipment, training, and travel and is not available for salary increases. The review team believes the Branch may face staffing challenges in the future if their salaries do not become comparable to other State and Federal salaries.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that North Dakota's performance with respect to the indicator, Technical Staffing and Training, was satisfactory.

#### 3.2 Status of Materials Inspection Program

The review team focused on five factors while reviewing this indicator: inspection frequency, overdue inspections, initial inspections of new licenses, timely dispatch of inspection findings to licensees, and performance of reciprocity inspections. The review team's evaluation was based on the Branch's questionnaire response relative to this indicator, data gathered from the Branch's database, examination of completed inspection casework, and interviews with managers and staff.

The review team verified that the Branch's inspection priorities for various types of licenses are at least as frequent as similar license types listed in IMC 2800. The Branch previously had a procedure for extending inspection frequencies for good performance, but changed the procedure when IMC 2800 was revised to exclude this activity. The Branch retained the ability to reduce inspection frequency for poor performance. The review team noted that one licensee was currently on a reduced inspection interval.

The Branch uses a Microsoft Access database to track all inspection data. A report, identifying inspections coming due, is periodically generated and is used to assign inspectors and tentatively schedule the inspections. Management and staff have been able to effectively track the timeliness of individual inspections using this tool.

At the time of the review, there was one overdue Priority 2 inspection. The review team examined the Branch's inspection tracking information and identified a total of 33 Priority 1, 2, and 3 inspections, including three initial inspections that were due during the review period. Nine Priority 1, 2, and 3 inspections were either conducted overdue or were overdue at the time of the review. The review team calculated that 27 percent of the Priority 1, 2, and 3 and initial inspections were conducted or will be conducted at intervals that exceed NRC frequencies.

Timeliness in issuing inspection findings was evaluated by reviewing inspection casework and inspection data maintained in the database. The Branch requires that all inspection correspondence be issued to licensees within 30 days of the inspection date. For the 32

inspection files examined that required correspondence to the licensee, only four inspection findings were sent to the licensee beyond the 30-day requirement. The review team noted that these four cases occurred in 2005 after the departure of an experienced staff member.

During the review period, the Branch granted 21 reciprocity permits, of which, 16 permits were candidate licensees based on criteria in IMC 1220. The review team determined that the Branch inspected at least 20 percent of the candidate licensees operating under reciprocity during the review period.

The review team determined that with respect to Commission Staff Requirements Memorandum (SRM) for COMSECY-05-0028, on Increased Controls, the Branch planned for the initial set of inspections of licensees subject to the Increased Controls in accordance with the SRM. The review team evaluated the Branch's prioritization methodology and found it acceptable. The Branch identified eight licensees subject to Increased Controls, with six Increased Controls inspections scheduled for completion within the first year. Four Increased Controls inspections had been conducted by the Branch at the time of the review. For three of the four, one is completed and closed out and two are under Branch review. The fourth inspection was of a new licensee subject to Increased Controls. The other two inspections scheduled for completion within the first year are tentatively scheduled for completion by June 2007.

Based on the IMPEP evaluation criteria, the review team initially recommended that North Dakota's performance with respect to the indicator, Status of Materials Inspection Program, be found unsatisfactory; however, based on the State's efforts to eliminate the backlog of inspections and their commitments to maintaining a current inspection program, the MRB determined that the State's performance with respect to this indicator was satisfactory, but needs improvement.

#### 3.3 <u>Technical Quality of Inspections</u>

The review team evaluated the inspection reports, enforcement documentation, and inspection field notes and interviewed inspectors for 13 radioactive materials inspections conducted during the review period. The casework review included inspections conducted by both of the Branch's fully-trained radioactive materials inspectors (one current and one former inspector), as well as inspections in which the Branch Manager participated. The casework review covered inspections of a variety of licensed activities, including: industrial radiography, academic broad scope, research and development, well logging, self-shielded irradiators, large source service providers, Increased Controls, and reciprocity. Appendix C lists the inspection casework files reviewed, as well as the results of the inspector accompaniments.

Based on the evaluation of casework, the review team determined that routine inspections covered all aspects of the licensees' radiation protection programs. The inspection reports were thorough, complete, consistent, and of high quality, with sufficient documentation to demonstrate that licensees' performances with respect to health and safety were acceptable. Inspection documentation frequently included photographs, illustrating licensee facilities and documenting the actual conduct of licensed activities. The documentation adequately supported any cited violations. Exit interviews were held with appropriate licensee personnel. Team inspections were performed when appropriate and for training purposes.

For any violations identified, a written analysis of the licensee's response along with any needed follow-up actions was prepared by the inspector. These documents provided a clear, easy-to-follow record of decision making regarding the enforcement action. All violations to be issued are reviewed by the Branch Manager who determines whether or not they should be referred to the Attorney General's Office for potential escalated enforcement action. Available escalated enforcement options include the formal Notices of Violation issued by the Attorney General and the imposition of monetary civil penalties.

The Branch Manager attempts to conduct supervisory accompaniments of radioactive material inspectors on at least 10 percent of all inspections. The review team found that the Branch Manager performed an accompaniment of each inspector annually during the review period, with the exception of 2006. The Branch Manager did not conduct accompaniments in 2006 due to the loss of the experienced staff member in the Branch and two staff members from other programs within the Branch. At the time of the review, accompaniments for 2007 had been conducted.

The Branch has an adequate supply of survey instruments to support their inspection program, as well as for responding to incidents and emergency conditions. The Branch has contractors who calibrate their survey instruments on an annual basis. Appropriate documentation for calibrated survey instruments was available. Radioactive contamination samples can be evaluated at the Department's Chemistry Division's counting laboratory using a liquid scintillation counting system.

The review team accompanied the qualified radioactive materials inspector during the week of March 26, 2007, during inspections of one industrial radiography licensee and a self-shielded irradiator licensee. Both health and safety and Increased Controls inspections were conducted at both facilities. The accompaniments are identified in Appendix C. Inspections are generally unannounced; however, the inspector indicated that he may contact the licensee either the day before or the morning of an inspection to ensure that appropriate licensee personnel are available prior to his arriving at the facility. During the accompaniments, the inspector conducted interviews with appropriate personnel, observed licensed operations, documented the inspection with digital photographs, conducted confirmatory measurements, and utilized good health physics practices. The inspections were adequate to assess radiological health and safety and Increased Controls at the licensed facilities.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that North Dakota's performance with respect to the indicator, Technical Quality of Inspections, was satisfactory.

#### 3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed license reviewers for 11 licensing actions. Licensing actions were reviewed for completeness, consistency, proper radioisotopes and quantities, qualifications of authorized users, adequate facilities and equipment, adherence to good health physics practices, financial assurance, operating and emergency procedures, appropriateness of license conditions, Increased Controls, and overall technical quality. The casework was evaluated for timeliness, use of appropriate correspondence, reference to appropriate regulations, documentation of safety evaluation

reports, consideration of compliance history, use of a pre-licensing checklist, peer or supervisory review as necessary, and proper signature authority. The casework was also checked for retention of necessary documents and supporting data.

The licensing casework was selected to provide a representative sample of licensing actions completed during the review period. The sampling included the following types of licenses: medical, high dose-rate remote afterloader, mobile nuclear medicine, broad scope university, self-shielded irradiator, portable and fixed gauges, industrial radiography, and well logging. Licensing actions selected for evaluation included one new license, five renewals, four amendments, and one termination. A listing of the licensing casework evaluated may be found in Appendix D.

Overall, the review team found that the licensing actions were thorough, complete, consistent, and of acceptable quality, with health, safety, and security issues properly addressed. Documentation of each review was thorough and complete. License tie-down conditions were stated clearly, backed by information contained in the file, and were auditable.

Deficiencies are addressed via telephone, by electronic mail, or by letter depending on the level of detail of the additional information required. The deficiency notices contained appropriate regulatory language and were well-documented in the license file. There were no licensing backlogs identified during the review period. The licensee's compliance history was taken into account when reviewing renewal applications and amendments. The license reviewers appropriately used the Branch's licensing guides and policies and standard licensing conditions. All licensing information is available at the State's website, including the Branch's licensing guides and NRC licensing guides.

Based on the type of action, licensing actions are assigned to the qualified license reviewer or the license reviewer-in-training. The license reviewer conducts a technical review of each licensing action, prepares the appropriate licensing documents, and then enters the information into the Branch database, where the status of licensing actions is tracked. The Branch Manager performs technical and supervisory reviews on all licensing actions, and the Division Director performs a supervisory review before a license is issued under his signature. The Branch's licensing procedure sets a 45-day guideline for the completion of routine renewals and new applications, including minor amendments without significant changes. The majority of licensing actions meet this guideline and currently the Branch does not have a backlog of licensing actions. Licenses are issued for a 5-year period.

The review team evaluated financial assurance and decommissioning activities conducted by the Branch. The review team concluded that the Branch handles financial assurance appropriately. The review team identified no performance issues with the handling of financial assurance or decommissioning by the Branch. The review team found that terminated licensing actions were well-documented and that the files included the appropriate transfer and survey records. Confirmatory surveys for license terminations were conducted when appropriate.

The Branch administers a radiographer certification program as a certifying entity. The Branch, in coordination with the Conference of Radiation Control Program Directors, Inc., and the State of Texas, proctors the Texas examination. The Branch certified approximately 60 radiographers during the review period.

The review team examined the list of licensees that the Branch determined to meet the criteria for the Increased Controls, per COMSECY-05-0028. The review team determined that the Branch correctly identified the licensees that require the Increased Controls, based on the criteria. The Branch will continue to issue Increased Controls to any additional licensees, as appropriate. Each licensee was issued a license amendment, requiring the Increased Controls, in accordance with the time lines established by the Commission in the SRM for COMSECY-05-0028.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that North Dakota's performance with respect to the indicator, Technical Quality of Licensing Actions, was satisfactory.

#### 3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Branch's actions in responding to incidents and allegations, the review team examined the Branch's response to the questionnaire relative to this indicator, reviewed the incident reports for North Dakota in the Nuclear Material Events Database (NMED) against those contained in the Branch's files, and evaluated reports and supporting documentation for seven radioactive material incidents. A listing of the incident casework examined may be found in Appendix E. The review team also reviewed the Branch's response to five allegations involving radioactive material.

The incidents selected for review included the following event categories: transportation, potential overexposure, lost and recovered gauge, medical event, and faulty equipment. The review team determined that the Branch's responses to incidents were, in general, complete and comprehensive. Initial responses were prompt and well-coordinated, and the level of effort was commensurate with the health and safety significance. The Branch dispatched inspectors for on-site investigations when appropriate and took suitable followup actions. Incident reports were thorough, well-documented and were generally timely.

The responsibility for initial response and followup actions to radioactive materials incidents may be assigned to one of the staff or the Branch Manager. Upon receipt, staff reviews the report, decides on the appropriate response, and enters the information into a database. Documentation related to an incident is placed in the appropriate license file, an incident file, and/or a separate confidential file depending on the subject matter.

As identified as a good practice during the 2003 IMPEP, North Dakota's incident response procedure includes a list of trained personnel in the State who are willing to respond to a radiation incident, such as a transportation incident, and would provide initial assessment of the incident or assist during the incident until State radiological emergency response personnel can arrive. The list includes the names of volunteers, their location within the State, the types of safety equipment they have available, and their contact numbers.

The Branch's incident procedure references the NRC's "Handbook on Nuclear Material Event Reporting in the Agreement States." The Branch responded to a total of 20 incidents involving radioactive materials during the review period. The review team identified six incidents in NMED for North Dakota during the review period. One event not meeting the reporting criteria in the handbook was entered into the NMED database for tracking purposes. The review team noted that all events requiring 24-hour notification and routine and/or event updates, requiring 30-day notification, were reported to the NRC for inclusion in NMED. All NMED records were complete and closed.

The review team evaluated the casework for five allegations. The Branch evaluates each allegation and determines the proper level of response. The review of the casework indicated that the Branch took prompt and appropriate action in response to the concerns raised. Each of the allegations reviewed was closed, and the allegers were informed of the results, when possible. The review team identified no performance issues from the allegation casework review.

The review team noted that Section GII.B. of North Dakota's procedures states protection of witnesses is provided for in Rule 509, North Dakota Rules of Evidence. The procedures further state that it is the responsibility of the Branch Manager to handle requests for information. The State makes every effort to protect an alleger's identity, but it cannot be guaranteed. The review team found this practice acceptable.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that North Dakota's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, was satisfactory.

#### 4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies four non-common performance indicators to be used in reviewing Agreement State programs: (1) Compatibility Requirements; (2) Sealed Source and Device Evaluation Program; (3) Low-Level Radioactive Waste Disposal Program; and (4) Uranium Recovery Program. North Dakota's Agreement does not cover a sealed source and device evaluation program or a uranium recovery program, so only the first and third non-common performance indicators were applicable to this review.

#### 4.1 Compatibility Requirements

#### 4.1.1 Legislation

North Dakota became an Agreement State on September 1, 1969. Legislative authority to create an agency and enter into an Agreement with the NRC is granted in the North Dakota Century Code Chapter 23-20. The Department is designated as the State's radiation control agency. The review team noted that no legislation affecting the radiation control program was passed during the review period.

# 4.1.2 <u>Program Elements Required for Compatibility</u>

The North Dakota Revised Radiological Health Rules, found in North Dakota Administrative Code Chapters 33-10-01 through 33-10-14, apply to all ionizing radiation, whether emitted from radionuclides or devices. North Dakota requires a license for possession and use of all radioactive material including naturally-occurring radioactive materials, such as radium, and accelerator-produced radionuclides.

The review team examined the State's rulemaking process and found that the process takes approximately 9 months after preparation of a draft rule. Proposed rules are submitted to the State Health Council for consideration and approval to proceed with public comment. Public notice of proposed rule revisions is made and a 60-day public comment period, including a public hearing is conducted. Proposed rules are sent to NRC for a compatibility review. After resolution of comments and the Attorney General's approval, final draft rules are sent to the State Health Council for final review and adoption. Final rules are sent to the NRC and to licensees. The State has the authority to issue legally binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective.

The review team evaluated the Branch's response to the questionnaire relative to this indicator, reviewed the status of regulations required to be adopted by the State under the Commission's adequacy and compatibility policy, and verified the adoption of regulations with data obtained from the Office of Federal and State Materials and Environmental Management Programs's (FSME) State Regulation Status Sheet.

Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally binding requirements no later than three years after they are effective. The following two NRC amendments are overdue; however, the State does not have any facilities subject to either provision and, until they receive a license application for a facility that would be subject to these provisions, do not need to adopt these amendments:

- "Financial Assurance for Materials Licensees," 10 CFR Part 30, 40, and 70 amendments (68 FR 57327) that became effective on December 3, 2003, and was due for Agreement State adoption by December 3, 2006.
- "National Source Tracking System Serialization Requirements," 10 CFR Part 32 amendment (with reference to Part 20 Appendix E) (71 FR 65685) that became effective February 6, 2007, and was due for Agreement State adoption by February 6, 2007.

The review team identified the following four NRC amendments that will be needed in the future:

- "Compatibility with IAEA Transportation Safety Standards and Other Transportation Safety Amendments," 10 CFR Part 71 amendment (69 FR 3697) that became effective on October 1, 2004, and is due for Agreement State adoption by October 1, 2007.
- "Security Requirements for Portable Gauges Containing Byproduct Material," 10 CFR Part 30 amendment (70 CFR 2001) that became effective on July 11, 2005, and is due for Agreement State adoption by July 11, 2008.

- "Medical Use of Byproduct Materials Recognition of Specialty Boards," 10 CFR Part 35 amendment (70 FR 16336, 71 FR 1926) that became effective on April 29, 2005, and is due for Agreement State adoption by April 29, 2008.
- "Minor Amendments," 10 CFR Part 20, 30, 32, 35, 40 and 70 amendments (71 FR 15005) that became effective March 27, 2006, and is due for Agreement State adoption by March 27, 2009.

The Branch Manager indicated that all of the above regulations would be addressed in an upcoming rulemaking or by issuance of alternate legally binding requirements. He expects the draft rulemaking package to be completed by October 2007 for comments with an anticipated final publication in June 2008.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that North Dakota's performance with respect to the indicator, Compatibility Requirements, was satisfactory.

#### 4.2 <u>Low-Level Radioactive Waste (LLRW) Disposal Program</u>

In 1981, the NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Authority and Assumption Thereof by States Through Agreement" to allow a State to seek an amendment for the regulation of LLRW as a separate category. Those States with existing Agreements prior to 1981 were determined to have continued LLRW disposal authority without the need of an amendment. Although North Dakota has such disposal authority, NRC has not required States to have a program for licensing a disposal facility until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, they are expected to put in place a regulatory program which will meet the criteria for an adequate and compatible LLRW disposal program. There are no plans for a LLRW disposal facility in North Dakota. Accordingly, the review team did not evaluate this indicator.

#### 5.0 SUMMARY

As noted in Sections 3.0 and 4.0, North Dakota's performance was found to be satisfactory, but needs improvement, for the indicator, Status of Materials Inspection Program, and satisfactory for all remaining performance indicators reviewed. The review team made no recommendations regarding the performance of the North Dakota Agreement State Program. Accordingly, the review team recommended, and the MRB agreed, that the North Dakota Agreement State Program be found adequate to protect public health and safety and compatible with NRC's program. Based on the results of the current IMPEP review, the review team recommended, and the MRB agreed, that a periodic meeting should be held in 1 year and that the next full IMPEP review should take place in approximately 4 years.

#### LIST OF APPENDIXES AND ATTACHMENT

Appendix A **IMPEP Review Team Members** 

North Dakota Organization Charts Appendix B

Appendix C **Inspection Casework Reviews** 

Appendix D License Casework Reviews

Appendix E **Incident Casework Reviews** 

May 31, 2007, E-mail from Kenneth W. Wangler North Dakota's Response to Draft IMPEP Report Attachment

# APPENDIX A

# IMPEP REVIEW TEAM MEMBERS

Technical Staffing and Training Technical Quality of Licensing Actions

Name	Area of Responsibility
Kathleen Schneider, FSME	Team Leader Technical Quality of Incident and Allegation Activities Compatibility Requirements
Randy Erickson, RIV	Status of Materials Inspection Program Technical Quality of Inspections Inspector Accompaniments

Barbara Taylor, TX

## APPENDIX B

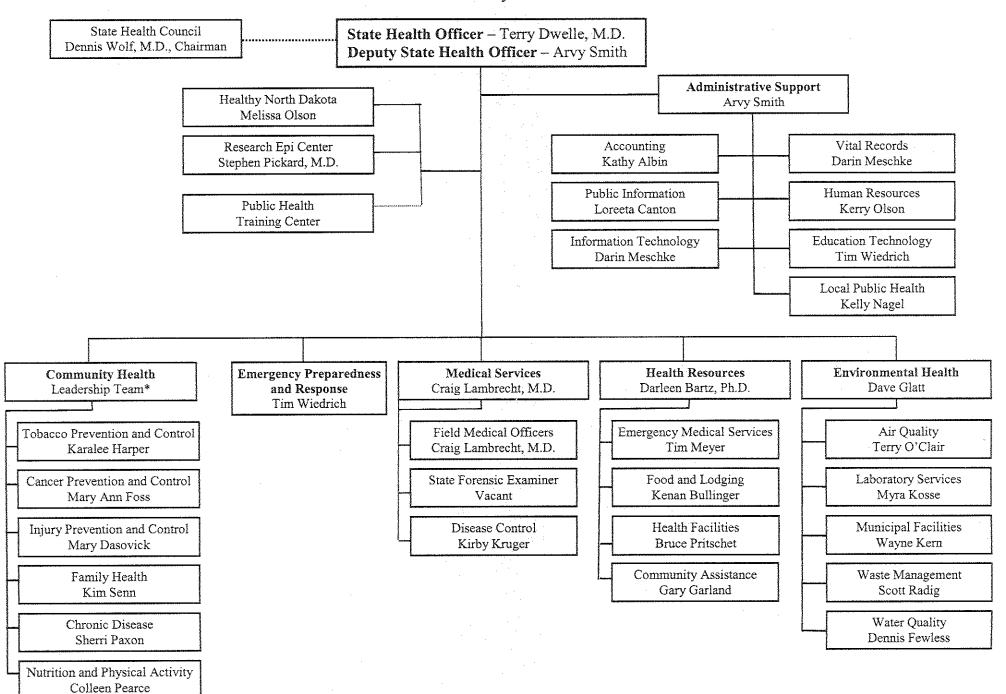
NORTH DAKOTA ORGANIZATION CHARTS

ADAMS ACCESSION NO.: ML071230758

PAGES 16-17

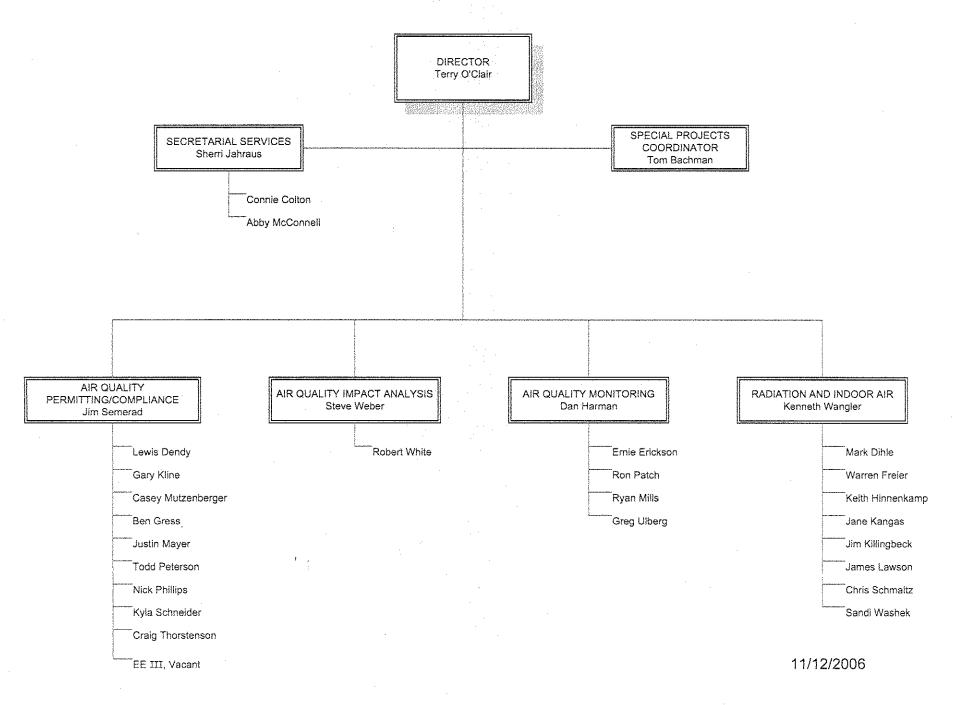
# North Dakota Department of Health Organizational Chart

February 2007



<sup>\*</sup>The six division directors share responsibility for management of the Community Health Section

# NORTH DAKOTA DEPARTMENT OF HEALTH DIVISION OF AIR QUALITY



#### APPENDIX C

#### INSPECTION CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: Ewer Testing & Inspection License No.: 33-32610-01

Inspection Type: Field, Announced Priority: 1

Inspection Date: 2/7/06 Inspectors: JK, CS

File No.: 2

Licensee: Ewer Testing & Inspection License No.: 33-32610-01

Inspection Type: Routine, Announced Priority: 1

Inspection Dates: 3/28-29/07 Inspectors: JK, CS

File No.: 3

Licensee: Schlumberger Technology Corp. License No.: 33-00090-01

Inspection Type: Routine, Announced Priority: 3

Inspection Date: 9/13/06 Inspectors: JK, CS

File No.: 4

Licensee: Midwest Industrial X-Ray, Inc. License No.: 33-14907-01

Inspection Type: Routine, Unannounced Priority: 1

Inspection Date: 7/12/05 Inspector: KW

File No.: 5

Licensee: United Blood Services License No.: 33-05427-02

Inspection Type: Routine, Announced Priority: 5

Inspection Date: 3/14/07 Inspectors: KW, JK, CS

File No.: 6

Licensee: United Blood Services License No.: 33-05427-02

Inspection Type: Routine, Announced Priority: 5

Inspection Date: 3/28/07 Inspectors: JK, CS

File No.: 7

Licensee: T&K Inspection, Inc. License No.: 33-22313-01

Inspection Type: Routine, Announced Priority: 1

Inspection Date: 9/11/06 Inspectors: JK, CS

File No.: 8

Licensee: University of North Dakota License No.: 33-12827-01

Inspection Type: Routine, Announced Priority: 3

Inspection Dates: 4/25-27/05 Inspectors: KW, JG

File No.: 9

Licensee: North Dakota State University License No.: 33-06769-06

Inspection Type: Routine, Announced Priority: 3

Inspection Dates: 3/2-4/05 Inspectors: KW, JG

File No.: 10

Licensee: Braun Intertec Corporation License No.: N/A

Inspection Type: Reciprocity, Announced Priority: 1

Inspection Date: 9/8/05 Inspectors: JK, CS

File No.: 11

Licensee: USA Environment, L.P. License No.: N/A

Inspection Type: Reciprocity, Announced Priority: 3

Inspection Dates: 10/25-27/04 Inspector: JK

File No.: 12

Licensee: Shaw Pipeline Services, Inc.

License No.: N/A

Inspection Type: Reciprocity, Unannounced Priority: 1

Inspection Date: 9/25/03 Inspectors: KW, JG

File No.: 13

Licensee: J.L. Shepherd & Associates License No.: N/A

Inspection Type: Reciprocity, Unannounced Priority: 2

Inspection Date: 10/7/04 Inspectors: KW, JG

#### INSPECTOR ACCOMPANIMENTS

The following inspector accompaniments were performed prior to the on-site IMPEP review:

Accompaniment No.: 1

Licensee: United Blood Services License No.: 33-05427-02

Inspection Type: Routine, Announced Priority: 5

Inspection Date: 3/28/07 Inspectors: JK, CS

Accompaniment No.: 2

Licensee: Ewer Testing & Inspection License No.: 33-32610-01

Inspection Type: Routine, Announced Priority: N/A

Inspection Dates: 3/28-29/07 Inspectors: JK, CS

#### APPENDIX D

#### LICENSE CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: St. Joseph's Hospital and Health Center

Type of Action: Renewal

Date Issued: 9/30/04

License No.: 33-01901-01

Amendment No.: 28

License Reviewer: JK

File No.: 2

Licensee: Varco, L.P.

Type of Action: Renewal

Date Issued: 9/6/06

License No.: 33-13562-01

Amendment No.: 20

License Reviewer: CS

File No.: 3

Licensee: Schlumberger Technology Corporation

Type of Action: Amendment

Date Issued: 10/13/06

License No.: 33-00090-01

Amendment No.: 43

License Reviewer: CS

File No.: 4

Licensee: United Blood Services

Type of Action: Amendment

Date Issued: 7/27/06

License No.: 33-05427-02

Amendment No.: 10

License Reviewer: JK

File No.: 5

Licensee: United Blood Services

Type of Action: Amendment

Date Issued: 7/27/06

License No.: 33-05427-02

Amendment No.: 10

License Reviewer: JK

File No.: 6

Licensee: United Blood Services

Type of Action: Renewal

Date Issued: 2/3/05

License No.: 33-05427-02

Amendment No.: 7

License Reviewer: JG

File No.: 7

Licensee: The Kidney and Hypertension Center

Type of Action: New

Date Issued: 11/2/06

License No.: 33-44302-01

Amendment No.: 1

License Reviewers: CS, JK

File No.: 8

Licensee: T & K Inspection, Inc.

Type of Action: Renewal

Date Issued: 11/14/03

License No.: 33-22313-01

Amendment No.: 14

License Reviewer: JG

File No.: 9

Licensee: MeritCare Health System

Type of Action: Amendment

Date Issued: 1/10/06

License No.: 33-10227-02

Amendment No.: 45

License Reviewer: JK

File No.: 10

Licensee: University of North Dakota

Type of Action: Renewal

Date Issued: 8/4/05

License No.: 33-12827-01

Amendment No.: 25

License Reviewer: JK

File No.: 11

Licensee: Interstate Testing Services, Inc. License No.: 33-29016-01

Type of Action: Termination Amendment No.: 2
Date Issued: 6/1/06 License Reviewer: JK

#### APPENDIX E

#### INCIDENT CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: T & K Inspection

Date of Incident: 10/17/03

Investigation Date: 10/17/03

License No.: ND 33-22313-01

Incident Log No.: NMED 030910

Type of Incident: Damage to Equipment

Type of Investigation: Phone

File No.: 2

Licensee: Trinity Medical Center

Date of Incident: 1/3/03

Investigation Date: 10/23/03

License No.: ND 33-04608-01

Incident Log No.: NMED 030911

Type of Incident: Medical Event

Type of Investigation: Inspection

File No.: 3

Licensee: Motor Coach Industry

Date of Incident: 7/18/03

Investigation Date: 9/4/03

Type of Incident: Lost Radioactive Material

Type of Investigation: Phone

File No.: 4

Licensee: M Bar D Facility

Date of Incident: N/A

Investigation Date: 6/5/06

License No.: N/A

Incident Log No.: N/A

Type of Incident: Landfill survey

Type of Investigation: Investigation

File No.: 5

Licensee: Heart of America Medical Center

Date of Incident: 7/23/03

Investigation Date: 7/23/03

License No.: N/A

Incident Log No.: NMED 030672

Type of Incident: Medical Event

Type of Investigation: Phone

File No.: 6

Licensee: ALTRU Hospital

Date of Incident: 1/28/04

Investigation Date: 3/10/04

License No.: ND 33-01599-03

Incident Log No.: NMED 040150

Type of Incident: Medical Event

Type of Investigation: Inspection

File No.: 7

Licensee: Llyod Richmond & Associates License No.: ND 33-20305-01

Date of Incident: 7/22/04 Incident Log No.: NMED 010820

Investigation Date: 7/26/04

Type of Incident: Recovered Radioactive Material

Type of Investigation: Inspection

# ATTACHMENT

May 31, 2007, E-mail from Kenneth W. Wangler North Dakota's Response to Draft IMPEP Report

ADAMS: ML071630461

"Wangler, Ken W." <kwangler@nd.gov> "Kathleen Schneider" <KXS@nrc.gov> From:

To:

**Date:** 05/31/2007 10:39:37 AM

Subject: RE: ND IMPEP questionaire

#### Kathleen

I realize you are out until June 5. As indicated in my email to Aaron McCraw, North Dakota has no comments on the IMPEP review team's draft report. Well done.

Also I wanted to run the attached request past you for your comment. North Dakota is considering a request to the MRB to change the Status of Inspections findings to satisfactory. I realize our request is a stretch given that we are requesting to go up by two finding categories. Let me know your thoughts. Thanks

Ken Wangler

"Killingbeck, Jim E." <jkilling@nd.gov>, "O'Clair, Terry L." <toclair@nd.gov>, "Schmaltz, CC: Chris J." <cschmalt@nd.gov>

With regard to 3.2 Status of Materials Inspection Program, the State of North Dakota respectfully requests the Management Review Board to consider changing the findings of the IMPEP inspection team from unsatisfactory to satisfactory. While the State did not meet the prescriptive measures of the IMPEP evaluation criteria, the Inspection Program performed in a manner supporting a satisfactory finding.

The State supports its request with the following statements:

During the review period the State lost one of its two experienced staff. This 50% reduction prevented the State from being able to meet its inspection frequency obligations. The State filled the vacated staff position and has been training the new staff for 16 months. The new staff has been assisting the Program, allowing it to complete its inspections in a timely manner as evidenced by the current status of overdue inspections. This analysis can be supported by comparing the timing of the staff leaving in relationship to when the overdue inspections began occurring and the timing of the new staff coming onboard in relation to when the Program was able to begin completing overdue inspections and to maintain the inspection schedule current on new inspections. As of June 15, 2007 there are no Priority 1, 2 or 3 inspections overdue by more than 25% nor any initial inspections past one year. Also no inspection findings reports to the licensees are more than 30 days since the inspection.

The new staff has been trained in a number of NRC core training courses including those listed in the table below.

the table below.

NRC Licensing Practices and Procedures

NRC Inspection Procedures

NRC Transportation of Radioactive Materials

NRC Safety Aspects of Well Logging (scheduled for Nov 2007)

NRC Safety Aspects of Industrial Radiography

NRC Security Systems and Principles Course (IC's)

In addition to assisting with licensing actions and other administrative duties in the office, the new staff is nearly ready to begin conducting independent inspections of Industrial Radiographers (priority 1), Level gauges and Moisture Density gauges which will further help the Program to maintain its inspection schedule.

Management Directive 5.6 describes a satisfactory rating for Status of Materials Inspection Program in part as inspected at regular intervals in accordance with prescribed frequencies. While the State did fall behind for a period of time and allowed 27% of Priority 1, 2 and 3 inspections to get more than 25% overdue, this was not the case prior to the experienced staff leaving as indicated by the 2003 IMPEP and the deficiency has since been corrected. The staff member left the Program in August 2005. At that time, the State was operating at near 100% of the inspection frequency. The State was able to maintain an acceptable inspection frequency, ie; less than 25% overdue, until June 2006. As previously indicated, with the assistance of the new staff, the Program has been able to make up over due inspections by June 2007.

Management Directive 5.6 further describes a satisfactory rating for Status of Materials Inspection Program in part as deviations from inspection schedules should be normally coordinated between working staff and management. Deviations should be generally the result of joint decisions that consider the risk of licensee operation, past licensee performance, and the need to temporarily defer the inspection(s) to address more urgent or more critical priorities. The State believes it exhibited this characteristic as demonstrated by allowing the number of overdue

inspections to exceed the unsatisfactory rating by only 2 percentage points during a period when it lost and had to rebuild a significant portion of its inspection and licensing staff. During this time the State successfully implemented the increased controls requirements and maintained the other six IMPEP evaluation criteria at a satisfactory level.

Thirdly, Management Directive 5.6 describes a satisfactory rating for Status of Materials Inspection Program in part as having a plan to reschedule any missed or deferred inspections. While the State did fall behind in conducting inspections, there was a successful plan in place to conduct those inspections in a timely manner as demonstrated by the fact that there are currently no overdue inspections.

Finally, Management Directive 5.6 describes a satisfactory rating for Status of Materials Inspection Program in part as a large majority of the inspection findings are communicated to licensees in a timely manner (30 calendar days). Of the 41 inspections conducted during the review period, 7 communications were in excess of 30 days and only 1 was in excess of 45 days. The licensee that exceeded 45 days received a phone call from Department staff within 30 days of the inspection, communicating the inspection findings and explaining that the letter from the Department would be delayed. Again there is correlation between the time when the staff left the Program and the responses began exceeding 30 days. Further, as indicated earlier, no inspection finding communications are currently over 30 days.

The State believes that the information above demonstrates performance that meets the intent of the objectives of Management Directive 5.6. The situation that the State faced with the loss of an experienced staff was the cause of its inability to satisfactorily complete inspections in a manner described by the inspection frequency. The staff has been replaced and is undergoing training. The Program is again current on inspections and reports.