

June 18, 1997

MEMORANDUM TO: Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

FROM: John T. Greeves, Director (Original signed by)
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: TECHNICAL REVIEWER CERTIFICATION APPROVAL

The purpose of this memorandum is to request your review and approval of Mr. Ted Johnson, Dr. Elaine Brummett, Mr. William Ford, Dr. Balad Jagannath, Mr. Michael Layton, and Mr. Daniel Rom of the Division of Waste Management (DWM) as certified technical reviewers. Manual Chapter (MC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area," provides a standard methodology for determining that license reviewers meet established qualifications. A set of training requirements that must be fulfilled for individuals to be formally qualified as technical reviewers is outlined in MC 1246. Although MC 1246 does not completely provide a grandfathering provision, DWM believes these individuals are appropriate for grandfathering for the following reasons: 1) they have extensive experience in their technical areas of expertise as well as five or more years of time in the uranium recovery program, and 2) they have a sound understanding of the U.S. Nuclear Regulatory Commission and its mission related to uranium recovery activities. Having the individuals complete the training program outlined in MC 1246 would not add much to their ability to conduct technical reviews.

As such, DWM is recommending that the above individuals be grandfathered as certified technical reviewers. These grandfathered individuals would receive specific training courses as needed to further strengthen their experience. However, they would not be required to complete the formal process in MC 1246. New staff members who have just recently begun work in the uranium recovery program would undertake the required training outlined in MC 1246. Attached are the qualification statements for each staff member identified, detailing the technical review area for which certification is requested and summarizing their previous training and experience. DWM is currently revising MC 1246 in response to the recent Integrated Materials Performance Evaluation Program findings. As part of this revision, DWM will recommend that MC 1246 be revised to include a grandfathering provision.

Attachments: As stated

CONTACT: Daniel M. Gillen, URB
415-7295

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PDR WASTE
WM-3 PDR

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DOCUMENT NAME: S:\DWM\URB\DMG\CERTMEMO

OFC	URB	URB	DWM						
NAME	DGJ	JHJohnson	JGreeves						
DATE	06/03/97	06/03/97	06/18/97						

OFFICIAL RECORD COPY

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: TERRY (TED) L. JOHNSON

Technical area for which certification is requested:

INDEPENDENT REVIEW OF THE SURFACE WATER HYDROLOGY AND EROSION PROTECTION ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES, SDMP SITES, AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. Mr. Johnson joined the NRC Headquarters staff in June, 1974 as a hydraulic engineer/surface water hydrologist. He received a Bachelor's Degree from West Virginia University in 1968 in Civil Engineering. Mr. Johnson worked for the United States Army Corps of Engineers from 1969 to 1974, specializing in design of erosion protection and hydraulic structures. He has over 28 years of experience in the design and review of flooding and erosion aspects of nuclear power plants, high-level waste sites, low-level waste sites, and uranium mill tailings sites.
2. Since joining the NRC, Mr. Johnson has completed numerous technical reviews of remedial action plans, license amendments, and erosion protection designs. He has represented NRC in many meetings and technical exchanges for the development of acceptable designs at various waste disposal sites. He has conducted many construction inspections at various uranium mill tailings sites. He has participated in various research efforts that formed the basis for publications related to the design of erosion protection. He has published several papers related to the design and construction of erosion protection.
3. Mr. Johnson has developed various NRC guidance documents in the areas of surface water hydrology and erosion protection, including: standard review plans for high-level waste, low-level waste, and uranium mill tailings sites; and staff technical positions for uranium mill tailings reclamation. He has frequently developed site-specific guidance related to design of erosion protection. He has also developed quality assurance criteria for the assessment of rock durability, rock selection, and rock placement.

Recommended by: D. M. Miller for J. Holmick 6/16/97
Branch Chief Date
J. Miller 6/18/97
Division Director Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: Dr. Banad Jagannath

Technical area for which certification is requested:

INDEPENDENT TECHNICAL REVIEW OF THE GEOTECHNICAL ENGINEERING ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. Dr. Jagannath joined the NRC headquarters staff in December 1980 as a Geotechnical Engineer in NRR. He received his Doctorate degree in Civil Engineering from Ohio State University in 1969 and has nearly 28 years of experience as a civil/geotechnical engineer. In NRC he worked in the reactor area for three years and moved to NMSS where he has worked on UMTRA projects, low-level waste projects, and high-level waste project. Prior to joining NRC he worked in private industry for PRC-Harris Consulting Engineers, and other firms for about 11 years.
2. In private industry, Dr. Jagannath has extensive experience in the design of geotechnical aspects of numerous projects on highways, bridges, earthen dams, multi-story buildings, offshore oil terminals, dry docks, marinas, and other civil engineering facilities. Dr. Jagannath has managed a geotechnical testing laboratory and has taken part in both performing and inspecting numerous geotechnical engineering and construction related tests. His design experience covers a wide range of civil engineering projects. At NRC he has experience in reviewing numerous UMTRA Project reclamation plans, nuclear power plant license applications, and both High-Level and Low-Level waste disposal project documents.
3. At NRC he has completed training in 'HP for Uranium Recovery', 'Site Access Radiation Control', 'QA Audit Observer Training', and courses in Tunnelling and Mining, rock mechanics, and Earthquake Engineering, etc.

Recommended by:

J. Holovich for J. Holovich 6/16/97
Branch Chief Date

J. Green 6/18/97
Division Director Date

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by:

Office Director

Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: DANIEL S. ROM

Technical area for which certification is requested:

INDEPENDENT REVIEW OF THE GEOTECHNICAL ENGINEERING AND EARTH CONSTRUCTION ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. MR. ROM JOINED THE NRC HEADQUARTERS STAFF IN JANUARY, 1990, AS A GEOTECHNICAL ENGINEER. HE RECEIVED BACHELOR OF CIVIL ENGINEERING (1973) AND MASTER OF SCIENCE IN CIVIL (GEOTECHNICAL) ENGINEERING DEGREES (1975) FROM THE GEORGIA INSTITUTE OF TECHNOLOGY. HE HAS 24 YEARS EXPERIENCE IN GEOTECHNICAL ENGINEERING INCLUDING DESIGN, ANALYSIS, EXPLORATION, AND CONSTRUCTION ACTIVITIES. FROM 1974 TO 1990, HE WORKED FOR NATIONAL CONSULTING ENGINEER FIRMS, RISING FROM THE STATUS OF FIELD ENGINEER TO REGIONAL MANAGER IN CHARGE OF A STAFF OF 45 INDIVIDUALS AND FIVE DRILL RIGS. MR. ROM IS A REGISTERED PROFESSIONAL ENGINEER IN TEN STATES, A CERTIFIED MASTER WELL DRILLER, AND A MEMBER OF ASCE.
2. SINCE JOINING THE NRC, MR. ROM HAS COMPLETED NUMEROUS TECHNICAL REVIEWS FOR GEOTECHNICAL ENGINEERING AND CONSTRUCTION ASPECTS OF TITLE I AND TITLE II SITE RECLAMATIONS. HE HAS ACTED AS AN INSPECTOR FOR CONSTRUCTION OPERATIONS FOR MOST OF THE TITLE I SITES SINCE 1990, AND FOR TITLE II SITES SINCE 1994. FURTHERMORE, AS A DAM SAFETY INSPECTOR, MR. ROM HAS PARTICIPATED IN SIX NRC DAM SAFETY INSPECTIONS TO DATE. MR. ROM HAS REPRESENTED NRC IN TECHNICAL EXCHANGES WITH THE DEPARTMENT OF ENERGY, TITLE II LICENSEES, AND SEVERAL STATE GOVERNMENTS.
3. IN ADDITION TO NUMEROUS TRAINING COURSES ON NRC POLICY, MR. ROM HAS COMPLETED CONTINUING EDUCATION STUDIES IN: "GEOTECHNICAL ASPECTS OF LANDFILL DESIGN", JANUARY 1992; "GROUND MODIFICATION", APRIL, 1992; "STABILITY & PERFORMANCE OF SLOPES & EMBANKMENTS II", JUNE-JULY, 1992; "NUCLEAR REACTOR CONCEPTS", FEBRUARY, 1994; "GEOTECHNOLOGY IN INFRASTRUCTURE IMPROVEMENT", APRIL, 1996; "DEVELOPMENT OF GROUND MOTION PARAMETERS FOR DAM SAFETY EVALUATION", FEBRUARY, 1997; "HEALTH PHYSICS FOR URANIUM RECOVERY", FEBRUARY, 1997; AND "FUNDAMENTALS OF INSPECTION", APRIL, 1997. THE CONTINUING EDUCATION COURSES WERE SPONSORED BY AGENCIES INCLUDING THE NRC, ASCE, FEMA, AND OTHERS.

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: ELAINE S. BRUMMETT

Technical area for which certification is requested:

INDEPENDENT TECHNICAL REVIEW OF RADIOLOGICAL ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. MS. BRUMMETT JOINED THE NRC HEADQUARTERS STAFF IN MAY 1991 AS A HEALTH PHYSICIST. SHE HAD WORKED FOR 12.5 YEARS FOR THE STATE OF COLORADO AS HEALTH PHYSICIST ON THE URANIUM MILL TAILINGS REMEDIAL ACTION PROGRAMS.
2. SINCE JOINING NRC, MS. BRUMMETT HAS PERFORMED NUMEROUS TECHNICAL REVIEWS OF RECLAMATION PLANS AND COMPLETION REPORTS FOR URANIUM RECOVERY FACILITIES, AS WELL AS REVIEW OF PROPOSED REGULATION AND GUIDANCE IN THE AREA OF HEALTH PHYSICS.
3. SHE HAS COMPLETED THE NRC TRAINING COURSES "HEALTH PHYSICS PRACTICES FOR FUEL CYCLE FACILITIES," "ENVIRONMENTAL MONITORING FOR RADIOACTIVITY," "RADIOLOGICAL SURVEYS IN SUPPORT OF DECOMMISSIONING," AND "SITE ACCESS TRAINING," AND IS CURRENTLY TAKING "HEALTH PHYSICS CERTIFICATION REVIEW COURSE."

Recommended by:

D. M. Goo L. J. Moloch
Branch Chief

6/16/97
Date

[Signature]
Division Director

6/18/97
Date

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by:

Office Director

Date



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 18, 1997

MEMORANDUM TO: Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

FROM: John T. Greeves, Director *JT Greeves*
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: TECHNICAL REVIEWER CERTIFICATION APPROVAL

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Attachments: As stated

CONTACT: Daniel M. Gillen, URB
415-7295

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: Dr. Banad Jagannath

Technical area for which certification is requested:

INDEPENDENT TECHNICAL REVIEW OF THE GEOTECHNICAL ENGINEERING ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. Dr. Jagannath joined the NRC headquarters staff in December 1980 as a Geotechnical Engineer in NRR. He received his Doctorate degree in Civil Engineering from Ohio State University in 1969 and has nearly 28 years of experience as a civil/geotechnical engineer. In NRC he worked in the reactor area for three years and moved to NMSS where he has worked on UMTRA projects, low-level waste projects, and high-level waste project. Prior to joining NRC he worked in private industry for PRC-Harris Consulting Engineers, and other firms for about 11 years.

2. In private industry, Dr. Jagannath has extensive experience in the design of geotechnical aspects of numerous projects on highways, bridges, earthen dams, multi-story buildings, offshore oil terminals, dry docks, marinas, and other civil engineering facilities. Dr. Jagannath has managed a geotechnical testing laboratory and has taken part in both performing and inspecting numerous geotechnical engineering and construction related tests. His design experience covers a wide range of civil engineering projects. At NRC he has experience in reviewing numerous UMTRA Project reclamation plans, nuclear power plant license applications, and both High-Level and Low-Level waste disposal project documents.

3. At NRC he has completed training in 'HP for Uranium Recovery', 'Site Access Radiation Control', 'QA Audit Observer Training', and courses in Tunnelling and Mining, rock mechanics, and Earthquake Engineering, etc.

Recommended by: Dr. M. Allen for J. Holovich 6/16/97
Branch Chief Date
J. Green 6/18/97
Division Director Date

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by: _____
Office Director Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: ELAINE S. BRUMMETT

Technical area for which certification is requested:

INDEPENDENT TECHNICAL REVIEW OF RADIOLOGICAL ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

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3. SHE HAS COMPLETED THE NRC TRAINING COURSES "HEALTH PHYSICS PRACTICES FOR FUEL CYCLE FACILITIES," "ENVIRONMENTAL MONITORING FOR RADIOACTIVITY," "RADIOLOGICAL SURVEYS IN SUPPORT OF DECOMMISSIONING," AND "SITE ACCESS TRAINING," AND IS CURRENTLY TAKING "HEALTH PHYSICS CERTIFICATION REVIEW COURSE."

Recommended by:

D. M. Goo for J. Holovich
Branch Chief

6/16/97
Date

[Signature]
Division Director

6/18/97
Date

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Approved by:

Office Director

Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: DANIEL S. ROM

Technical area for which certification is requested:

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2. SINCE JOINING THE NRC, MR. ROM HAS COMPLETED NUMEROUS TECHNICAL REVIEWS FOR GEOTECHNICAL ENGINEERING AND CONSTRUCTION ASPECTS OF TITLE I AND TITLE II SITE RECLAMATIONS. HE HAS ACTED AS AN INSPECTOR FOR CONSTRUCTION OPERATIONS FOR MOST OF THE TITLE I SITES SINCE 1990, AND FOR TITLE II SITES SINCE 1994. FURTHERMORE, AS A DAM SAFETY INSPECTOR, MR. ROM HAS PARTICIPATED IN SIX NRC DAM SAFETY INSPECTIONS TO DATE. MR. ROM HAS REPRESENTED NRC IN TECHNICAL EXCHANGES WITH THE DEPARTMENT OF ENERGY, TITLE II LICENSEES, AND SEVERAL STATE GOVERNMENTS.
3. IN ADDITION TO NUMEROUS TRAINING COURSES ON NRC POLICY, MR. ROM HAS COMPLETED CONTINUING EDUCATION STUDIES IN: "GEOTECHNICAL ASPECTS OF LANDFILL DESIGN", JANUARY 1992; "GROUND MODIFICATION", APRIL, 1992; "STABILITY & PERFORMANCE OF SLOPES & EMBANKMENTS II", JUNE-JULY, 1992; "NUCLEAR REACTOR CONCEPTS", FEBRUARY, 1994; "GEOTECHNOLOGY IN INFRASTRUCTURE IMPROVEMENT", APRIL, 1996; "DEVELOPMENT OF GROUND MOTION PARAMETERS FOR DAM SAFETY EVALUATION", FEBRUARY, 1997; "HEALTH PHYSICS FOR URANIUM RECOVERY", FEBRUARY, 1997; AND "FUNDAMENTALS OF INSPECTION", APRIL, 1997. THE CONTINUING EDUCATION COURSES WERE SPONSORED BY AGENCIES INCLUDING THE NRC, ASCE, FEMA, AND OTHERS.

Bases for Certification: DANIEL S. ROM

Recommended by:

D.M. Gille
Branch Chief

for J. Holovich

6/16/97
Date

[Signature]
Division Director

6/18/97
Date

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by:

Office Director

Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: WILLIAM H. FORD

Technical area for which certification is requested:

INDEPENDENT REVIEW OF THE WATER RESOURCES PROTECTION ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. MR. FORD JOINED THE NRC HEADQUARTERS STAFF IN APRIL 1984, AS A HYDROGEOLOGIST. HE RECEIVED A MASTER OF SCIENCE DEGREE IN GEOLOGY FROM THE UNIVERSITY OF SOUTH FLORIDA IN 1971. HE HAS OVER 24 YEARS EXPERIENCE IN ENVIRONMENTAL, GEOLOGICAL, SURFACE WATER, AND GROUND-WATER INVESTIGATIONS. HE WORKED FOR WOODWARD CLYDE, WESTINGHOUSE, WYOMING MINERAL CORPORATION, ATLANTIC RICHFIELD CO., ANACONDA COPPER CO., AND APPLIED HYDROLOGY ASSOCIATES ON NUCLEAR AND ENVIRONMENTAL PROJECTS. MR. FORD IS A LICENSED PROFESSIONAL GEOLOGIST IN THE STATE OF FLORIDA.
2. SINCE JOINING THE NRC, MR. FORD HAS COMPLETED NUMEROUS GROUND-WATER TECHNICAL REVIEWS ASSOCIATED WITH URANIUM RECOVERY TITLE I AND II FACILITIES, NUCLEAR POWER PLANTS, LOW LEVEL WASTE FACILITIES, AND THE HIGH LEVEL WASTE PROGRAM.
3. HE HAS COMPLETED THE FOLLOWING TRAINING AND CONTINUING EDUCATION COURSES FOR GROUND-WATER RELATED ISSUES: ISOTOPE HYDROLOGY BY U.S. GEOLOGICAL SURVEY, COMPUTER MODELING OF UNSATURATED GROUNDWATER FLOW AND TRANSPORT BY INTERNATIONAL GROUNDWATER MODELING CENTER, NUMERICAL ANALYSIS OF GROUND WATER FLOW OFFERED BY JOHN HOPKINS UNIVERSITY, MODELING OF GROUND WATER FLOW AND POLLUTION BY JACOB BEAR, ANALYTICAL GROUND WATER MODELING BY WILLIAM WALTON, PRINCIPLES AND CONCEPTS OF VARIOGRAM AND KRIGING ANALYSIS FOR ENVIRONMENTAL APPLICATIONS, AND APPLIED STATISTICS (NRC TECHNICAL TRAINING CENTER).

Recommended by:

Don. Allen for J. Hebert
Branch Chief

6/16/97

Date

J. Hebert
Division Director

6/18/97

Date

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by:

Office Director

Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: TERRY (TED) L. JOHNSON

Technical area for which certification is requested:

INDEPENDENT REVIEW OF THE SURFACE WATER HYDROLOGY AND EROSION PROTECTION ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES, SDMP SITES, AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. Mr. Johnson joined the NRC Headquarters staff in June, 1974 as a hydraulic engineer/surface water hydrologist. He received a Bachelor's Degree from West Virginia University in 1968 in Civil Engineering. Mr. Johnson worked for the United States Army Corps of Engineers from 1969 to 1974, specializing in design of erosion protection and hydraulic structures. He has over 28 years of experience in the design and review of flooding and erosion aspects of nuclear power plants, high-level waste sites, low-level waste sites, and uranium mill tailings sites.
2. Since joining the NRC, Mr. Johnson has completed numerous technical reviews of remedial action plans, license amendments, and erosion protection designs. He has represented NRC in many meetings and technical exchanges for the development of acceptable designs at various waste disposal sites. He has conducted many construction inspections at various uranium mill tailings sites. He has participated in various research efforts that formed the basis for publications related to the design of erosion protection. He has published several papers related to the design and construction of erosion protection.
3. Mr. Johnson has developed various NRC guidance documents in the areas of surface water hydrology and erosion protection, including: standard review plans for high-level waste, low-level waste, and uranium mill tailings sites; and staff technical positions for uranium mill tailings reclamation. He has frequently developed site-specific guidance related to design of erosion protection. He has also developed quality assurance criteria for the assessment of rock durability, rock selection, and rock placement.

Recommended by:

D. M. Miller for J. Holnick 6/16/97
Branch Chief Date

J. K. [Signature]
Division Director

6/18/97
Date

Bases for Certification: TED L. JOHNSON

The technical reviewer named above is hereby certified to perform independent reviews in the functional areas identified above based on the justification indicated. The reviewer may also perform independent reviews in related areas as authorized by the Branch Chief.

Approved by:

Office Director

Date

Bases for Certification as Technical Reviewer

Technical Reviewer's Name: MICHAEL C. LAYTON

Technical area for which certification is requested:

INDEPENDENT REVIEW OF THE WATER RESOURCES PROTECTION ASPECTS OF THE U.S. DEPARTMENT OF ENERGY UMTRA PROGRAM SITES AND URANIUM INDUSTRY LICENSEES' FACILITIES.

Bases for certification:

1. MR. LAYTON JOINED THE NRC HEADQUARTERS STAFF IN JUNE, 1991 AS A HYDROGEOLOGIST. HE RECEIVED A MASTER OF SCIENCE DEGREE IN GEOLOGY FROM THE UNIVERSITY OF SOUTH FLORIDA IN 1982, WITH AN EMPHASIS IN GROUND-WATER RESOURCE EVALUATION AND GEOPHYSICAL APPLICATIONS TO GROUND-WATER RECONNAISSANCE SURVEYS. HE HAS OVER 15 YEARS EXPERIENCE IN ENVIRONMENTAL, GROUND-WATER, AND GEOPHYSICAL INVESTIGATIONS. HE WORKED FOR DAMES & MOORE ON ENVIRONMENTAL, GROUND-WATER PROJECTS AND MOBIL OIL CORPORATION ON GEOPHYSICAL PROJECTS. MR. LAYTON IS A LICENSED PROFESSIONAL GEOLOGIST IN THE COMMONWEALTH OF PENNSYLVANIA AND A CERTIFIED GROUND-WATER PROFESSIONAL WITH THE ASSOCIATION OF GROUND-WATER SCIENTISTS AND ENGINEERS.
2. SINCE JOINING THE NRC, MR. LAYTON HAS COMPLETED NUMEROUS TECHNICAL REVIEWS IN THE AREA OF WATER RESOURCES PROTECTION FOR UMTRA PROJECT REMEDIAL ACTION PLANS, URANIUM MILL LICENSE AMENDMENTS, AND URANIUM IN SITU LEACH LICENSE AMENDMENTS. HE REPRESENTED THE NRC IN DOE'S GROUND-WATER TECHNICAL WORKING GROUP MEETINGS FOR DEVELOPING GROUND-WATER RESTORATION STRATEGIES AT UMTRA PROJECT SITES. HE ALSO PARTICIPATED AS A TEAM MEMBER ON SEVERAL ANNOUNCED INSPECTIONS OF LICENSED IN SITU LEACH FACILITIES.
3. HE COMPLETED THE FOLLOWING TRAINING AND CONTINUING EDUCATION COURSES FOR GROUND-WATER RELATED ISSUES: "GROUND WATER ANALYSIS AND DESIGN OF DEWATERING SYSTEMS," UNIVERSITY OF FLORIDA CONTINUING EDUCATION, APRIL 1996; "APPLIED GROUND-WATER MODELING, FLOW AND ADVECTIVE TRANSPORT," NGWA SHORT COURSE, JULY 1993; UNSATURATED FLOW AND CONTAMINANT TRANSPORT WORKSHOP, USGS/NRC SPONSORED WORKSHOP, JUNE 1993; "UNSATURATED FLOW AND CONTAMINANT TRANSPORT WORKSHOP," NRC SPONSORED WORKSHOP, JANUARY 1992; "CRITICAL ISSUES IN UNDERGROUND STORAGE TANK MANAGEMENT," NWWA SHORT COURSE, FEBRUARY 1989; AND "CORRECTIVE ACTIONS FOR CONTAINING AND CONTROLLING GROUND-WATER CONTAMINATION," NWWA SHORT COURSE, JULY 1985.

Bases for Certification: MICHAEL C. LAYTON

Recommended by:

D. M. Allen for J. Holovich
Branch Chief

6/16/97
Date

[Signature]
Division Director

6/18/97
Date

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Office Director

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