



## **TINA BARNETT**

Ms. Barnett is the NMMSS Program Director and Acting Department of Energy (DOE) Liaison at NAC International in Atlanta. She is responsible for the oversight of all NMMSS activities, including processing of transaction and inventory data, and reconciliation, as well as the NMMSS News. She is also responsible for providing weekly and monthly status reports to DOE and NRC. In addition, she represents the analyst staff and performs as a technical expert on the NMMSS Upgrade Team. She has also worked in MC&A at the Savannah River Site and in nuclear measurements at the Mound plant in Ohio. She has a Bachelor of Science degree in Chemistry from Miami University (Ohio) and a Masters of Business Administration, also from Miami University.

## **NEELAM BHALLA**

Ms. Bhalla is from the Nuclear Regulatory Commission's Rulemaking Branch B.

## **RONALD BONIFAY**

Ron Bonifay holds the position of the Nuclear Regulatory Commission (NRC) Liaison at the NMMSS. He is responsible for the oversight of day-to-day operations, in support of the NRC as well as all International and IAEA activities. He has been with the NMMSS since 1998. Prior to his employment with NAC International, he was employed with BWXT of Ohio, at the Mound facility with over 32 years of combined service. During that time Mr. Bonifay held positions in nuclear materials management, nuclear materials control auditing, and nuclear weapons manufacturing.

## **SAM BROWN**

Sam Brown is the Technical Team Leader at NMMSS. He is responsible for the oversight of all software and hardware technical activities related to the NMMSS project. Mr. Brown also created the software package Safeguards Managements Software (SAMS), which is used by facilities to edit their data before submission to the NMMSS. He has been on the NMMSS project since November 1994.

## **HELEN BURNS**

Helen Burns is a Lead Technical Specialist with Washington Savannah River Company. She began her professional career in 1984 at Savannah River Site near Aiken, SC in Analytical Laboratories. In 1999, she transferred to Safeguard and Security where she now serves as the LANMAS Design Authority and Program Lead. She has been with the LANMAS program for 8 years and works with the LANMAS User Community for the development of the application.

Helen received a Bachelor of Business Administration in Accounting, a Bachelor of Science in Computer Science, and a Masters in Applied Mathematical Science in Computer Science from the University of Georgia. She recently obtained her Project Manager Professional certification from Project Management Institute and is a member of the Institute of Nuclear Materials Management.



## **KENT COLE**

Kent Cole has been president of NAC International since August 2006, responsible for overseeing the day-to-day operations of the nuclear fuel transport, spent fuel management technology, and fuel cycle consulting services company. Before becoming NAC's president, Cole had been responsible for two of NAC's key business units involving spent nuclear fuel storage systems and the global transportation of spent nuclear fuel using NAC's fleet of commercial spent nuclear fuel transportation casks. Previously, he was employed by GE Nuclear Energy for 15 years, where he served in several leadership roles with increasing responsibility, until joining NAC in 2003

## **DAN COLLIER**

Dan Collier, Vice President of Government Consulting for NAC International, has more than 30 years of experience in the nuclear fuel industry. He has provided first-hand consulting expertise to many commercial and government entities in the nuclear industry around the world. Mr. Collier has helped foreign and domestic utilities develop and refine procurement strategies. Mr. Collier has conducted seminars on the commercial, technical and nonproliferation aspects of the nuclear markets for clients. He has presented nuclear market analyses to top management and the boards of international companies. From February 2004, Mr. Collier has been responsible for the operation of NMMSS at NAC.

## **JAMES CRABTREE**

James C. Crabtree, Materials Control and Accountability Program Manager, Office of Security Policy, Office of Health, Safety and Security, U. S. Department of Energy.

Dr. Crabtree is the manager for the Materials Control and Accountability (MC&A) Program for the Office of Security Policy, U. S. Department of Energy (DOE). He has a BA and MA in mathematics from the University of South Carolina, and a Ph.D. in mathematics from the University of Illinois. After receiving his Ph.D. for the University of Illinois, he held the position of visiting assistant professor at the Georgia Institute of Technology from 1984 to 1986. Since 1987, he has worked in nuclear materials safeguards. He began his career in nuclear safeguards at DOE's Savannah River Operations Office where he worked as a statistician. In this position, he analyzed nuclear materials inventory data, assisted with nuclear materials surveys, and provided site level guidance on implementation of MC&A programs. From 1991 to 2001, he served as a staff member of the MC&A Program of the Office of Safeguards and Security and was involved in developing and issuing DOE MC&A orders, manuals, and guides. He was promoted to his current position of MC&A program manager for the Office of Security Policy in 2001 where he is responsible for managing DOE's MC&A policy.

## **GIANCARLO DELFINI**

Giancarlo Luciano Delfini received a Bachelors of Science in Nuclear Engineering from Rensselaer Polytechnic Institute. He is currently employed by Entergy as a Reactor Engineer at Indian Point Energy Center (IPEC). He has worked in the Nuclear Industry for 18 years, and has been at IPEC for 15 years. One of his duties is control of Special Nuclear Materials. He is currently a member of the New York Metropolitan Section of the American Nuclear Society.

## **PETER DESSAULES**

Peter Dessaulles, the Nuclear Materials Management and Safeguards System (NMMSS) and the Local Area Nuclear Materials Accountability Software (LANMAS) Program Manager in the DOE Office of Health, Safety and Security, is responsible for oversight of DOE's materials accounting systems and is the focal point for information on the Department's nuclear materials. His extensive background in nuclear materials includes directing scrap recovery operations at an HEU facility, responsibility for the successful restart of the Hanford PUREX and UO<sub>3</sub> plants and other responsibilities at Hanford reactor sites. Mr. Dessaulles authored two very important DOE reports on materials accountability: *Plutonium: The First 50 Years, United States Plutonium Production, Acquisition, and Utilization from 1944 through 1994*, February 1999, and *Highly Enriched Uranium: Striking a Balance, United States Production, Acquisition, and Utilization from 1944 through 1996*, September 1999.

## **TONY ESCOBEDO**

Anthony Escobedo has been the Facility Security Officer since November 2004. His previous position within NMMSS was as the Systems Administrator which included responsibilities as the Computer Systems Security Officer. He's a 1998 graduate from Georgia State University.

## **DAN FARMER**

Dan is the Principal Technical Advisor of Accountability Systems at Washington Savannah River Company. In this capacity Dan is responsible for several different programs such as the development of LANMAS, NMMSS Upgrade, Integrated Surveillance Program for 3013's and SRSMAS. Dan has spent his professional career in software engineering related to Safeguards and Security. Dan earned his Bachelors in Electrical Engineering from Manhattan College and his Masters in Electrical Engineering from the Georgia Institute of Technology.

## **DAWN GILLAS**

Dawn Gillas obtained a B.S. in Engineering with a major in nuclear engineering and a minor in materials engineering from the University of Maryland in 1980. She has held a variety of engineering positions since then. She began her engineering career with the Nuclear Regulatory Commission in both the research and reactor regulations areas. She then worked for the contractor at the Idaho National Lab (while it was called INEL) related to reactor safety systems research (Loss of Fluid Test Facility). She then moved to the Nevada Test Site (NTS) where she was the engineer responsible for the low level waste disposal facilities and the transuranic waste stored at NTS. She then began her career with the Department of Energy where she has spent the last 25 years. During her DOE time, she has held positions at Albuquerque (both in the Waste Isolation Pilot Project and in nuclear materials availability for weapons systems), the Pinellas Plant in many different positions, the Mound Plant as the Weapons Quality Branch Chief, and the Savannah River Site (SRS) where she has been for the last ten years, all related to nuclear materials stabilization and management. She is currently the Program Manager responsible for the final disposition from SRS of depleted, natural, and low enriched uranium and

heavy water as well as oversight of H-Canyon operations including being a member of the team managing the HEU Blend Down Program. Since arriving at SRS, Dawn has implemented disposition programs that have disposed of ~10,000 drums of Depleted Uranium Oxide (~28% of the inventory), the entire inventory (355 drums) of Low Enriched Uranium Oxide, the entire inventory of Depleted Uranyl Nitrate solutions which was a mixed waste stream (~180,000 gallons), and small portions of the heavy water inventory. She has also implemented a program to recover and disposition natural uranium (NU) from universities. This NU has been on loan from the Federal Government for decades and is the topic of her presentation today.

## **MITCH HEMBREE**

Mr. Hembree has been a Senior Software Engineer for the NMMSS since 1998. He is currently responsible for coordinating testing and implementation activities for the NMMSS Upgrade at NAC.

## **RAYMOND HOLMER**

Mr. Holmer is an Information Security Specialist (Leader) in the Department of Energy (DOE), Office of Information Management (HS-1.22)

## **BRIAN HORN**

Since January 1997, Mr. Horn has been the Nuclear Regulatory Commissions (NRC) Technical Project Manager for the NRC's contract, with DOE, for NMMSS. His current responsibilities include assuring NRC's objectives are clearly presented through regulations and guidance documents for NMMSS reporting and that NMMSS satisfies NRC's needs. Mr. Horn has served 26 years with the NRC in various capacities including spent fuel route approvals, export license reviews, implementation of International Atomic Energy Agency (IAEA) safeguards at NRC licensed facilities. Mr. Horn is the NRC's expert in the development of the NMMSS Obligation Tracking function that became effective October 1, 2003.

## **ROSE MARTYN**

Ms. Martyn has worked in the material control & accounting role for more than 20 years at two NRC licensed facilities. She has been the Material Control and Accounting Manager at Global Nuclear Fuel in Wilmington, North Carolina for the past eleven years. She is a Senior Member of the Institute of Nuclear Materials Management where she serves on the ANSI N15 Standards Ballot Committee. Her primary focus with the NMMSS since 1997 has been in the area of revising tracking of foreign obligations at fuel fabrication sites. She has a Bachelors Degree in Mathematics and a Masters in Business Administration.

## **KAREN MCCULLOCH**

Karen McCulloch began her 25 years in the nuclear industry at K-25 under the management of Union Carbide. She held positions in long- and short-range forecasting for supply and demand for enrichment and software development that included systems to monitor and track nuclear materials. After more than 16 years at K-25, she was recruited by NAC International. She served on the software development team for Nuclear Materials Management and Safeguards System (NMMSS) as a Senior Software Engineer. After 5 years with NAC, Karen had the

opportunity to work at BWXT Y-12. Her responsibilities at the Y-12 National Security Complex began with responsibilities within the Materials Management organization for submission of the annual Nuclear Material Inventory Assessment (NMIA), Enriched Uranium Receipt/Shipment 10-Year Forecast, Y-12 National Security Complex Nuclear Materials 5-Year Forecast. Currently, she works with the Nuclear Materials Control and Accountability (NMC&A) organization. Her responsibilities include Nuclear Materials Rep for Y-12, special assignments that include the Weapons Information System (WIS), Work for Others and Global Threat Reduction Initiative and works with the External Accounting Group for shipments and receipts.

## **STEPHANIE MIRABELLO**

Stephanie Mirabello has worked for the Department of Energy (DOE) for 14 years where she has served in various roles, including Special Assistant to the Director for Nuclear Nonproliferation, Delegate to the Biological Weapons Convention, and Chemical and Biological Manager for the Initiatives for Proliferation Prevention Program. Ms. Mirabello also served a one-year detail to the Henry L. Stimson Center, a non-governmental organization devoted to enhancing international peace and security. In her current position, Ms. Mirabello manages the implementation of Agreements for Cooperation on Peaceful Uses of Nuclear Energy. She also manages DOE's policy and technical support to both the Biological Weapons Convention and the Australia Group.

## **BRUCE W. MORAN**

Mr. Moran has served as Senior International Safeguards Technical Analyst of the U.S. Nuclear Regulatory Commission (NRC) since 1996. He is Chair of the interagency Subgroup on International Atomic Energy Agency (IAEA) Safeguards in the United States (SISUS) with responsibility for coordinating and facilitating IAEA safeguards at U.S. facilities. He represents NRC on interagency committees, U.S. delegations to policy and technical meetings, and international experts and working groups related to safeguards and non-proliferation issues. He performs technical and policy analyses on international safeguards issues related to implementing IAEA safeguards inspections and the Additional Protocol, strengthening the IAEA safeguards system, developing new safeguards concepts, developing safeguards approaches for new facilities, and evaluating and implementing new agreements. Prior to joining NRC, Mr. Moran was a Safeguards Program Manager and Technical Analyst for Lockheed Martin Energy Systems, Oak Ridge, Tennessee, from 1984 through 1996 and was a Project Manager and Chemist for the Department of Energy's New Brunswick Laboratory from 1976-1984.

## **MELINA POWERS (GAIL)**

Melinda Gail Powers work for AREVA NP, Inc. - Lynchburg Va. (formally Framatome ANP) for 17 years. She has been in her current position for 15 years as a Nuclear Materials Coordinator II

## **FRITZ STRYDOM**

Fritz directs NAC's government consulting on back-end and nonproliferation topics including spent fuel management policies and reprocessing activities. He manages the Fuel-Trac® database that tracks nuclear fuel cycle facilities and global nuclear

material inventories. Fritz also has expertise in information management, database design, and GIS web applications. He has a B.S. degree in Nuclear Engineering from Rensselaer Polytechnic Institute and a M.S. in Health Physics from Georgia Institute of Technology.

## **DORI VOTOLATO**

Dori Votolato is an MC&A Physical Scientist with the U.S. Nuclear Regulatory Commission, with responsibility for oversight of MC&A inspections at power reactors and wet storage sites. She has a degree in Materials Engineering from the University of Maryland.

## **MARTHA WILLIAMS**

Martha Williams is a Senior MC&A Physical Scientist with the U.S. Nuclear Regulatory Commission, with responsibility for oversight of MC&A inspections at power reactors and wet storage sites. Before joining the NRC, she was Supervisor of the SNM Statistics program at Nuclear Fuel Services. From 1992-2000 she was Statistician in the International Atomic Energy Agency's Division of Safeguards Concepts and Planning. She has a B.A. in mathematics and physics and an M.S. in mathematics.