NARSTO Quality Planning and Data Management Handbooks

Executive Summary

This brief Executive Summary explains to Program Managers and Principal Investigators the NARSTO requirements, resources, and guidance documents for quality planning and data management.

NARSTO is a non-binding, tri-national public/private alliance, open to science agencies, regulatory agencies, regulated industries, academic institutions, environmentalists, and public interests groups in Canada, Mexico and the United States. It fosters policy-relevant scientific research and assessment of tropospheric pollution behavior. NARSTO technical programs provide credible scientific data and assessment tools for use by policy makers, scientists, and air quality managers in making policy decisions and designing cost-effective control options. In part, because NARSTO data products are intended to be shared, programs need to assure their data are of high quality and to provide data and supporting information (metadata) in a format suitable for permanent archiving. NARSTO offers three documents to guide and assist programs in meeting these NARSTO requirements. The documents are purposely short in comparison with many other similar documents. Rather than requiring development of substantial new quality documentation, they encourage making use where possible of the institutions’ existing quality assurance programs.

The first of the three documents, the NARSTO Quality Systems Management Plan (QSMP), is the umbrella under which all NARSTO quality-related activities are to be planned and conducted. This document explains the NARSTO quality and data management expectations. It defines a flexible QSMP framework, which calls for Program/Project Managers to create a Program Quality Management Plan (PQMP), establishing only those quality activities and expectations that are applicable to their specific program. Then, at the project level, each Principal Investigator (PI) is responsible for developing a Quality Integrated Work Plan (QIWP).

The second document is the NARSTO Quality Planning Handbook. It offers guidance for preparing project quality system planning documents and NARSTO research, modeling, and assessment reports. A template is provided for QIWP for monitoring and measurement research and development projects, and another is provided for model development projects.

The third document is the NARSTO Data Management Handbook. It defines validation levels for NARSTO data, and defines the standard format for providing data to the Permanent Data Archive (PDA) via the Quality Systems Science Center (QSSC). NARSTO data are intended to be archived in the standard format with supporting information to withstand the “20-year test” – findable 20 years from now by someone not familiar with them, and usable based only on the archived information.

The referenced documents are available on-line at http://cdiac.esd.ornl.gov/programs/NARSTO/ Check to be sure you have the most recent versions.

The NARSTO Quality Systems Science Center (QSSC) at the Oak Ridge National Laboratory stands ready to help NARSTO projects by consulting, reviewing quality system planning documents, and advising about data management issues. The QSSC Director, Les Hook, can be reached at 865-241-4846, or by e-mail to hookla@ornl.gov. The QSSC Data Management Coordinator, Sig Christensen, can be reached at 865-574-7394, or by e-mail to swc@ornl.gov and Meng Dawn Cheng, Chief Scientist, can be reached at 865-241-5918 or by e-mail at chengmd@ornl.gov.