

# National Human Exposure Assessment Survey (NHEXAS)

## *Region 5 Study*

## Quality Systems and Implementation Plan for Human Exposure Assessment

Research Triangle Institute  
Research Triangle Park, NC 27079  
Cooperative Agreement CR 821902

**Standard Operating Procedure**

**NHX/SOP-820-001**

**Title:** Certification of Standard Weights

**Source:** Research Triangle Institute

U.S. Environmental Protection Agency  
Office of Research and Development  
Human Exposure & Atmospheric Sciences Division  
Human Exposure Research Branch

**Notice:** The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), partially funded and collaborated in the research described here. This protocol is part of the Quality Systems Implementation Plan (QSIP) that was reviewed by the EPA and approved for use in this demonstration/scoping study. Mention of trade names or commercial products does not constitute endorsement or recommendation by EPA for use.

**TITLE:** STANDARD OPERATING PROCEDURE FOR CERTIFICATION OF  
STANDARD WEIGHTS

**SOURCE:** Research Triangle Institute  
Post Office Box 12194  
Analytical and Chemical Sciences  
Research Triangle Park, NC 27709-2194

**AUTHOR(s):**

Gwen McNeill Date: 6/14/95  
\_\_\_\_\_  
Date: \_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_

**APPROVED BY:**

Principal Investigator: E. Pellipani Date: 6/14/95

QA Officer: WJ Smith Date: 6/15/95

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CERTIFICATION OF STANDARD WEIGHTS

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## 1.0 GENERAL

This Standard Operating Procedure describes the guidelines used in having weights calibrated against standards traceable to the National Institute of Standards and Technology, NIST (formerly the National Bureau of Standards, NBS).

## 2.0 SCOPE OF PROCEDURE

Any laboratory certified by the U.S. Department of Commerce National Institute of Standards and Technology can calibrate the weights. The N.C. Department of Agriculture, Standards Division, (919-733-4311) is recommended by the ACS QA staff. The QA officer maintains a set of weights that are certified yearly. A yearly calibration is recommended for other standard weights.

## 3.0 PROCEDURE

Before weights are taken to the laboratory, obtain a purchase order. The weights can be hand delivered or shipped by RTI. Other information needed is the density of the weights and the type of tolerance test you want conducted.

Make an appointment to have the weights calibrated. It takes at least a week to have the calibration completed. You should receive the following documents:

1. Report of calibration.
2. A copy of Standards Laboratory Certification.
3. Statement of Traceability.

## 4.0 DOCUMENTATION

All certificates will be placed in a spiral notebook. The notebook will be maintained by the QA program staff.