

The Arizona Border Study

*An Extension of the
Arizona National Human Exposure Assessment Survey (NHEXAS) Study
Sponsored by the Environmental Health Workgroup of the Border XXI Program*

Quality Systems and Implementation Plan for Human Exposure Assessment

The University of Arizona
Tucson, Arizona 85721

Cooperative Agreement CR 824719

Standard Operating Procedure

SOP-UA-D-41.0

Title: Database Tree and Data Sources

Source: The University of Arizona

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

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Environmental Protection Agency
Contract Number: CR821560

NHEXAS Arizona Project

Title: ~~NHEXAS~~ DATABASE TREE AND DATA SOURCES

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APPROVALS

☒ Full SOP ☒ Working SOP #pages 52

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Database Tree and Data Sources

1.0 Purpose and Applicability

This SOP describes the database storage organization, as well as describes the sources of data for each database for the NHEXAS Arizona Project, the Border Study, and other Health and Environment projects.

2.0 Definitions

- 2.1 BORDER STUDY = An alias for "Total Human Exposure Arizona: A Comparison of the Border Communities and the State" conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.
- 2.2 Database Tree: Directory structure which is used to organize databases. Structure consists of a "root" with one or more "branches", or "sub-trees" stemming from it. In this structure, the root is viewed as a primary descriptor, and related topics are grouped in sub-trees, which in turn act as descriptors which are further subdivided.
- 2.3 Data Source: Origin of data; either source of collection of raw data, or of analysis of previously collected data
- 2.4 HEALTH AND ENVIRONMENT PROJECTS (or H&E) = An umbrella title for all projects funded to M.D. Lebowitz and/or M.K. O'Rourke (or their designees) which examine purported or real relationships among environmental factors and any aspect of human health.

3.0 References

UA-D-27.X Master Database Appendage

4.0 Discussion

4.1 Database Tree Structure

See Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects
Master File Area

4.2 Data Sources

Data obtained from the following sources:

1. NHEXAS Project, the Border Study, and other Health and Environment projects

2. Census
3. Battelle
4. CDC
5. EPA Cincinnati
6. FDA

5.0 Responsibilities

Data Manager: It is the responsibility of the data manager to ensure that each database is stored in its proper location.

6.0 Materials and Equipment

None

7.0 Procedure

- 7.1 Data is collected
- 7.2 Data is cleaned
- 7.3 Data is stored in correct location in tree structure, i.e. appended to appropriate master database (see UA-D-27.X: Master Database Appendage)
- 7.4 If data to be analyzed by outside lab, data transmitted to them. Upon receipt of new analyzed database, data is stored in correct location in tree structure, i.e. appended to appropriate master database (see UA-D-27.X: Master Database Appendage)

8.0 Records

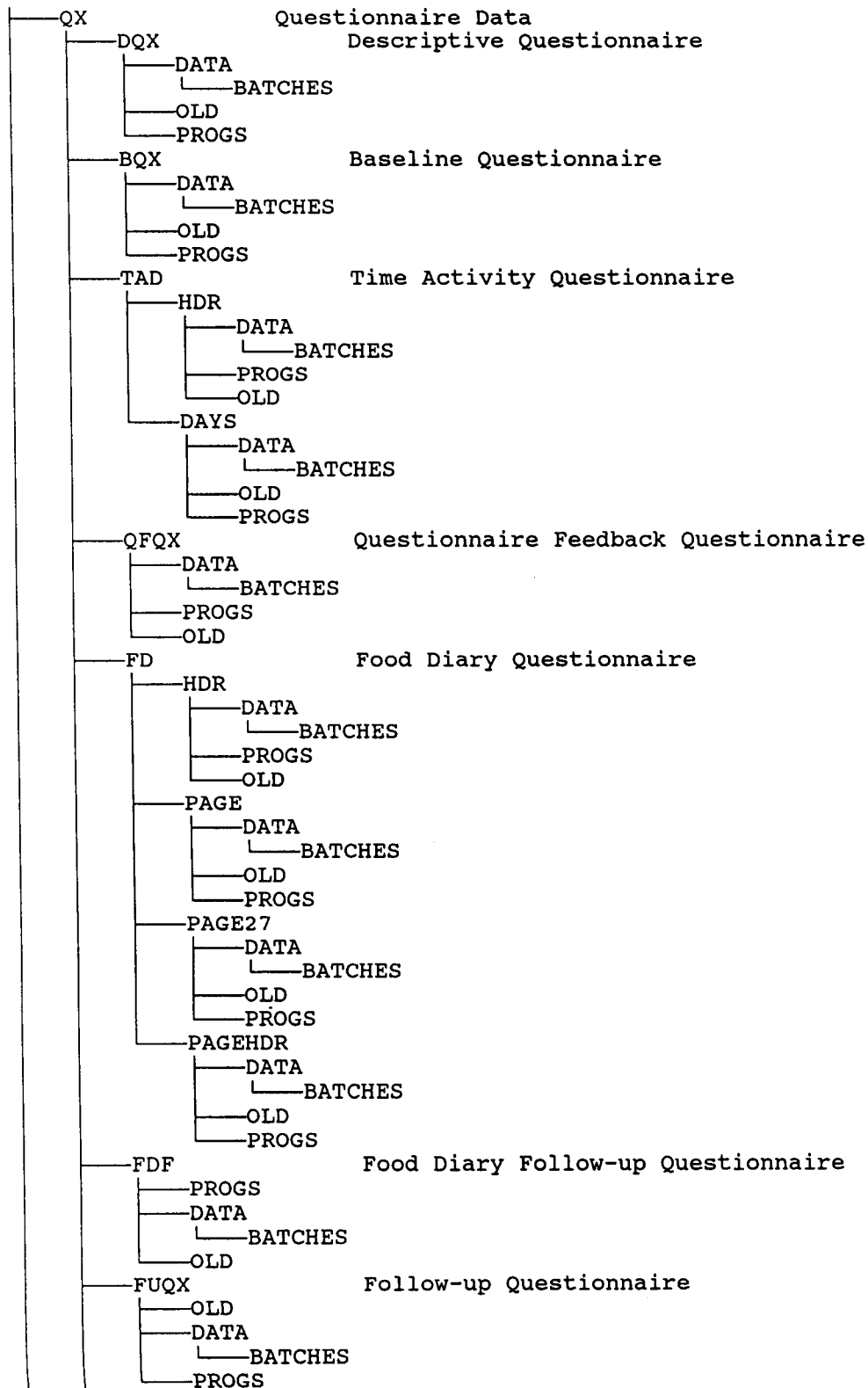
None

Inclusions:

Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects
Master File Area (4 pages)

**Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects
Master File Area**

Directory listing for NHEXAS Master File Area



└─TQX Tech Questionnaire

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└─DETAIL
  └─DATA
    └─BATCHES
  └─OLD
  └─PROGS
└─TQX
  └─DATA
    └─BATCHES
  └─OLD
  └─PROGS

```

─FIELD Field Data

```

└─GPS                   HHID/GPS Record (No VID)
  └─DATA
└─PHOTO                 Photoionization Readings (No VID)
  └─DATA
└─SOILFCB               Soil (Foundation/Yard/Thin Film) (SOY SOF SOT)
  └─DATA
└─DUSTFL                Dust (Floors -- inc Weights) (FLD)
  └─DATA
└─SILL                  Sill (Wipes & Thin Film) (SWP SWM SWT)
  └─DATA
└─SENTOUT               Sentinel/Outdoor Air (AS1)
  └─DATA
└─PM10URG               PM 10 & URG/Black Box (PMM PMF PMP)
  └─DATA
└─PRSNLAIR              Personal Air Metals (PAM)
  └─DATA

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─LABAZ Lab Results -- Arizona

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└─PM10                  XRF PM10 (PMM)
  └─DATA
└─PA                    XRF Personal Air (PAM)
  └─DATA
└─SOILCOM               XRF Soil Yard (SOY YSM)
  └─DATA
└─SOILFOU               XRF Soil Foundation (SOF FSM)
  └─DATA
└─CURBBLOT              XRF Curb Blot (SOT)
  └─DATA
└─HOUSDUST              XRF Floor Dust (FLD)
  └─DATA
└─SILLBLOT              XRF Dust Sill Blot (SWT)
  └─DATA
└─FDWTVOL               Food Weight and Volume (FUD)
  └─DATA
└─FLTWTPRE              Filter Weight (Pre) (AS1 PMM PAM FLD)
  └─DATA
└─FLTWTPOS              Filter Weight (Post) (AS1 PMM PAM FLD)
  └─DATA
└─FLTWTCNC              Filter Weight (Consol & Calc) (AS1 PMM PAM FLD)
  └─DATA
└─SOILCHAR              Soil Characteristics (SOY SOF)
  └─DATA

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─LABBAT Batelle Lab Data

```

└─SOILPEST.GC           Soil Composite Pesticide (GC/ECD)
  └─DATA
└─DUSTPEST.GC           Dust Pesticide (GC/ECD)
  └─DATA
└─SOILPEST.ELI          Soil Composite Pesticide (Elisa)
  └─DATA

```

DUSTPEST.ELI	Dust Pesticide (Elisa)
└─DATA	
SOILCMPM.AA	Soil Composite Metals (AA)
└─DATA	
PM10IO.ICP	PM 10 Indoor/Outdoor (ICP)
└─DATA	
PM10IO.AA	PM 10 Indoor/Outdoor (AA)
└─DATA	
PM10PM.ICP	PM 10 Personal Metals (ICP)
└─DATA	
PM10PM.AA	PM 10 Personal Metals (AA)
└─DATA	
FOODPST	Food Data (3 pest)
└─DATA	
SOILCMPM.ICP	Soil Composite Metals (ICP)
└─DATA	
SOILFDNM.ICP	Soil Foundation Metals (ICP)
└─DATA	
SOILFDNM.AA	Soil Foundation Metals (AA)
└─DATA	
DUSTFLRM.ICP	Dust (Floor) Metals (ICP)
└─DATA	
DUSTFLRM.AA	Dust (Floor) Metals (AA)
└─DATA	
DERMETAL.ICP	Dermal Metal (ICP)
└─DATA	
DERMETAL.AA	Dermal Metal (AA)
└─DATA	
SURFWPM.ICP	Surface Wipes Metals (ICP)
└─DATA	
SURFWPM.AA	Surface Wipes Metals (AA)
└─DATA	
URGPSTIO.GC	URG Pesticide (GC/MS by EI) -- Indoor/Outdoor
└─DATA	
URGPSTP.GC	URG Pesticide (GC/MS by EI) -- Personal
└─DATA	
URGPSTIO.ELI	URG Pesticide (Elisa) -- Indoor/Outdoor
└─DATA	
SOILCMPP.GC	Soil Composite (GC/MS by EI) -- Pesticides
└─DATA	
SOILFDNP.GC	Soil Foundation (GC/MS by EI) -- Pesticides
└─DATA	
DUSTPEST.MS	Dust (GC/MS by EI) -- Pesticides
└─DATA	
DERMWIPP.GC	Dermal Wipes (GC/MS by EI) -- Pesticides
└─DATA	
SURFWPP.GC	Surface Wipes (GC/MS by EI) -- Pesticides
└─DATA	
VOCCARBO.GC	VOC -- Carbo Traps (GC/MSD)
└─DATA	
FRMALDHD	Formaldehyde
└─DATA	
OVMBADGE.GC	OVM Badge (GC/EID)
└─DATA	
WATERMTL	Water Data (Metals)
└─DATA	
WATERPST	Water Data (3 Pest)
└─DATA	
WATERCAR	Water Data (Carbaryl)
└─DATA	

WATERVOC	Water Data (VOC)
└─DATA	
FOODMTL	Food Data (Metals)
└─DATA	
BEVRGMTL	Beverage Data (Metals)
└─DATA	
BEVRGPST	Beverage Data (3 Pest)
└─DATA	
BLOODMTL	Blood (Metals)
└─DATA	
BLOODVOC	Blood (VOC)
└─DATA	
URINEMTL	Urine (Metals)
└─DATA	
URINEPST	Urine (Pesticide)
└─DATA	