APPENDIX C
DATA QUALITY AUDIT CHECKLIST
(EXAMPLE 1)

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DATA QUALITY AUDIT CHECKLIST (EXAMPLE 1)

The Chicago Inventory QA Checklist was used to assess the quality of the planning documents, adequacy of the data gathering procedures, and thoroughness of the technical review process during the development of a toxics inventory from an existing inventory. This was a Level 4 inventory (see Chapter 2, Section 1 for explanation of inventory categories), and the objective was to develop a preliminary estimate of HAP emissions based on existing inventories. Determining the validity of the existing data would be critical to the accuracy and completeness of this inventory.

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CHICAGO INVENTORY QA CHECKLIST

1.0 GENERAL PROCEDURES

1.1 Written Instructions, Plans

1.1.1 Were project instructions prepared and distributed to all team members? _____

Date: _____

1.1.2 Was an Inventory Preparation Plan prepared? _____

Reviewed, and if necessary, revised? _____

Distributed to team members? _____

1.2 Data Gathering

1.2.1 Was project file set up? _____

Date: _____

1.2.2 Are separate files maintained for each of the following source categories?

Storage, Transportation, and Marketing of VOL	_____	Consumer/Commercial Solvent Use	_____
VOL Transfer	_____	Agricultural Pesticide Application	_____
Barge and Tanker Cleaning	_____	Architectural Surface Coatings	_____
Service Station Unloading	_____	Automobile Refinishing	_____
Vehicle Refueling	_____	Traffic/Maintenance Coatings	_____
Gasoline Tanker Truck Leaks	_____	Landfills	_____
Underground Tank Losses	_____	TSDFs	_____
Degreasing	_____	POTWs	_____
Dry Cleaning	_____	Incinerators	_____
Graphic Arts	_____	Structure Fires	_____
Asphalt Paving	_____		

1.2.3 Are sufficient document/access controls in place? _____
If so, what are they? _____

_____

1.2.4 Are copies of completed calculation sheets placed in the appropriate files? _____

_____

2.0 TECHNICAL REVIEW

2.1 General

2.1.1 Were "Source Category Review" forms completed (QC) for all categories? _____

If not, list those not completed. _____

_____

_____

2.1.2 Are project files complete? _____

_____

_____

2.2 Individual Source Category Reviews

2.2.1 Storage, Transportation, and Marketing of Volatile Organic Liquids (VOL)

- Were emissions for the following categories completed?

_____ Barge and Tanker Cleaning

_____ Service Station Loading (Stage I)

_____ Vehicle Refueling

_____ Gasoline Tank Truck Leaks

_____ UST Breathing

- Were VOC emission factors adjusted for temperature and RVP before applying speciation profiles? _____

_____

- Does QC review for this category include assessment of reasonableness of estimates? _____

_____

2.2.2 Other Solvent Use

- Are assumptions used for HAP cleaning machine solvent use clearly stated and referenced? _____

_____

- Were graphic arts estimates adjusted by subtracting emissions from point sources <100 tons? _____

_____

- Were asphalt paving emissions estimated using IL DOT data and assuming 95% diluent evaporation from rapid cure cutbacks, 70% from medium cure cutbacks? _____

_____

- Was the consumer products emission estimate adjusted to include nonreactive VOC HAPs (like methylene chloride)?_____

_____

Was it done correctly? _____

- Did agricultural emissions of captan, carbaryl, lindane, and trifluoralin correctly address seasonality (i.e., confined to growing season) and application rate (i.e., accounted for frequency and amount applied)? _____

_____

- Verify the source of VOC emissions and speciation profiles for each of the following:

	Proposed VOC Emission Source	✓ if used, or show source	Proposed Speciation Profile	✓ if used, or show source
Architectural Surface Coatings	IL SIP		CARB (1991)	
Automobile Refinishing	IL SIP		CARB (1991)	
Traffic Markings	IL SIP		CARB (1992)	
Bridge Painting	IL SIP		CARB (1992)	

Explain any deviations from plan:

_____

_____

_____

- Was information from the Methane Recovery Yearbook (1991) used to adjust uncontrolled landfill VOC emissions? _____ If not, how was the adjustment made? _____

_____

- For TSDF emissions, what was the source of growth factor used to adjust emissions? _____

  Is it reasonable? _____

  Was sufficient justification for its use given? _____

- The IPP methodology for POTW emissions estimation proposed use of emission factors from California. Was any information obtained and documented that shows the use of these factors is reasonable for Chicago? _____

_____

- Were the assumptions, methods, and data sources used to develop structure fires emission factors thoroughly described and referenced? _____

  Are they reasonable? _____

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