Attachment C

"Region I CSF Completeness Evidence Audit Program", July 1991

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON MA 02173

MEMORANDUM

DATE: August 7, 1991

SUBJ: Region I CSF Completeness Evidence Audit Program

FROM: Moira M. Lataille
Deborah A. Szaro
Region I CLP TPOs

TO: Lead Chemists
Region I Contractors

THRU: Heidi Horahan
ARCs DPO

The attached Region I CSF Completeness Evidence Audit Program/July 3, 1991 replaces the currently used procedure described by CEAT-Techlaw in EPA Regional CSF Completeness Evidence Audit Guidelines. Begin using the Region I CSF CEAP on the next CSF you receive. Note that the forms supplied by CEAT-Techlaw during the Complete SDG File Training seminar held on February 20, 1991 will no longer be utilized. These are replaced by the **EPA Region I Complete SDG File Receipt/Transfer Form** and the **DC-2 Forms.**

To assist you in implementing this new CSF Program, we have set up a CSF Hotline number, (617) 229-2050, at the Region I Weston/ESAT office. Primary contact is Pam Rose and secondary contact is Kate Schweitzer. All questions received by ESAT will be documented with telephone conversation logs. Questions requiring clarification will be forwarded by ESAT to the TPOs and/or NEIC. You will receive an answer to your question within 24 hours or be informed that the question is being researched by the TPO/NEIC and that clarification will be provided as soon as possible. In an effort to save the Lead Chemists' time and reduce the number of repeated questions, a copy of questions and answers received from all Lead Chemists will be provided to each Lead Chemist in a monthly report. Please take the time to read the monthly reports.

Please note the following:

o All CSF data must have the Region I CSF Completeness Evidence Audit performed even if those data are not to be validated at this time.

o Only Lead Chemists may call the CSF Hotline; please identify yourself when you call.

o The Hotline is to be used to resolve technical/legal questions and specific audit

questions after you have read and become familiar with the Region I CSF CEAP. The ESAT contacts will not walk you through an audit.

If you are repeatedly unable to reach either the primary or secondary ESAT contact at the CSF Hotline, call either Deborah Szaro or Moira Lataille at (617) 860-4312.

cc: Carol Wood, QAO
Scott Clifford, ESAT DPO

REGION I CSF COMPLETENESS
EVIDENCE AUDIT PROGRAM

July 3, 1991

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1.0 INTRODUCTION

Evidence audits are conducted to ensure that laboratory documentation and data will be admissible in potential litigation. Prior to the implementation of the OLM01.0 Organic and ILM01.0 Inorganic Statements of Work, evidence audits for all Routine Analytical Services case files were performed by CEAT-Techlaw. However, under the ILM01.0 and OLM01.0 Inorganic and Organic Statements of Work, laboratories must now develop Complete Sample Delivery Group Files (CSFs). The CSFs consist of the original Sample Data Package and all related documentation. Laboratories operating under the new contracts will submit the CSFs directly to the regions, who will now be responsible for conducting the evidence audits. This process allows the EPA to quickly monitor the quality of the laboratory documentation.

To easily integrate the evidence audit into the validation procedure, the Region I Quality Assurance Office has developed the Region I CSF Completeness Evidence Audit Program. The program addresses two fundamental areas of responsibility necessary to ensure the admissibility of laboratory-generated documentation and analytical data as evidence. First, the integrity of the CSF must be maintained during all transfers. Second, the completeness of the CSF documentation must be assured through the evidence audit process.

The Region I CSF Completeness Evidence Audit Program replaces the procedure described by CEAT-Techlaw in EPA Regional CSF Completeness Evidence Audit Guidelines. None of the forms supplied by CEAT-Techlaw at the Complete SDG File Training seminar held on February 20, 1991 will be necessary to complete the Region I CSF Completeness Evidence Audit or to perform the CSF tracking procedures.

A flowchart outlining the Region I CSF Completeness Evidence Audit Program is included in Attachment I.

2.0 COMPONENTS OF THE CSF

The CSF consists of the original Sample Data Package and all related documentation. The laboratory is required to assemble the CSF and submit it directly to the Region (as specified in Exhibit B, Section II, B-22 of OLM01.0 and Exhibit B, Section II,B-13 of ILM01.0). The laboratory submits a Complete SDG File (CSF) Inventory Sheet, **DC-2 Form**, (inorganic pages 1-2, organic pages 1-4), which indexes all

documents submitted in the CSF. In addition to the original Sample Data Package, the CSF consists of the following original documents:

- A completed, signed, and dated Complete SDG File (CSF) Inventory Sheet, **DC-2 Form**;
- All original shipping documents including the EPA chain of custody records, airbills, EPA traffic reports, and sample tags sealed in plastic bags;
- All original receiving documents, including the sample log-in sheet (DC-1 Form), and other receiving forms or copies of receiving logbooks;
- All original laboratory records, not already submitted in the Sample Data Package, concerning internal laboratory sample transfer/tracking, preparation and analysis;
- All other original SDG-specific documents in the laboratory's possession including telephone contact logs, copies of personal logbook pages, and hand written case-specific notes.

3.0 THE CSF TRACKING PROCEDURE

3.1 Tracking Overview

To comply with evidence requirements, signed and dated custody seals must be affixed to the CSF whenever it is transferred. The CSF is considered transferred whenever it changes location upon shipment or hand-delivery. This occurs when the CSF is shipped from the laboratory to the Regional Sample Control Center (RSCC), from the RSCC to the Prime Contractor, from the Prime Contractor to the Data Validation Subcontractor, from the Data Validation Subcontractor to the Prime Contractor, whenever the CSF is requested for oversight by the Region I EPA Quality Assurance Office, or any other time the CSF must change custody.

Data Validation Subcontractors will not be responsible for conducting evidence audits; however, they must be informed of and adhere to the Region I CSF Completeness Evidence Audit Program, CSF Tracking Procedures. The Prime Contractors are responsible for ensuring that all Data Validation Subcontractors are properly trained in the procedures outlined in the tracking procedure.

The CSF Tracking Procedure is initiated when the CSF is received at the RSCC by the Sample Control Coordinator (SCC). The SCC will initiate the **CSF Receipt/Transfer Form**, which will remain with the CSF through every transfer. The purpose of the **CSF Receipt/Transfer Form** is to document the presence and condition of custody seals, which must be affixed to the data package in compliance with evidence audit requirements during all transfers. Examples of blank and completed **CSF Receipt/Transfer Form**s are included in Attachment IIA and IIB.

3.2 CSF Tracking Procedure

The CSF is received at the RSCC from the laboratory under custody seal. The SCC initiates a **CSF Receipt/Transfer Form**, which will remain with the CSF with every transfer. For each transfer, the following protocol for CSF tracking and completion of the **CSF Receipt/Transfer Form** must be followed:

1. Inspect the unopened CSF shipment. Determine if custody seals are present or absent. If present, determine if custody seals are intact or broken.

2. Open the CSF shipment and complete the **CSF Receipt/Transfer Form**. The case number, SDG number, and data package number will be completed by the SCC.

   - **Receipt Date** - Enter the date that the contractor/validator received the CSF;
   - **Received By** - Enter the name and initials of the contractor/validator who has opened the CSF, and list the affiliation, i.e. RSCC, Weston/ESAT, NUS/ARCS, Dynamac, EPA, etc.;
   - **CSF Activity** - List the CSF activity. For example, the SCC will list the activity as "CSF Receipt". The contractor/validator will list the activity as "validation", "resubmittals", "data validation oversight" or "CSF storage";
   - **Custody Seals** - Indicate whether the custody seals were present and intact;

- **Released** - If the CSF must be transferred to a new location, identify which organization the package will be released to and the date of release, i.e. shipment date or hand-delivery date.

3.3 Laboratory Resubmittal Tracking

All laboratory resubmittals requested during the evidence audit and/or data validation must be shipped under custody seal. The Prime Contractor Lead Chemist is the only one authorized to request and receive resubmittals. The Data Validation Subcontractor cannot request or receive resubmittals. The laboratory may send resubmittals to either the RSCC or the Prime Contractor.

If the laboratory sends resubmittals to the RSCC, a new **CSF Receipt/Transfer Form** will be initiated by the SCC. The resubmittals and new **CSF Receipt/Transfer Form** will be shipped to the Prime Contractor Lead Chemist as stated in section 3.2. The Prime Contractor will complete the appropriate section of the new **CSF Receipt/Transfer Form** and will indicate the "CSF Activity" as "Resubmittals". The Prime Contractor will then forward the resubmittals to the Data Validation Subcontractor under custody seal.

However, if the laboratory sends resubmittals directly to the Prime Contractor, a new **CSF Receipt/Transfer Form** will be initiated by the Prime Contractor. The Prime Contractor will complete the appropriate section of the new **CSF Receipt/Transfer Form** and will indicate the "CSF Activity" as "Resubmittals". The Prime Contractor will then forward the resubmittals to the Data Validation Subcontractor under custody seal.

If the Prime Contractor receives resubmittals from both the laboratory and the RSCC, the Prime Contractor must verify that the resubmittals received from the RSCC are identical to those received directly from the laboratory. The Prime Contractor may then discard and recycle the set of resubmittals received from the RSCC. If the two sets of resubmittals are not identical, the Prime Contractor must contact the laboratory to determine which set of resubmittals is correct.

Upon receipt of the resubmittals, the Data Validation Subcontractor will complete the appropriate section of the new **CSF Receipt/Transfer Form**. Under "Released", the Data

Validation Subcontractor should indicate "Included with CSF". All **CSF Receipt/Transfer Forms** and laboratory resubmittals must be kept with the CSF.

3.4 Data Validation Oversight

If the QA Office requests a CSF for data validation oversight, the Prime Contractor must complete the appropriate sections of the **CSF Receipt/Transfer Form** and ship the CSF under custody seal to the EPA. When the data validation oversight is complete, the EPA will complete the appropriate sections of the **CSF Receipt/Transfer Form** and ship the CSF under custody seal to the Prime Contractor.

4.0 THE CSF AUDIT PERFORMANCE PROCEDURE

4.1 CSF Audit Overview

The purpose of the evidence audit is to determine completeness of the CSF as shipped from the laboratory. **The auditor must verify that all documents are present as stated by the laboratory on the DC-2 Form and that <u>all</u> pages in the CSF are accounted for on the DC-2 Form.** All evidentiary documents must be clearly identified with the case number and SDG number, and must be signed and dated where required. The accuracy of the Sample Data Package submitted as part of the CSF is determined during the normal data validation procedure and is not part of the evidentiary audit.

The CSF Audit Performance Procedure outlines the protocol that Prime Contractors must follow to complete the evidence audit. The evidence audit must be completed by Prime Contractors only. Data Validation Subcontractors performing data validation will not be responsible for conducting the evidence audit, although they will be required to adhere to all CSF tracking procedures. The Prime Contractor will perform the evidence audit by reviewing the **DC-2 Form**, which is submitted by the laboratory as part of the CSF. Examples of blank organic and inorganic **DC-2 Form**s are included in Attachment IIIA. Examples of laboratory-completed organic and inorganic **DC-2 Form**s are included in Attachment IIIB. Examples of laboratory-completed and Prime Contractor-completed organic and inorganic **DC-2 Form**s are included in Attachment IIIC.

4.2 Inorganic Completeness Evidence Audit

The following describes the Region I guidelines for

conducting completeness evidence audits of inorganic CSFs. The CSF will be shipped to the Prime Contractor Lead Chemist by the RSCC. A **CSF Receipt/ Transfer Form**, initiated by the SCC, will be shipped with the CSF.

The Prime Contractor Auditor/Validator will perform the evidence audit using a photocopy of each completed and signed **DC-2 Form** which is submitted by the laboratory as part of the CSF or which is submitted with resubmitted documents. The Prime Contractor Auditor/Validator must not write on the original **DC-2 Form**, which will remain with the CSF, unmodified.

When resubmittals are requested, the Prime Contractor Auditor/Validator should request that the laboratory number the resubmitted pages so that they may be appended to the end of the CSF. Pages should not be inserted into the CSF, and original pages in the CSF should not be replaced by resubmitted pages.

When the laboratory resubmittals are received, photocopy the new **DC-2 Form** and perform the evidence audit for the resubmitted sections only. The Prime Contractor Auditor/Validator must not write on the original **DC-2 Form**, which will remain with the CSF, unmodified.

The Prime Contractor Auditor/Validator must generate telephone communication logs whenever the laboratory is contacted for resubmittals or clarification.

Complete the evidence audit according to the following protocol:

1. Inspect the package for custody seals and follow the protocol outlined in the CSF Tracking Procedure. After completing the appropriate sections of the **CSF Receipt/Transfer Form**, proceed with the evidence audit.

2. Locate the CSF Inventory Sheet, **DC-2 Form**, submitted by the laboratory. Make one photocopy of this **DC-2 Form** to perform the evidence audit. At the top of the first page, label the photocopy "Evidence Audit Photocopy". The original **DC-2 Form** submitted by the laboratory must remain with the CSF, unmodified.

   If the **DC-2 Form** is not included with the CSF, contact the laboratory for submittal and complete

a telephone communication log. Resubmittal of just the **DC-2 Form** is not required to be under custody seal. Proceed with the evidence audit after the **DC-2 Form** has been submitted by the laboratory and photocopied by the Prime Contractor Auditor/Validator.

3. Review the documents in the CSF. Compare the document page numbers to the page numbers listed on the **DC-2 Form**. Ensure that all documents are accounted for and legible. If extra pages were included with the CSF but were not listed on the **DC-2 Form**, or if page numbers listed on the **DC-2 Form** were incorrect, request that a corrected **DC-2 Form** be submitted. Complete a telephone communication log.

4. For items 1-27 on the **DC-2 Form,** if the information is accurate and legible, place a check in the EPA column for those items.

   If any pages are missing, inaccurate, or illegible, do not put a check in the EPA column. Request resubmittal of the pages from the laboratory and complete a telephone communication log.

5. For item 28, check whether the traffic report is present. If no, leave EPA column blank, request resubmittal of the pages from the laboratory and complete a telephone communication log.

   Check whether the traffic report was signed and dated. If yes, place a check in the EPA column. If no, leave EPA column blank and indicate the non-compliance directly next to item 28 on the **DC-2 Form**. Do not request a laboratory resubmittal of the traffic report if it was present but not signed or dated.

6. Proceed to item 29. Check whether airbills, chain of custody records, sample tags, sample log-in sheets (DC-1 Form and/or lab form), and the SDG cover sheet are present. If no, leave EPA column blank, request resubmittals from the laboratory, and complete a telephone communication log.

   Check whether the airbills, chain of custody records and SDG cover sheets were signed and

dated. If yes, place a check in the EPA column. If no, leave EPA column blank and indicate the non-compliance directly next to item 29 on the **DC-2 Form**. Do not request laboratory resubmittals of these documents if they were present but not signed and dated.

Check whether the sample log-in sheet/ DC-1 Form are complete and accurate. If yes, place a check in the EPA column. If no, leave EPA column blank and indicate the non-compliance directly next to item 29 on the **DC-2 Form**. Do not request laboratory resubmittals of these documents if they were present but not complete or accurate.

7. Items 30, 31, and 32 concern laboratory documentation including miscellaneous shipping/receiving records, telephone logs, internal laboratory sample transfer/ tracking sheets, and sample preparation and analysis records. Confirm that EPA sample numbers, SDG numbers, and Case numbers are correctly referenced to this particular Case and SDG on all documents submitted by the laboratory. If yes, place a check in the EPA columns. If no, leave EPA columns blank, request that the laboratory resubmit the correct documents and complete a telephone communication log.

8. If there are documents listed in item 33, confirm that EPA sample numbers, SDG numbers, and Case numbers are correctly referenced to this particular Case and SDG on all documents submitted by the laboratory. If yes, place a check in the EPA columns. If no, leave EPA columns blank, request that the laboratory resubmit the correct documents, and complete a telephone communication log.

9. The evidence auditor should sign the "Audited by" section at the bottom of each photocopied **DC-2 Form**. The evidence auditor's printed name, title, and date should also be completed. In addition, the evidence auditor should indicate their company name/contract below the "Printed Name/Title" line.

10. Since resubmittals may be requested during validation, hold all **DC-2 Form**s until the data validation is complete before proceeding with the

distribution of the forms.

11. When requested resubmittals and new **DC-2 Form** are received from the laboratory, make a photocopy of the new **DC-2 Form**. At the top of the first page, label the photocopy "Evidence Audit Photocopy". The original **DC-2 Form** submitted by the laboratory must remain with the CSF, unmodified. Perform the evidence audit for the resubmitted sections on the photocopy of the new **DC-2 Form**. The column on the photocopied **DC-2 Form** for the original data package, which was left blank during the evidence audit pending resubmittals, remains blank.

4.3 Organic Completeness Evidence Audit

The following describes the Region I guidelines for conducting completeness evidence audits of organic CSFs. The CSF will be shipped to the Prime Contractor Lead Chemist by the RSCC. A **CSF Receipt/ Transfer Form**, initiated by the SCC, will be shipped with the CSF.

The Prime Contractor Auditor/Validator will perform the evidence audit using a photocopy of each completed and signed **DC-2 Form** which is submitted by the laboratory as part of the CSF or which is submitted with resubmitted documents. The Prime Contractor Auditor/Validator must not write on the original **DC-2 Form** which will remain unmodified with the CSF.

When resubmittals are requested, the Prime Contractor Auditor/Validator should request the laboratory to number the resubmitted pages so that they may be appended to the end of the CSF. Pages should not be inserted into the CSF and original pages in the CSF should not be replaced by resubmitted pages.

When the laboratory resubmittals are received, photocopy the new **DC-2 Form** and perform the evidence audit for the resubmitted sections only. The Prime Contractor Auditor/Validator must not write on the original **DC-2 Form** which will remain with the CSF, unmodified.

The Prime Contractor Auditor/Validator must generate telephone communication logs whenever the laboratory is contacted for resubmittals or clarification.

Complete the evidence audit according to the following protocol:

1. Inspect the package for custody seals and follow the protocol outlined in the CSF Tracking Procedure. After completing the appropriate sections of the **CSF Receipt/Transfer Form**, proceed with the evidence audit.

2. Locate the CSF Inventory Sheet, **DC-2 Form**, submitted by the laboratory. Make one photocopy of this **DC-2 Form** to perform the evidence audit. At the top of the first page, label the photocopy "Evidence Audit Photocopy". The original **DC-2 Form** submitted by the laboratory must remain with the CSF, unmodified.

   If the **DC-2 Form** is not included with the CSF, contact the laboratory for submittal and complete a telephone communication log. Resubmittal of just the **DC-2 Form** is not required to be under custody seal. Proceed with the evidence audit after the **DC-2 Form** has been submitted by the laboratory and photocopied by the Prime Contractor Auditor/Validator.

3. Review the documents in the CSF. Compare the document numbers to the page numbers listed on the **DC-2 Form**. Ensure that all documents are accounted for and legible.
   If extra pages were included with the CSF but were not listed on the **DC-2 Form**, or if page numbers listed on the **DC-2 Form** were incorrect, request that a corrected **DC-2 Form** be submitted. Complete a telephone communication log.

4. For items 2, 4, 5, and 6 on the **DC-2 Form**, if the information is accurate and legible, place a check in the EPA column for those items.

   If any pages are missing, inaccurate, or illegible, do not check off the EPA column. Request resubmittals from the laboratory and complete a telephone communication log.

5. For item 3, check whether the traffic report is present. If no, leave EPA column blank, request resubmittal of the form, and complete a telephone communication log.

Check whether the traffic report was signed and dated. If yes, place a check in the EPA column. If no, leave the EPA column blank and indicate the non-compliance directly next to item 3 on the **DC-2 Form**. Do not request a laboratory resubmittal of the traffic report if it was present but not signed or dated.

6. Item 7 concerns laboratory documentation including internal laboratory sample transfer/tracking sheets, sample preparation and analysis logbook pages, screening records, and all instrument output, including strip charts from screening activities. Confirm that EPA sample numbers, SDG numbers, and Case numbers are correctly referenced to this particular Case and SDG on all documents submitted by the laboratory. If yes, place a check in the EPA columns. If no, leave the EPA column blank, request that the laboratory resubmit the correct documents, and complete a telephone communication log.

7. Proceed to item 8. Check whether airbills, chain of custody records, sample tags, sample log-in sheets (DC-1 Form and/or lab form), the SDG cover sheet, and miscellaneous shipping/receiving records are present. If no, leave the EPA column blank, request resubmittals from the laboratory, and complete a telephone communication log.

   Check whether the airbills, chain of custody records and SDG cover sheets were signed and dated. If yes, place a check in the EPA column. If no, leave EPA column blank and indicate the non-compliance directly next to item 8 on the **DC-2 Form**. Do not request laboratory resubmittals of these documents if they were present but not signed and dated.

   Check whether the sample log-in sheet/DC-1 Form are complete and accurate. If yes, place a check in the EPA column. If no, leave EPA column blank and indicate the non-compliance directly next to item 8 on the **DC-2 Form**. Do not request laboratory resubmittals of these documents if they were present but not complete or accurate.

8. Item 9 lists all internal laboratory sample transfer records and tracking sheets. Confirm

that EPA sample numbers, SDG numbers, and Case numbers are correctly referenced by the laboratory. If yes, place a check in the EPA columns. If no, leave EPA columns blank, request resubmittals from the laboratory, and complete a telephone communication log.

9. If there are documents listed in item 10, confirm that EPA sample numbers, SDG numbers, and Case numbers are correctly referenced to this particular Case and SDG on all documents submitted by the laboratory. If yes, place a check in the EPA columns. If no, leave EPA columns blank, request resubmittals from the laboratory, and complete a telephone communication log.

10. The evidence auditor should sign the "Audited by" section at the bottom of each photocopied **DC-2 Form**. The evidence auditor's printed name, title, and date should also be completed. In addition, the evidence auditor should indicate their company name/contract below the "Printed Name/Title" line.

11. Since resubmittals may be requested during validation, hold all **DC-2 Forms** until the data validation is complete before proceeding with the distribution of the forms.

12. When requested resubmittals and new **DC-2 Form** are received from the laboratory, make a photocopy of the new **DC-2 Form**. At the top of the first page, label the photocopy "Evidence Audit Photocopy". The original **DC-2 Form** submitted by the laboratory must remain with the CSF, unmodified. Perform the evidence audit for the resubmitted sections on the photocopy of the new **DC-2 Form**. The column on the photocopied **DC-2 Form** for the original data package, which was left blank during the evidence audit pending resubmittals, remains blank.

5.0 POTENTIAL PROBLEMS WITH THE CSF AUDIT PROCESS

The following is a list of guidelines to aid the auditor in determining the appropriate action to take when a CSF or DC-2 deviates from the required format. Examples of situations which would and would not require contacting the laboratory for resubmittals are also included.

5.1 Guidelines for Contacting the Laboratory

The laboratory must be contacted for any problem that affects the completeness or accuracy of the CSF. For example:

- If the CSF contains pages identified with only a laboratory identifier, such as a LIMS project number, the laboratory must be contacted. All pages of the CSF must reference the CLP Case Number and SDG to maintain data completeness. Any pages with only a laboratory or LIMS project number must be resubmitted.

- If the laboratory mistakenly indicates "Not Applicable" for an item and it is obvious that the item is applicable, i.e. the document is present in the CSF, the laboratory must be contacted. For example, if the laboratory mistakenly indicates that the airbills are "NA", then the laboratory must be contacted and the revised DC-2 Form must be resubmitted to indicate the exact page number of the airbills.

- If the DC-2 Form used by the laboratory does not itemize all pages present in the CSF, the laboratory must be contacted. The laboratory may use their own version of the DC-2 Form as long as all items/pages are listed. If the DC-2 Form does not accurately reflect the contents of the CSF, then the laboratory must resubmit the DC-2 Form.

- If the laboratory submits photocopied documentation instead of original documentation, and if the location of the originals is not noted on each photocopy, then the laboratory must be contacted. The entire CSF must be submitted with all original documentation, or the location of the originals must be noted on each photocopy.

  For example, sample tags and air bills must be original documentation. Sample preparation logs and standard preparation logs, which are usually in bound logbooks, may be photocopies.

5.2 Guidelines for Not Contacting the Laboratory

The laboratory does not need to be contacted if problems

do not affect the completeness or accuracy of the CSF. For example:

- If the laboratory uses a different DC-2 Form than the one included in the Region I program (i.e. individual items on the DC-2 Form have slightly different headers than those on the CLP forms), the laboratory does not need to be contacted. As long as all documents are accurately inventoried on the laboratory DC-2 Form and the DC-2 Form accurately reflects the contents of the CSF, then the laboratory does not need to be contacted.

- If the Traffic Report includes the Chain of Custody form, as is the case with the new Traffic Reports, the laboratory does not need to be contacted. The laboratory may list them individually. The duplication of page numbers is inevitable.

- If the laboratory has inserted resubmitted pages into the CSF, the laboratory does not need to be contacted. The laboratory has the option to add the requested resubmittals in an addendum, insert additional pages in the package and renumber the pages or resubmit the page with the original page number.

- If other inconsistencies are found on the DC-2 Form, but the integrity of the package is not affected, then complete the audit and note the deficiency. For example, some laboratories may not check each item individually on the DC-2 Form, but may instead draw a continuous arrow down the column to indicate that all items were checked. If, however, an item that is not applicable to the case is indicated as present by the continuous arrow, note the inconsistency on the DC-2 Form.

- If the laboratory listed <u>both</u> the original and photocopied pages of the shipping documents on the DC-2 Form, the laboratory does not need to be contacted. The laboratory may have listed the photocopied documents under the "Traffic Report" and "EPA Shipping/Receiving Documents" sections and the original documents under "Other Records". As long as the original documentation is included with the CSF, it is not necessary for the

laboratory to resubmit the DC-2 Form with the original documents listed under the "Traffic Report" and "EPA Shipping/Receiving Documents" sections.

6.0 COMPLETION OF EVIDENCE AUDIT AND DISTRIBUTION OF AUDIT FORMS

The audit is complete after data validation has been performed and when all **DC-2 Form**s have been received and audited. Even if data validation is performed by a Data Validation Subcontractor, the Prime Contractor is still responsible for obtaining any resubmittals required by the validation and new **DC-2 Form**s following the protocol outlined above for CSF tracking and auditing.

The photocopied **DC-2 Form**s completed by the evidence auditor, the original laboratory-submitted **DC-2 Form**, and the **CSF Receipt/Transfer Form** should remain with the CSF. The evidence auditor should make a copy of all **DC-2 Form**s that were previously photocopied and completed during the audit procedure. These copies, along with copies of the telephone communication logs, should be sent to:

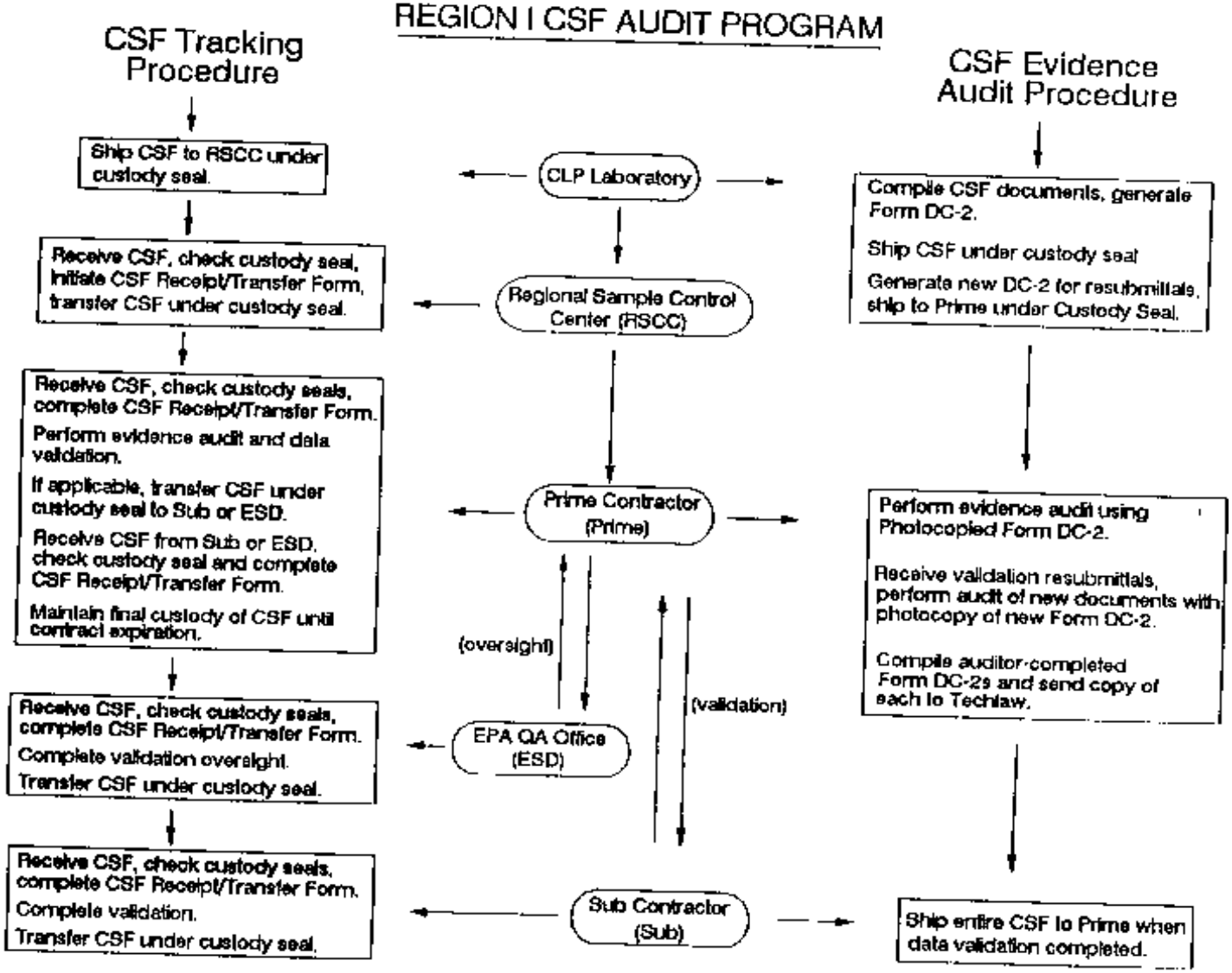
Contract Evidence Audit Team (CEAT-TechLaw)
12600 West Colfax Avenue
Suite C-310
Lakewood, Colorado 80215
Attn: Kerri Luka, Project Leader

When the validation and evidence audit procedures are completed, the CSF remains with the Prime Contractor until contract expiration or until further use of the CSF is required by Region I.

Attachment I

Flowchart of Region I CSF Evidence Audit Program

REGION I CSF AUDIT PROGRAM



Attachment IIA

Blank CSF Receipt/Transfer Form

EPA REGION I
COMPLETE SDG FILE
RECEIPT/TRANSFER FORM

Case #: _____ SDG: _____ Data Package #: _____

Receipt Date	Received by: Name	Init.	Affiliation	CSF Activity	Custody Present (On	Seals: / Intact Receipt)	Released: To	Date
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		

Attachment IIB

Completed CSF Receipt/Transfer Form

EPA REGION I
COMPLETE SDG FILE
RECEIPT/TRANSFER FORM

Case #: 12348 SDG: AA001 Data Package #: 90060040

Receipt Date	Received by: Name	Init.	Affiliation	CSF Activity	Custody Present (On	Seals: / Intact Receipt)	Released: To	Date
2/20/91	Mo Himmel	MH	RSCC Weston/SAIC	resubmittals	(Y) N	(Y) N	NUS/ARCS	2/20/91
2/23/91	Mary Smith	MS	NUS/ARCS	resubmittals	(Y) N	(Y) N	Dynamac	2/23/91
2/23/91	Linda Jones	LJ	Dynamac	resubmittals	(Y) N	(Y) N	Included with CSF	
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		

EPA REGION I
COMPLETE SDG FILE
RECEIPT/TRANSFER FORM

Case #: 12348 SDG: AA001 Data Package #: 4000640

Receipt Date	Received by: Name	Init.	Affiliation	CSF Activity	Custody Present (On)	Seals: / Intact Receipt)	Released: To	Date
2/3/91	Meg Himmel	MH	RSCC Weston/ESAT	CSF Receipt	(Y) N	(Y) N	NUS/AECS	2/3/91
2/5/91	Mary Smith	MS	NUS/AECS	Validation	(Y) N	(Y) N	Dynamac	2/6/91
2/9/91	Linda Jones	LJ	Dynamac	Validation	(Y) N	(Y) N	NUS/AECS	2/27/91
3/3/91	Mary Smith	MS	NUS/AECS	CSF Stwdy	(Y) N	(Y) N	EPA	3/27/91
3/29/91	Steve Stebola	SS	EPA	Data Validation Checklist	(Y) N	(Y) N	NUS/AECS	4/12/91
4/21/91	Mary Smith	MS	NUS/AECS	CSF Stwdy	(Y) N	(Y) N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		
					Y N	Y N		

Attachment IIIA

Blank Organic and Inorganic DC-2 Forms

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____ CITY/STATE _____

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ SAS NO. _____

CONTRACT NO. _____ MOD NO. _____ RFW NO. _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION XI F AND SECTION XIII H)

	PAGE NOs FROM	TO	CHECK LAB	RVW
1. Inventory Sheet (Form DC-2) (Do not number)				
2. SDG Case Narrative				
3. Traffic Report				
4. Volatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II VOA)				
MS/MSD Duplicate Summary (Form III VOA)				
Method Blank Summary (Form IV VOA)				
Tuning and Mass Calibration (Form V VOA)				
b. Sample Data				
TCL Results - (Form I VOA)				
Tentatively Identified Compounds (Form I VOA-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw spectra and of background-subtracted mass spectra of target compounds identified				
Mass spectra of all reported TIC's with three best library matches				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA)				
RICs and Quan Reports for all Standards				
Continuing Calibration (Form VII VOA)				
RICs and Quan Reports for all Standards				
Internal Standard Area Summary (Form VIII A VOA)				
d. Raw QC Data				
RVW				
Blank Data				
Matrix Spike Data				
Matrix Spike Duplicate Data				
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)				
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
Tuning and Mass Calibration (Form V SV)				

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ SAS NO. _____

	FROM	TO	LAB	EPA
5. Semivolatiles Data (Contd)				
b. Sample Data				
TCL Results (Form I SV)				
Tentatively Identified Compounds (Form I SV-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw spectra and background-subtracted mass spectra of TCL compounds				
Mass spectra of TIC's with 3 best library matches				
GPC chromatograms (if GPC performed)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV)				
RICs and Quan Reports for all standards				
Continuing Calibration (Form VII SV)				
RICs and Quan Reports for all standards				
Internal Standard Area Summary (Form VIII SV)				
Internal Standard Area Summary (Form VIII SV)				
d. Raw QC Data				
BFB/DFTPP				
Blank Data				
Matrix Spike Data				
Matrix Spike Duplicate Data				
6. Pesticides				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II Pest)				
MS/MSD Duplicate Summary (Form III Pest)				
Method Blank Summary (Form IV Pest)				
b. Sample Data				
TCL Results - Organic Analysis Data Sheet (Form I Pest)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout and calibration plots				
Manual work sheets				
UV traces from GPC (if available)				
For pesticides/PCBs confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. _____ SDG NO. _____ SDG NOS. IN FOLLOW _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	X
6. Pesticides (Contd)				
c. Standards Data				
Pesticides Evaluation Standards Summary (Form VIII, Pest-1)	___	___	___	___
Pesticides Evaluation Standards Summary (Form VIII, Pest-2)	___	___	___	___
Pesticide/PCB Standards Summary (Form II, Pest)	___	___	___	___
Pesticide/PCB Identification (Form X, Pest)	___	___	___	___
Standard chromatograms and data system printout for all standards	___	___	___	___
For pesticides/PCBs confirmed by GC/MS, copies of spectra for standards used	___	___	___	___
d. Raw QC Data	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
7. Miscellaneous Data	___	___	___	___
Original preparation and analysis forms or copies of preparation and analysis logbook pages	___	___	___	___
Internal sample and sample extract transfer chain-of-custody records	___	___	___	___
Screening records	___	___	___	___
All instrument output, including strip charts from screening activities (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DCI)	___	___	___	___
SDG Cover Sheet	___	___	___	___
Miscellaneous Shipping/Receiving Records (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
9. Internal Lab Sample Transfer Records and Tracking Sheets (Describe or list)				
_____	___	___	___	___
_____	___	___	___	___

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont'd)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ SAS NO. _____

	PAGE Nos		CHECK	
	FROM	TO	LAB	EPA
10. Other Records (describe or list) Telephone Communication Log				

11. Comments: _____

Completed by: (CLP Lab) _____ (Signature) _____ (Printed Name/Title) _____ (Date)

Audited by: (EPA) _____ (Signature) _____ (Printed Name/Title) _____ (Date)

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME: _____ CITY/STATE: _____

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ SAS NO. _____

CONTRACT NO. _____ SOW NO. _____ EPA NO. _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II G AND SECTION III D)

		PAGE NOs FROM	TO	CHECK LAB	EPA
1.	Inventory Sheet (Form DC-2) (Do not number)				
2.	Cover Page				
3.	Inorganic Analysis Data Sheet (Form I)				
4.	Initial and Continuing Calibration Verification (Form II, Part 1)				
5.	CRDL Standard for AA and ICP (Form II, Part 2)				
6.	Blanks (Form III)				
7.	ICP Interference Check Sample (Form IV)				
8.	Spike Sample Recovery (Form V, Part 1)				
9.	Post Digest Spike Sample Recovery (Form V, Part 2))				
10.	Duplicates (Form VI)				
11.	Laboratory Control Sample (Form VII)				
12.	Standard Addition Results (Form VIII)				
13.	ICP Serial Dilutions (Form IX)				
14.	Instrument Detection Limits, Quarterly (Form X)				
15.	ICP Interelement Correction Factors, Annually (Form XI, Part 1)				
16.	ICP Interelement Correction Factors, Annually (Form XI, Part 2)				
17.	ICP Linear Ranges Quarterly (Form XII)				
18.	Preparation Log (Form XIII)				
19.	Analysis Run Log (Form XIV)				
20.	ICP Raw Data				
21.	Flame AA Raw Data				
22.	Furnace AA Raw Data				
23.	Mercury Raw Data				
24.	Cyanide Raw Data				
25.	Percent Solids Calculations				

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOs		CHECK	
	FROM	TO	LAB	EPA
26. Distillation Logs (Cyanides Only)				
27. Digestion Logs				
28. Traffic Report				
29. EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)				
Chain-of-Custody Records				
Sample Tags				
Sample Log-In Sheet (Lab & Form DC-1)				
SDG Cover Sheet				
30. Miscellaneous Shipping/Receiving Records (list all individual records)				
Telephone Logs				
_____				
_____				
31. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
_____				
_____				
32. Internal Original Sample Preparation and Analysis Records (describe or list)				
Preparation records _____				
Analysis records _____				
Description _____				
33. Other Records (describe or list)				
_____				
_____				
_____				
34. Comments:				
_____				
_____				

Completed by: (CLP Lab) _____ (Signature) _____ (Printed Name/Title) _____ (Date)

Audited by: (EPA) _____ (Signature) _____ (Printed Name/Title) _____ (Date)

Attachment IIIB

Laboratory-Completed Organic and Inorganic DC-2 Forms

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME: ABC Labs CITY/STATE: [illegible]

CASE NO. RAVE SDG NO. [illegible] SDG NOS. TO FOLLOW: [illegible]

CONTRACT NO. 54321 SOW NO. 3/90 MOD. REF. NO. [illegible] EPA NO. [illegible]

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II F AND SECTION III E)

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. Inventory Sheet (Form DC-2) (Do not number)			✓	
2. SDG Case Narrative	1	3	✓	
3. Traffic Report	4	5	✓	
4. Volatiles Data	6	6	✓	
a. QC Summary			✓	
Surrogate Percent Recovery Summary (Form II VOA)	7	9	✓	
MS/MSD Duplicate Summary (Form III VOA)	10	14	✓	
Method Blank Summary (Form IV VOA)	15	19	✓	
Tuning and Mass Calibration (Form V VOA)	20	23	✓	
b. Sample Data				
TCL Results - (Form I VOA)	24	24	✓	
Tentatively Identified Compounds (Form I VOA-TIC)			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw spectra and of background-subtracted mass spectra of target compounds identified			✓	
Mass spectra of all reported TIC's with three best library matches			✓	
c. Standards Data (All Instruments)			✓	
Initial Calibration Data (Form VI VOA)	153	153	✓	
RICs and Quan Reports for all Standards	154	162	✓	
Continuing Calibration (Form VII VOA)	163	170	✓	
RICs and Quan Reports for all Standards	171	190	✓	
Internal Standard Area Summary (Form VIIIA VOA)	191	196	✓	
d. Raw QC Data				
BFB	197	209	✓	
Blank Data	210	220	✓	
Matrix Spike Data	221	221	✓	
Matrix Spike Duplicate Data	225	240	✓	
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	241	260	✓	
MS/MSD Summary (Form III SV)	261	270	✓	
Method Blank Summary (Form IV SV)	271	278	✓	
Tuning and Mass Calibration (Form V SV)	279	287	✓	

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. 2396 SDG NO. A4901 SDG NOS. TO FOLLOW N/A SAS NO. 121

	Page Nos From	To	Check Lab	Check E
5. Semivolatiles Data (Contd)				
b. Sample Data				
TCL Results (Form I SV)	285	288	✓	—
Tentatively Identified Compounds (Form I SV-TIC)			✓	—
Reconstructed total ion chromatograms (RIC) for each sample			✓	—
For each sample:				
Raw spectra and background-subtracted mass spectra of TCL compounds			✓	—
Mass spectra of TIC's with 3 best library matches			✓	—
GPC chromatograms (if GPC performed)			✓	—
c. Standards Data (All Instruments)			✓	—
Initial Calibration Data (Form VI SV)	291	402	✓	—
RICs and Quan Reports for all standards				
Continuing Calibration (Form VII SV)	403	422	✓	—
RICs and Quan Reports for all standards				
Internal Standard Area Summary (Form VIIIE SV)	423	425	✓	—
Internal Standard Area Summary (Form VIIIC SV)	426	451	✓	—
d. Raw QC Data				
DFTPP	452	470	✓	—
Blank Data	471	486	✓	—
Matrix Spike Data	487	497	✓	—
Matrix Spike Duplicate Data	498	510	✓	—
6. Pesticides				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II Pest)	511	521	✓	—
MS/MSD Duplicate Summary (Form III Pest)	522	529	✓	—
Method Blank Summary (Form IV Pest)	530	534	✓	—
b. Sample Data				
TCL Results - Organic Analysis Data Sheet (Form I Pest)	535	545	✓	—
Chromatograms (Primary Column)			✓	
Chromatograms from second GC column confirmation			✓	—
GC Integration report or data system printout and calibration plots			✓	—
Manual work sheets			✓	—
UV traces from GPC (if available)			✓	—
For pesticides/PCBs confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			✓	—

Page no. - -

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. 12346 SDG NO. A0001 SDG NOS. TO FOLLOW N/A

SAS NO. 671

	PAGE NOs FROM	TO	CHECK LAB	X
6. Pesticides (Contd)				
c. Standards Data				
Pesticides Evaluation Standards Summary (Form VIII, Pest-1)	586	594	✓	
Pesticides Evaluation Standards Summary (Form VIII, Pest-2)	595	599	✓	
Pesticide/PCB Standards Summary (Form IX, Pest)	600	615	✓	
Pesticide/PCB Identification (Form X, Pest)	616	619	✓	
Standard chromatograms and data system printout for all standards	620	632	✓	
For pesticides/PCBs confirmed by GC/MS, copies of spectra for standards used	633	640	✓	
d. Raw QC Data				
Blank Data	641	652	✓	
Matrix Spike Data	653	670	✓	
Matrix Spike Duplicate Data	671	677	✓	
7. Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	678	690	✓	
Internal sample and sample extract transfer chain-of-custody records	691	701	✓	
Screening records	702	710	✓	
All instrument output, including strip charts from screening activities (describe or list)				
Strip Charts	711	740	✓	
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 1)	741	750	✓	
Chain-of-Custody Records	751	753	✓	
Sample Tags	754	771	✓	
Sample Log-In Sheet (Lab & DCI)	772	773	✓	
SDG Cover Sheet	774	774	✓	
Miscellaneous Shipping/Receiving Records (describe or list)				
N/A				
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
N/A				

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont'd)

CASE NO. 2348 SDG NO. ABD01 SDG NOS. TO FOLLOW N/A SAS NO.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK E
10. Other Records (describe or list)				
Telephone Communication Log	775	782	✓	

11. Comments:

Completed by: (CLP Lab) John Smith (Signature) John Smith Sample Control Custodian (Printed Name/Title) 2/2/91 (Date)

Audited by: (EPA) ______ (Signature) ______ (Printed Name/Title) ______ (Date)

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME: ABC LAB CITY/STATE: BOSTON, MASS

CASE NO. 2345 SDG NO. ABC01 SDG NOS. TO FOLLOW N/A SAS NO. 12

CONTRACT NO. 5W921 SOW NO. 3/90 IFB NO. 1-WB42

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II G AND SECTION III D)

		PAGE NOS FROM	TO	CHECK LAB	R
1.	Inventory Sheet (Form DC-2) (Do not number)			✓	
2.	Cover Page	1	1	✓	
3.	Inorganic Analysis Data Sheet (Form I)	2	20	✓	
4.	Initial and Continuing Calibration Verification (Form II, Part 1)	21	27	✓	
5.	CRDL Standard for AA and ICP (Form II, Part 2)	27	35	✓	
6.	Blanks (Form III)	36	47	✓	
7.	ICP Interference Check Sample (Form IV)	48	59	✓	
8.	Spike Sample Recovery (Form V, Part 1)	60	65	✓	
9.	Post Digest Spike Sample Recovery (Form V, Part 2))	66	69	✓	
10.	Duplicates (Form VI)	70	75	✓	
11.	Laboratory Control Sample (Form VII)	76	90	✓	
12.	Standard Addition Results (Form VIII)	91	101	✓	
13.	ICP Serial Dilutions (Form IX)	102	109	✓	
14.	Instrument Detection Limits, Quarterly (Form X)	110	135	✓	
15.	ICP Interelement Correction Factors, Annually (Form XI, Part 1)	136	141	✓	
16.	ICP Interelement Correction Factors, Annually (Form XI, Part 2)	142	150	✓	
17.	ICP Linear Ranges Quarterly (Form XII)	151	170	✓	
18.	Preparation Log (Form XIII)	171	180	✓	
19.	Analysis Run Log (Form XIV)	181	190	✓	
20.	ICP Raw Data	191	195	✓	
21.	Flame AA Raw Data	196	210	✓	
22.	Furnace AA Raw Data	211	219	✓	
23.	Mercury Raw Data	220	227	✓	
24.	Cyanide Raw Data	228	240	✓	
25.	Percent Solids Calculations	241	250	✓	

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CLP No. 12348 SDG No. [illegible] SDG Nos. TO FOLLOW [illegible] Site No. [illegible]

	Page Nos From	Page Nos To	Check Lab	Check EPA
26. Distillation Logs (Cyanides Only)	251	256	✓	
27. Digestion Logs	257	280	✓	
28. Traffic Report	281	281	✓	
29. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 1)	282	285	✓	
Chain-of-Custody Records	286	290	✓	
Sample Tags	291	315	✓	
Sample Log-In Sheet (Lab & Form DC-1)	316	317	✓	
SDG Cover Sheet	318	318	✓	
30. Miscellaneous Shipping/Receiving Records (list all individual records)				
Telephone Logs	319	319	✓	
31. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
NA				
32. Internal Original Sample Preparation and Analysis Records (describe or list)				
Preparation records	320	322	✓	
Analysis records	326	340	✓	
Description				
33. Other Records (describe or list)				
NA				
34. Comments:				

Completed by: (CLP Lab) John Smith (Signature) John Smith / Sample Custodian (Printed Name/Title) 2/2/9 (Date)

Audited by: (EPA) (Signature) (Printed Name/Title) (Date)

FORM DC-2-g

Attachment IIIC

Laboratory and Contractor-Completed
Organic and Inorganic DC-2 Form

EVIDENCE AUDIT PHOTO

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME: AEC Labs CITY/STATE: Boston Mass

CASE NO. 2316 SDG NO. M001 SDG NOS. TO FOLLOW: NA SAS NO.: NA

CONTRACT NO. 54329 SOW NO. 390 IFB NO. 0C1088

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II F AND SECTION III H)

	PAGE NOs FROM	TO	CHECK LAB	VAL
1. Inventory Sheet (Form DC-2) (Do not number)				
2. SDG Case Narrative				
3. Traffic Report	1	3	✓	✓
4. Volatiles Data	4	6	✓	✓
a. QC Summary				
Surrogate Percent Recovery Summary (Form II VOA)	7	9	✓	
MS/MSD Duplicate Summary (Form III VOA)	10	14	✓	✓
Method Blank Summary (Form IV VOA)	15	19	✓	✓
Tuning and Mass Calibration (Form V VOA)	20	23	✓	✓
b. Sample Data				
TCL Results - (Form I VOA)	24	24	✓	✓
Tentatively Identified Compounds (Form I VOA-TIC)			✓	✓
Reconstructed total ion chromatograms (RIC) for each sample			✓	✓
For each sample:				
Raw spectra and of background-subtracted mass spectra of target compounds identified			✓	✓
Mass spectra of all reported TIC's with three best library matches			✓	✓
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA)	153	153	✓	✓
RICs and Quan Reports for all Standards	154	162	✓	
Continuing Calibration (Form VII VOA)	163	170	✓	✓
RICs and Quan Reports for all Standards	171	190	✓	✓
Internal Standard Area Summary (Form VIII A VOA)	191	196	✓	✓
d. Raw QC Data				
BFB				
Blank Data	197	209	✓	✓
Matrix Spike Data	210	220	✓	✓
Matrix Spike Duplicate Data	221	221	✓	✓
	222	246	✓	✓
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II BN)	247	269	✓	✓
MS/MSD Summary (Form III BN)	261	270	✓	✓
Method Blank Summary (Form IV BN)	271	278	✓	✓
Tuning and Mass Calibration (Form V BN)	279	287	✓	✓

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. 2346 SDG NO. A48701 SDG NOS. TO FOLLOW N/A LAB NO. NA

	PAGE NOs FROM	TO	CHECK LAB	REV
5. Semivolatiles Data (Contd)				
b. Sample Data				
TCL Results (Form I SV)	255	255	✓	✓
Tentatively Identified Compounds (Form I SV-TIC)			✓	✓
Reconstructed total ion chromatograms (RIC) for each sample			✓	✓
For each sample:				
Raw spectra and background-subtracted mass spectra of TCL compounds			✓	✓
Mass spectra of TIC's with 3 best library matches			✓	✓
GPC chromatograms (if GPC performed)			✓	✓
c. Standards Data (All Instruments)			✓	✓
Initial Calibration Data (Form VI SV)	391	402	✓	✓
RICs and Quan Reports for all standards				
Continuing Calibration (Form VII SV)	403	412	✓	✓
RICs and Quan Reports for all standards				
Internal Standard Area Summary (Form VIII SV)	413	434	✓	✓
Internal Standard Area Summary (Form VIII SV)	435	451	✓	✓
d. Raw QC Data				
DFTPP	452	456	✓	✓
Blank Data	457	485	✓	✓
Matrix Spike Data	486	497	✓	✓
Matrix Spike Duplicate Data	498	510	✓	✓
6. Pesticides				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II Pest)	511	521	✓	✓
MS/MSD Duplicate Summary (Form III Pest)	521	531	✓	✓
Method Blank Summary (Form IV Pest)	530	535	✓	✓
b. Sample Data				
TCL Results - Organic Analysis Data Sheet (Form I Pest)	535	545	✓	✓
Chromatograms (Primary Column)			✓	✓
Chromatograms from second GC column confirmation			✓	✓
GC Integration report or data system printout and calibration plots			✓	✓
Manual work sheets			✓	✓
UV traces from GPC (if available)			✓	✓
For pesticides/PCBs confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			✓	✓

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CASE NO. 12398 SDG NO. A8001 SDG NOS. TO FOLLOW NA FAX NO. N

		PAGE NOs FROM	TO	LAB	CHECK
6.	Pesticides (Contd)				
	c. Standards Data				
	Pesticides Evaluation Standards Summary (Form VIII, Pest-1)	588	594	✓	—
	Pesticides Evaluation Standards Summary (Form VIII, Pest-2)	595	599	—	—
	Pesticide/PCB Standards Summary (Form II, Pest)	600	615	✓	—
	Pesticide/PCB Identification (Form I, Pest)	616	625	✓	—
	Standard chromatograms and data system printouts for all standards	626	632	—	—
	For pesticides/PCBs confirmed by GC/MS, copies of spectra for standards used	633	640	—	—
	d. Raw QC Data				
	Blank Data				
	Matrix Spike Data	641	652	—	—
	Matrix Spike Duplicate Data	653	670	✓	✓
		671	677	✓	✓
7.	Miscellaneous Data				
	Original preparation and analysis forms or copies of preparation and analysis logbook pages	678	690	✓	✓
	Internal sample and sample extract transfer chain-of-custody records	691	701	✓	✓
	Screening records	702	717	✓	✓
	All instrument output, including strip charts from screening activities (describe or list)				
	SDG Printouts	718	746	✓	✓
		—	—	—	—
8.	EPA Shipping/Receiving Documents				
	Airbills (No. of shipments 1)	747	750	✓	—
	Chain-of-Custody Records — not signed	751	753	✓	—
	Sample Tags	754	771	✓	—
	Sample Log-In Sheet (Lab & DEC)	772	773	✓	✓
	SDG Cover Sheet	774	774	✓	✓
	Miscellaneous Shipping/Receiving Records (describe or list)				
	NA	—	—	—	—
		—	—	—	—
9.	Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	NA	—	—	—	—
		—	—	—	—

ORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont'd)

CASE No. 12345 SDG No. 44444 SDG NOS. TO FOLLOW N/A DAS NO. A

	PAGE Nos		CHECK	
	FROM	TO	LAB	EPA
10. Other Records (describe or list) Telephone Communication Log				
11. Comments:				

Completed by: John Smith (Signature) John Smith/Sample Custodian (Printed Name/Title) 2/9/91 (Date)
(CLP Lab)

Audited by: Mary Smith (Signature) Mary Smith/Validator (Printed Name/Title) 2/23/91 (Date)
(EPA) NUS/AECS

EVIDENCE AUDIT PHOTOC

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME - ABC LAB CITY/STATE - BOSTON MASS

CASE NO. 1234 SDG NO. ABC01 SDG NOS. TO FOLLOW N/A SAS NO. N/A

CONTRACT NO. 54921 SOW NO. 3/90 RFW NO. 1-ZAB10

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II G AND SECTION III G)

		PAGE NOs FROM	TO	CHECK LAB	CHECK EPA
1.	Inventory Sheet (Form DC-2) (Do not number)			✓	✓
2.	Cover Page	1	1	✓	✓
3.	Inorganic Analysis Data Sheet (Form I)	2	20	✓	✓
4.	Initial and Continuing Calibration Verification (Form II, Part 1)	21	27	✓	✓
5.	CRDL Standard for AA and ICP (Form II, Part 2)	27	35	✓	✓
6.	Blanks (Form III)	36	47	✓	✓
7.	ICP Interference Check Sample (Form IV)	48	59	✓	✓
8.	Spike Sample Recovery (Form V, Part 1)	60	65	✓	✓
9.	Post Digest Spike Sample Recovery (Form V, Part 2))	66	69	✓	✓
10.	Duplicates (Form VI)	70	75	✓	✓
11.	Laboratory Control Sample (Form VII)	76	90	✓	✓
12.	Standard Addition Results (Form VIII)	91	101	✓	✓
13.	ICP Serial Dilutions (Form IX)	102	109	✓	✓
14.	Instrument Detection Limits, Quarterly (Form X)	110	135	✓	✓
15.	ICP Interelement Correction Factors, Annually (Form XI, Part 1)	136	141	✓	
16.	ICP Interelement Correction Factors, Annually (Form XI, Part 2)	142	150	✓	✓
17.	ICP Linear Ranges Quarterly (Form XII)	151	170	✓	✓
18.	Preparation Log (Form XIII)	171	180	✓	✓
19.	Analysis Run Log (Form XIV)	181	190	✓	✓
20.	ICP Raw Data	191	195	✓	✓
21.	Flame AA Raw Data	196	210	✓	✓
22.	Furnace AA Raw Data	211	219	✓	✓
23.	Mercury Raw Data	220	227	✓	✓
24.	Cyanide Raw Data	228	240	✓	✓
25.	Percent Solids Calculations	241	250	✓	✓

FORM DC-2-1

INORGANIC COMPLETE SDG FILE (CSF) INVENTORY SHEET (Contd)

CLP No. 1234B SDG No. A22007 SDG Nos. To Follow N/A Mod. No. N/A

	Page Nos. From	Page Nos. To	Check: Lab	Check: EPA
26. Distillation Logs (Cyanides Only)	251	256	—	—
27. Digesting Logs	257	280	—	—
28. Traffic Report	281	287	—	—
29. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 1)	282	285	✓	✓
Chain-of-Custody Records not signed	286	290	✓	—
Sample Tags	291	315	✓	✓
Sample Log-In Sheet (Lab & Form DC-1)	316	317	✓	✓
SDG Cover Sheet	318	318	✓	—
30. Miscellaneous Shipping/Receiving Records (list all individual records)				
Telephone Logs	319	319	✓	—
	—	—	—	—
	—	—	—	—
31. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
NA	—	—	—	—
	—	—	—	—
32. Internal Original Sample Preparation and Analysis Records (describe or list)				
Preparation records	320	327	✓	✓
Analysis records	328	340	✓	✓
Description	—	—	—	—
33. Other Records (describe or list)				
NA	—	—	—	—
	—	—	—	—
	—	—	—	—
34. Comments:				

Completed by: (CLP Lab) John Smith (Signature) John Smith / Sample Control Custodian (Printed Name/Title) 2/2/91 (Date)

Audited by: (EPA) Mary Smith (Signature) Mary Smith / Val. Tech (Printed Name/Title) 2/5/91 (Date)

FORM DC-2-2 NLSI AZCJ