SECOND EDITION
MANUAL OF CUSTODY AND NON-CUSTODY SAMPLE HANDLING PROCEDURES
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

U.S. EPA
Central Regional Laboratory
Chicago, Illinois
August 1978

U.S. EPA, Region V
Procedures for Handling
Custody and Non - custody Samples

I Introduction

As in any other litigation, EPA must be able to prove that any analytical data offered into evidence in a court of law accurately represents environmental conditions existing at the time of sample collection. This implies that it can be clearly demonstrated that none of the involved samples could possibly have been tampered with during collection, transfer, storage or analysis. Therefore, an accurate written record must be maintained to trace the possession of each sample from the moment of its collection through its introduction into evidence. Samples for which this accurate documentation is maintained are called custody samples. A sample is in someones "custody" if:

1. It is in his actual physical possession, or
2. It is in his view, or
3. It was in his physical possession and he locked it up so no one could tamper with it, or
4. The sample is kept in a secured area which is restricted to authorized personnel only, or
5. The sample is placed in a container which is then sealed with a "custody" seal that will be broken when the container is opened.

In Region V, a Non-Custody sample is generally handled in the same manner as a custody sample, except that personnel handling the sample may not insure at all times that the sample is in their custody. For example, laboratories that do not contain custody samples are normally not locked when the scientist must leave the laboratory for 1-2 minutes. Chain of custody forms are not completed for non-custody samples. In summary, the procedures are intended to make it highly improbable for non-authorized persons to tamper with non-

custody samples and impossible for them to tamper with custody samples.

This document describes handling procedures used by Region V to handle all samples, both custody and non-custody. Special consideration used for custody samples only are identified below as required.

II The Physical Sample and its Description

Maintenance of custody requires satisfactory completion of three functions:

a) Maintain custody of the samples during collection, shipping, analyses, and storage.

b) Maintain custody of the written information describing sample collection, shipment, analyses and storage.

c) Insure that the relationship between the physical sample and the sample description is clear, complete and accurate.

In order to relate the descriptive information to a physical sample, a unique log number is assigned to each sample, both custody and non-custody. It should be noted that a sample may consist of several bottles and that each bottle is given the same log number indicating that all bottles contain parts of one sample. The bottles making up a sample, are differentiated by use of both a color coded label and a preservative code. Bottles containing different preservatives, are analyzed for different parameters.

III Sample Descriptive Documentation

The written information describing a sample consists of at least a study plan, a field record sheet, (Attachment I) an initialled and dated label on each bottle making up the sample, an analysis request form that lists all measure-

ments to be performed on each sample (see Attachment II) and a "chain of custody" form (Attachment III) which lists the names of all persons having access to the sample. The file of original information is complete when all samples are analyzed and the results are recorded on the analysis request forms. These files of original data are reviewed for completeness by the Office Director or his designee and filed in locked custody files in each of the Surveillance & Analysis Division Offices. A log book is maintained in each office for the custody files which lists the files stored and the name of all persons having access to any files, the date and item(s) removed at any time from the file, and the name of the person who removed the file. Therefore, all original information, relative to a sample or group of samples, should be available shortly after a request for such information is made and the files should be up to date, complete and accurate at all times.

IV Custody

Sample custody is initiated at the time of sample collection by fixing a numbered custody seal to each sample taken or by placing the sample in a locked container or into a container which is sealed with a custody seal. The custody form is also immediately filled out and signed by the person collecting the sample. It is the responsibility of the sampler to insure that the sample and sample descriptive forms are in custody (locked or properly sealed to prevent tampering) and that all descriptive information is accurate and complete. Each individual who subsequently signs the custody form has a similar responsibility and in addition, must insure that all information added to the sample descriptive forms is also complete and accurate.

In addition to the general procedures described above, there are several specific items which further explain custody procedures. These are as follows:

1. A unique sample number is assigned to each sample by the office that first receives or collects the sample, (Attachment IV). This number is subsequently used to describe the sample.
2. Any unique sample, such as grab and composite samples, may be assigned a log number providing the sample is clearly defined to differentiate it from other samples. No distinction is made in the log number between custody and non-custody samples.
3. Each office that assignes log numbers must keep an official log book. An entry should be made for each sample collected (or planned for collection) which includes, as a minimum, sample number, sample description, collection date and time, name of sampler and preservative bottles used to contain the sample. The log book should also include the numbers of all custody seals used to detect tampering and a description of how/where the seal was used.
4. All packages shipped to another location should be accompanied by the chain of custody record and analysis request form. A copy of these forms should be retained by the originating office (either carbon or photo copy). Mailed packages should be registered with return receipt requested. If packages are sent by common carrier, a Government Bill of Lading should be obtained. Receipts from post offices, and bills of lading or other common carrier receipts, including UPS shipment books, should be retained as part of the permanent chain of custody documentation. The samples must be secured so that no one can tamper with them until they are delivered to the appropriate laboratory custodian.
5. When shipped samples arrive at the CRL, or District Office, they are unpacked by the shipping and receiving clerk (alternate sample custodian)

or the sample custodian and all written information is checked for completeness and accuracy. If problems are discovered, they are resolved immediately. Once everything is in order, the samples are logged into the official custody log book. Custody samples are transferred to custody storage and stored in refrigerators or on shelves as required prior to analysis. Non-custody samples can be stored on shelves in the shipping and receiving refrigerator, freezer, or room. All sample description forms (analysis request and custody) are delivered to the sample custody office where copies are made for other users and the originals are filed and maintained for at least five years.

6. When samples are to be analyzed, the analyst obtains the samples from the shipping and receiving room, or in the case of custody samples, from the custody room after checking with the sample custodian and signing the chain of custody form. If an analyst is required to be out of the laboratory while custody samples are being analyzed, he/she must insure that the laboratory is locked, or return the samples to custody storage until he/she returns.
7. If all of a custody sample is consumed during analysis, the container is discarded and the sample custodian is so advised. If some sample remains after all analyses on a custody sample are complete, the remaining sample is stored on (non refrigerated) shelving in the custody room pending release by the submitting office. All non-custody samples are discarded as soon as all analyses on them have been completed.
8. The analyst who performs an analysis should date and initial the analysis request form below the data he/she reports. The responsible

Section Chief who transmits the completed analysis request form to the sample custodian with all supporting documentation, should sign and date each set of data released. The sample custodian makes at least two copies of the reported data. One copy is sent to the requesting office, the other copy is filed with the project study.

9. Data stored in the computer is not considered to be custody data. However, computer printouts become custody when signed and dated by an analyst or Section Chief verifying the accuracy of data on the printout. These sheets on "hard copy" are handled like any other piece of written information.

10. Under no circumstances will a sample be analyzed which has not been properly logged in. A priority sheet must be completed for all samples that are to be analyzed on a priority basis.

11. All samples collected by the CRL or D.O. staff will be considered custody, unless otherwise noted.

RV 3460.1 (10/30/74)

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION V
_______________ DISTRICT OFFICE
FIELD RECORD

CUSTODY
NON-CUSTODY

DISCHARGER ____________________ SAMPLING LOCATION ____________________

NPDES NUMBER ____________________

ADDRESS ____________________ OUTFALL NUMBER: ____________________

LAT ___° ___' ___" LONG ___° ___' ___"

RECEIVING WATER: ____________ M.P. OF DISCHARGE INTO STREAM ____________

CONTACT ____________________

SAMPLE INFORMATION:

☐ Municipal ☐ Industrial

Other ____________________

☐ Influent ☐ Effluent
☐ Grab ☐ Cont. Comp.
___ hr. Comp. at ___ hr. Intervals
☐ Time Comp. ☐ Comp. by Flow
☐ CST ☐ CDT ☐ EST ☐ EDT

SAMPLER:

☐ MANUAL ☐ AUTOMATIC ☐ EPA ☐ DISCHARGER ☐ TY[illegible]

Flume/Weir Type & Size ____________________

FLOW MEASUREMENT:
Integrator Finish ____________________
Integrator Start ____________________
Intg. F ( ) x Diff. ( ) = ____________
☐ EPA ☐ DISCHARGER ☐ OTHER ____________
☐ TOTALIZER ☐ INSTANTANEOUS ☐ [illegible] GAGE DA[illegible]
☐ PLANT RECORDS ☐ ESTIMATE ☐ OTHER ____________

SAMPLE COLLECTION

	Composite	Grab						PRES. CODE [2]	
CRL Log Numbers								Microbiology	[illegible]
STORET Stn. No.								Gen. Chem.	[illegible]
DATE								Petro. Prod.	[illegible]
TIME	/							Pest. Org. [illegible]	[illegible]
DEPTH	/							Nutrients	[illegible]
FLOW ( ) [1]								Tot. [illegible]	[illegible]
Tot. Cl_2 RES, mg/l								Oil & [illegible]	[illegible]
TEMP °C.								Tot. [illegible]	[illegible]
pH (field)								Diss. [illegible]	[illegible]
D.O. (mg/l)								Phenol[illegible]	
CONDUCTANCE								Cy[illegible]	
% FROM RT. BANK UPSTR.									
SAMPLING MILE POINT									
PRESERVATIVE AND/OR									
PRESERVATIVE CODE									

[1] Use Avg. Flow for Composites and Inst. Flow for [illegible] [2] [illegible]

FIELD RECORD FOR COMPOSITE AND RELATED GRAB SAMPLES

Sample Source ____________________ Sample No. ______

Time	Depth	Flow	Aliquot	Temp. °C.	pH	D.O.	Pres. Codes	Remarks
Total/Ave.								

REMARKS: ____________________

SAMPLER'S SIGNATURE ____________________

DUTY TIME ______ ______ ______ ______ ______ ______
Initial Time Final Time Initial Time Final Time Initial Time Final Time

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Description: River-02111204 Mun-Trt-Eff-03244240 Ind-Trt-Eff-03444240 Account No. _____ Study _____
Lake-02111402 Mun-Eff-Riv-02211204 Ind-Eff-Riv-02411204
Mun-Raw-03212240 Ind-Raw-Inf-03412240

	CRL Sample Log Number	Sample Description	Agency No. 8 digits	Station No. 6 digits	Grab Sample Collection Data or Beginning Composite Time Y Y M M D D H H H H	Depth	Type of Composite C1 C2 C3 C3	Ending Composite Sampling Time Y Y M M D D H H H H	Rt. Bank
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2									
3									
4									
5									
6									
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

CRL Sample Log Number	Sample Description	Parameter No.	00010	00020	00300	00400	50060	50064	00056		
	Identify highly polluted samples	Units	Water Temp	Air Temp	Dissolved Oxygen	Field pH	Residual Chlorine	Free Chlorine	Flow		
			C	C	mg/l	ph Units	mg/l	mg/l	gal/day		
1											
2											
3											
4											
5											
6											
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.	31503	31616	32210	32211	32218								
CRL Sample Log Number	Total Coliform	Fecal Coliform	Chlorophyll a Uncorrected	Chlorophyll a Corrected	Pheophyton a Corrected	1	2	3	4	5	6		
Units	MF/100 ml	MF/100 ml	µg/l	µg/l	µg/l								
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3													
4													
5													
6													
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1 = Macroinvertebrate, Ident. & Enumer. 4 =

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.	00076	00530	70300	00095	00945	00940	00956	00410	
CRL Sample Log Number	Turbidity	Sus.Solids (105°C)	Dissolved Solids (180°C)	Specific Conductance	Sulfate	Chloride	Total Silica as SiO_2	Alkalinity as $CaCO_3$	
Units	Formazin Turb. Units	mg/l	mg/l	µmhos/cm at 25°	mg/l	mg/l	mg/l	mg/l	
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2									
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.	00403	00310	00951	01032	38260	32730	00720			
CRL Sample Log Number	Lab pH	BOD_5	~~Flouride~~ Fluoride	Chromium Hexavalent	MBAS	Phenolics	Cyanide			
Units	pH Units	mg/l	mg/l	µg/l	mg/l	µg/l	µg/l			
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.		00630	00610	00625	00605	00665	00666	00340	00680	71900	
CRL Sample Log Number		Nitrate + Nitrite As N	Ammonia as N	Total Kjeldahl Nitrogen	Organic Nitrogen	Total P	Dis. P.	COD	TOC	Total Mercury	
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	
1											
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Sediment Samples

Account No. _____ Study _____

Parameter No.	70318	70322	00339	00627	00668	71921	32731	00721		
CRL Sample Log Number	% total solids	% total vol solids	COD Mud Dry Wt	TKN Mud Dry Wt	Phos Mud Dry Wt.	Hg Mud Dry Wt	Phenols Mud Dry Wt	Cyanide Mud Dry Wt		
Units	%	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Air Parameters Account No. _____ Study _____

	CRL Sample Log Number	Sample Description		Date Received	SO_2	NO_2	Particulates				
		Parameter No.									
		Identify highly polluted samples	Units	Mo/Day	ug/M^3	ug/M^3	$\mu g/M^3$				
1		Chicago	Gas	/							
2		Chicago	Hi-Vol	/							
3		Chicago Camp	Gas	/							
4		Chicago Camp	Hi-Vol	/							
5		East St. Louis	Gas	/							
6		East St. Louis	Hi-Vol	/							
7		Joliet	Gas	/							
8		Joliet	Hi-Vol	/							
9		Moline	Gas	/							
10		Moline	Hi-Vol	/							
11		North Chicago	Gas	/							
12		North Chicago	Hi-Vol	/							
13		Peoria	Gas	/							
14		Peoria	Hi-Vol	/							
15		Rockford	Gas	/							
16		Rockford	Hi-Vol	/							
17		Rock Island	Gas	/							
18		Rock Island	Hi-Vol	/							
19		Springfield	Gas	/							
20		Springfield	Hi-Vol	/							

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Air Parameters

	CRL Sample Log Number	Sample Description		Date Received	SO_2	NO_2	Particulates					
		Parameter No.										
		Identify high polluted samples	* Units	Mo/Day	$\mu g/M^3$	$\mu g/M^3$	$\mu g/M^3$					
1		East Chicago	Gas	/								
2		East Chicago	Hi-Vol	/								
3		Evansville	Gas	/								
4		Evansville	Hi-Vol	/								
5		Fort Wayne	Gas	/								
6		Fort Wayne	Hi-Vol	/								
7		Gary	Gas	/								
8		Gary	Hi-Vol	/								
9		Hammond	Gas	/								
10		Hammond	Hi-Vol	/								
11		Indianapolis	Gas	/								
12		Indianapolis	Hi-Vol	/								
13		Muncie	Gas	/								
14		Muncie	Hi-Vol	/								
15		Monroe Co.	Gas	/								
16		Monroe Co.	Hi-Vol	/								
17		New Albany	Gas	/								
18		New Albany	Hi-Vol	/								
19		South Bend	Gas	/								
20		South Bend	Hi-Vol	/								

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Air Parameters

	CRL Sample Log Number	Parameter No. / Sample Description	* Units	Date Received Mo/Day	SO_2 µg/M3	NO_2 µg/M3	Particulates µg/M3					
		Identify high polluted samples										
1		Minneapolis	Gas	/								
2		Minneapolis	Hi-Vol	/								
3		Moorhead	Gas	/								
4		Moorhead	Hi-Vol	/								
5		St. Paul	Gas	/								
6		St. Paul	Hi-Vol	/								
7		Akron	Gas	/								
8		Akron	Hi-Vol	/								
9		Canton	Gas	/								
10		Canton	Hi-Vol	/								
11		Cincinnati	Gas	/								
12		Cincinnati	Hi-Vol	/								
13		Cincinnati Camp	Gas	/								
14		Cincinnati Camp	Hi-Vol	/								
15		Cleveland	Gas	/								
16		Cleveland	Hi-Vol	/								
17		Columbus	Gas	/								
18		Columbus	Hi-Vol	/								
19		Dayton	Gas	/								
20		Dayton	Hi-Vol	/								

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Air Parameters

		Parameter No.									
	CRL Sample Log Number	Sample Description	Date Received	SO_2	NO_2	Particulates					
		Identify highly polluted samples * Units	Mo/Day	$\mu g/M^3$	$\mu g/M^3$	$\mu g/M^3$					
1		Iron Town Gas	/								
2		Iron Town Hi-Vol	/								
3		Portsmouth Gas	/								
4		Portsmouth Hi-Vol	/								
5		Steubenville Gas	/								
6		Steubenville Hi-Vol	/								
7		Toledo Gas	/								
8		Toledo Hi-Vol	/								
9		Youngstown Gas	/								
10		Youngstown Hi-Vol	/								
11		Eau Claire Gas	/								
12		Eau Claire Hi-Vol	/								
13		Fish Creek Gas	/								
14		Fish Creek Hi-Vol	/								
15		Kenosha Gas	/								
16		Kenosha Hi-Vol	/								
17		Madison Gas	/								
18		Madison Hi-Vol	/								
19		Milwaukee Gas	/								
20		Milwaukee Hi-Vol	/								

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Air Parameters

		Parameter No.									
	CRL Sample Log Number	Sample Description		Date Received	SO_2	NO_2	Particulates				
		Identify highly polluted samples	* Units	Mo/Day	$\mu g/M^3$	$\mu g/M^3$	$\mu g/M^3$				
1		Terre Haute	Gas	/							
2		Terre Haute	Hi-Vol	/							
3		Parke Co.	Gas	/							
4		Parke Co.	Hi-Vol	/							
5		Dearborn	Gas	/							
6		Dearborn	Hi-Vol	/							
7		Detroit	Gas	/							
8		Detroit	Hi-Vol	/							
9		Flint	Gas	/							
10		Flint	Hi-Vol	/							
11		Grand Rapids	Gas	/							
12		Grand Rapids	Hi-Vol	/							
13		Lansing	Gas	/							
14		Lansing	Hi-Vol	/							
15		Saginaw	Gas	/							
16		Saginaw	Hi-Vol	/							
17		Trenton	Gas	/							
18		Trenton	Hi-Vol	/							
19		Duluth	Gas	/							
20		Duluth	Hi-Vol	/							

* All values corrected to standard conditions of temperature and pressure

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Analysis Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Air Parameters

	CRL Sample Log Number	Sample Description		Date Received	SO_2	NO_2	Particulates				
		Parameter No.									
		Identify highly polluted samples	* Units	Mc/Day	$\mu g/M^3$	$\mu g/M^3$	$\mu g/M^3$				
1		Racine	Gas	/							
2		Racine	Hi-Vol	/							
3		Superior	Gas	/							
4		Superior	Hi-Vol	/							
5			Gas	/							
6			Hi-Vol	/							
7			Gas	/							
8			Hi-Vol	/							
9			Gas	/							
10			Hi-Vol	/							
11			Gas	/							
12			Hi-Vol	/							
13			Gas	/							
14			Hi-Vol	/							
15			Gas	/							
16			Hi-Vol	/							
17			Gas	/							
18			Hi-Vol	/							
19			Gas	/							
20			Hi-Vol	/							

* All values corrected to standard conditions of temperature and pressure

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month Year)

Account No. _____ Study _____

Parameter No.							01105	01002	01007	01027	01034	01037	01042	01045	01051	01055	
CRL Sample Log Number							Total Aluminum	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Iron	Total Lead	Total Manganese	
Units							µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.	01067	01147	01077	01092	01012	01102	01087	01152	01022		
CPL Sample Log Number	Total Nickel	Total Selenium	Total Silver	Total Zinc	Total Beryllium	Total Tin	Total Vanadium	Total Titanium	Total Boron		
Units	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l		
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.	00916	00927	00929	00937	Lead in Gasoline	
CRL Sample Log Number	Total Calcium	Total Magnesium	Total Sodium	Total Potassium	By Atomic Absorption	By Kit Kit #
Units	mg/l	mg/l	mg/l	mg/l	g/gal	g/gal
1						
2						
3						
4						
5						
6						
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.		01106	01025	01030	01040	01046	01049	01056	01065	01090	
CRL Sample Log Number		Dis. Aluminum	Dis. Cadmium	Dis. Chromium	Dis. Copper	Dis. Iron	Dis. Lead	Dis. Manganese	Dis. Nickel	Dis. Zinc	
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Sediment Samples

Parameter No.								01108	01008	01028	01029	01038	01043	01170	01052	01053	
CRL Sample Log Number								Al Mud Dry Wt	Ba Mud Dry Wt	Cd Mud Dry Wt	Cr Mud Dry Wt	Co Mud Dry Wt	Cu Mud Dry Wt	Fe Mud Dry Wt	Pb Mud Dry Wt	Mn Mud Dry Wt	
Units								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Sediment Samples

Parameter No.	01068	01093	01003	01148							
CRL Sample Log Number	Ni Mud Dry Wt	Zn Mud Dry Wt	As Mud Dry Wt	Se Mud Dry Wt							
Units	mg/kg	mg/kg	mg/kg	mg/kg							
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

Parameter No.		00556	00553									
CRL Sample Log Number		Oil and Grease	Oil and Grease Mud		Methylene Chloride	Carbon tetrachloride	Chloroform	1,2-dichloro ethane	Bromo-dichloro-methane	Chloro-dibromo-methane	Bromo form	
	Units	mg/l	mg/kg		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

General Qualitative and Quantitative Organic Analyses

CRL Sample Log Number	Compound	Conc	Compound	Conc	Compound	Conc	Compound	Conc	Compound	Conc
	Units =		Units =		Units =		Units =		Units =	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office ______ Sampling Date ______ (Day Month Year) Lab Arrival Date ______ (Day Month Year) Analysis Due Date ______ (Day Month)

Check for routine pesticides [ ] ; PCB's [ ] or both [ ]   Account No. ______ Study ______

All units are micrograms per liter of water or mg per kilogram dry sediment

Water *	39700		39732			39330		39430	39420		
CRL Sample Log Number	Hexachloro benzene	β-BHC	Lindane	Treflan	Diclone	Aldrin	Zytron	Isodrin	Heptachlor epoxide	γChlordane	
Sediment *	39701		39783			39333		39433	39423		
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* Mark out the set of parameter numbers not used

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office ________ Sampling Date ________ (Day Month Year) Lab Arrival Date ________ (Day Month Year) Analysis Due Date ________ (Day Month)

Account No. ________ Study ________

All units are micrograms per liter or milligrams per kilogram

Water *		39320	39315	39305	39310	39300		39480				
CRL Sample Log Number	o,p-DDE	p,p'-DDE	o,p-DDD	o,p-DDT	p,p' D D	p,p' DDT	Carbo-phenothion	Methoxy chlor	mirex			
Sediment *		39321	39316	39306	39311	39301		39481				
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office ________ Sampling Date ________ (Day Month Year) Lab Arrival Date ________ (Day Month Year) Analysis Due Date ________ (Day Month)

Account No. ________ Study ________

All units are micrograms per liter or milligrams per kilogram

Water *	39488	39492	39496	39500	39504	39508			39110	39100		
* CRL Sample Log Number	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Dibutyl Phthalate	Diethyl Hexyl Phthalate		
Sediment *	39491	39495	39499	39503	39507	39511			39112	39102		
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* Mark out set of parameter numbers not used

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

All units are µg/l or mg/kg.

Water *	39650				39380		39390		39460			
* CRL Sample Log Number	Diuron	2,4-D iso Propylester	DNBP	Endosyl-fan I	Dieldrin	DEHP	Endrin	Endosyl-fan II	Chloro-benzilate			
Sediment *					39383		39393		39461			
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* Mark out set of parameter numbers not used

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

All units are µg/l for water samples and mg/kg for sediments.

	Water *			39470															
CRL Sample Log Number		Nitrofen	2,4,5-T Isooctylester	Dilan	Tetra-difon														
	Sediment *																		
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office ____________ Sampling Date ______ (Day Month Year) Lab Arrival Date ______ (Day Month Year) Analysis Due Date ______ (Day Month)

Account No. ____________ Study ____________

All units are µg/l for water and µg/kg for sediments.

	Phorate	Diazinon	Dyfonate	Ronnel	Dursban	Methyl Parathion	Malathion	Ethyl Parathion	DEF	Ethion	
Water *		39570				39600	39530			39398	
CRL Sample Log Number											
Sediments *		39571				39601	39531			39399	
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ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM

District Office _____ Sampling Date _____ (Day Month Year) Lab Arrival Date _____ (Day Month Year) Analysis Due Date _____ (Day Month)

Account No. _____ Study _____

All units are µg/l for water and mg/kg for sediments.

CRL Sample Log Number		Phenkapton	EPN	Azinphos Methyl	Phosa-lone	Azinphas Ethyl	Coumaphos							
Water	*													
Sediments	*													
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U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION V

DISTRICT OFFICE

CHAIN OF CUSTODY RECORD

DISCHARGER

SAMPLES SOURCES
CITY AND STATE

SAMPLE INVENTORY AND MASTER PACKING LIST

Chest or Carton No.	Seal No.	CRL Sample Log No.	Sample Sub-Portions (Preservative Codes)	Total
	No. Chests		No. Samples	

CUSTODY SIGNATURES

The persons whose signatures are listed below certify that the collected samples lsited in the sample inventory and master packing list above had the samples in their custody and the only manner in which custody was given up was either to one of the other persons listed below or to a locked and/or secured area or chest.

SAMPLER(S) _____ _____

_____ _____

_____ _____

Signature Date and Time

Transmitted to _____ _____

_____ _____

Signature Date and Time

Transmitted to _____ _____

_____ _____

Transmitted to _____ _____

_____ _____

Transmitted to _____ _____

_____ _____

Transmitted to _____ _____

_____ _____

Region V, S&A Division Sample Numbering System
1 Oct. 1977

The general construction of a sample identification number will be according to the following guidelines:

Office Identification	(one letter)
Project Officer, etc.	(one letter)
Survey Number	(two numbers)
Sample Type	(one letter)
Sample Number	(two numbers)

Example - CL99S98 where
7

C = Central District Office
L = Roscoe Libby
99 = Roscoe Libby's 99th project during the current fiscal year
S = Sample
98 = Sample number 98

Comments:

The office identification letters are fixed as listed below. Other letters may be added to the list later.

A = Air Surveillance Branch	D = Ohio	K = QAO
C = Central District Office	F = Michigan	O = Other
E = Eastern District Office	G = Indiana	N = GLNPO
W = Western District Office	H = Wisconsin	
L = Laboratory-Central Regional	I = Illinois	
U = U.S. Coast Guard	J = Minnesota	
T = Toxic Substance Coordinator	B = Enforcement Division	

When samples arrive directly from a State, the CRL will assign the appropriate District Office Director as project officer.

The project officer identification should be assigned by each office submitting samples or by the CRL sample custodian if unassigned previously. All assignments should be unique and all changes must be cleared with the CRL sample custodian. An example of assignments for the Central District Office might be as follows:

L = Roscoe Libby
T = Lee Townsend
B = Sylvester Bernotas

The survey numbers should be used in sequence by each project officer to number his surveys. If a project officer conducts more than 99 surveys in a given year, he can use another identification letter and repeat the survey numbers as required.

The sample type letter is used to identify quality assurance and other sample types. The following letters are fixed and are to be used only as specified –

S ~ Sample
D ~ Duplicate Sample (two samples collected)
A ~ Duplicate Analysis (one sample split)
L ~ Laboratory Control Standard
R ~ Reagent Blank (Field)
B ~ Reagent Blank (Laboratory)

All other letters may be used as the project officer wishes, after clearing with the CRL sample custodian.

The sample numbers should be assigned in numerical order to all samples collected during the specified survey. If more than 99 samples are collected during a given survey, a new survey number should be used as required to uniquely identify all samples. Quality Assurance samples should receive unique numbers with duplicates being always for the preceeding sample.

Additional examples are given below to further explain the system.

Sample Number AM01S01

A = Air Surveillance Branch
M = Charles Miller
01 = Miller's first survey in FY-78
S = Sample
01 = First sample collected for project 01

Sample Number AM02Z37

A = Air Surveillance Branch
M = Charles Miller
02 = Miller's second survey in FY-78
Z = Sample from site "Z" *
* the use of the letter Z to specify a site has been approved by the CRL for the proposed O'Hare Study.

Sample Number AM02A38

A = Air Surveillance Branch
M = Charles Miller
02 = Miller's second survey in FY-78
A = A duplicate analysis of sample AM02S37
38 = The thirty-eighth sample in project 02

Sample Number AM02D39

A, M, 02 as defined above
D = A duplicate sample of AM02A38 (or AM02S37)
39 = the 39th sample in project 02.