# AIR POLLUTION CONTROL DISTRICT REGULATORY COMPLIANCE DIVISION

#### POLICIES AND PROCEDURES

Policy No. <u>III.B</u> Supersedes Date <u>01/15/90</u> Date <u>March 26, 1990</u>	Draft Final X Pages 8
Topic: Chain of Custody Procedures	
Distribution: All Policy Holders	

This policy and procedure document provides guidance on the chain of custody for samples gathered as evidence to document an alleged violation of or to confirm compliance with District rules and regulations or permit conditions.

Establishing a chain of custody is a very important part of documenting an alleged violation. Custody, as applied to samples gathered as evidence, means the care and keeping of material objects that are offered "to prove the existence or non-existence of a fact" (Calif. Evidence Code Sec. 140). The chain of custody is the procedure utilized to preserve the integrity of evidence and to verify that the sample which was obtained, in many cases several months or years prior to the court date, is in fact the same sample that is being submitted to the court as evidence. When an alleged violation is prosecuted, the integrity of the evidence must be established on all material objects collected by the inspector/engineer. Samples will be handled in a manner consistent with procedures outlined in section III of the policy and procedures manual.

To establish and maintain an effective chain of custody on evidence, four general rules will be followed:

- 1. All collection instruments, devices and containers must be properly maintained and/or calibrated.
- 2. Samples should be handled by as few persons as possible.
- 3. Sample handling procedures must ensure that the sample is not contaminated or altered.
- 4. The names of all persons handling samples, and the date and time of such handling, must be recorded to show continuous custody and control from collection to presentation.

## SAMPLE COLLECTION

Specific sample collection techniques are discussed in Policy and Procedure document III.C.

After a sample is collected, it is not to be left unattended at any time. The sample must always accompany the inspector/engineer until he/she returns to the office to transfer custody of the sample. If it is inconvenient to carry the sample, the sample must be locked in his/her vehicle.

The actual container which holds the sample shall be sealed with chain-of-custody tape to ensure the samples are not tampered with before analysis takes place.

### SAMPLE IDENTIFICATION

A separate Sample Identification Tag must be completed and affixed to <a href="each"><u>each</u></a> sample container <a href="immediately">immediately</a> after the sample is taken. If at all possible, this should be done in view of the source operator/representative. It is extremely important that there can be no question as to the identity of the sample, particularly if several are taken in the same location or in a short period of time. All entries on the Identification Tag must be completed <a href="legibly">legibly</a> in waterproof ink unless prohibited by weather conditions. Because the part of the Tag above the dotted line has a carbonless copy beneath it, it is necessary to press hard when writing. Attachment 1 illustrates the Tag.

The following directions are to be followed in filling out the Identification Tag:

- Date include month (spell out, do not use numbers), day and year.
- Time (of sample collection) military time is preferred e.g., 0930 hrs. If military time is not used, be sure to designate either AM or PM.
- 3. Preservative (if applicable) state the type of preservative used to stabilize the sample<sup>2</sup>.
- 4. Holding Time (if applicable) state the maximum time allowed between sample collection and analysis.
- 5. Sample Type provide a brief description, e.g, fuel oil, asbestos, produced gas, etc.
- 6. Required Analysis describe the analysis the laboratory is to conduct.
- 7. Project Name the <u>full</u> project name unique to this particular investigation must be provided. If appropriate, provide both company and facility names. If the sample is taken in response

<sup>&</sup>lt;sup>1</sup>Chain of custody tape will have a unique logo/inscription preprinted on it.

<sup>&</sup>lt;sup>2</sup>Some substances, such as hydrocarbons, need to be stabilized with other chemicals.

to a complaint and there is no project, write in "Complaint Response".

- 8. Address the <u>full</u> project address must be provided, as a company many have several facilities in the same city. In case of a complaint response, provide the location where the sample was taken.
- 9. ATC/PTO Number fill in "none" if the source is exempt, unpermitted or if the sample was taken in response to a complaint(s).
- 10. Inspector/Engineer Name first and last name of the individual taking the sample.
- 11. Sample Location the precise location where the sample was taken should be described in as much detail as possible, particularly in a large and complex facility. There must be no question as to what piece of equipment, material, etc. is being sampled. If necessary, ask the facility representative to describe the sampling location and note on the identification tag that the description was provided by the facility representative.
- 12. Remarks this section can be used to briefly note any other pertinent observations when collecting the sample, e.g., wind direction in case of a complaint response. Detailed notes would be included in the inspector/engineer's report.

## SAMPLE CUSTODY FORM

Records must support the integrity of the sample evidence. Each person handling the sample must be clearly identified to show continuity of custody. The Sample Custody Record and Transfer Form (Attachment 2) provides a record showing the custody of the sample from the time of collection to presentation in court and/or disposal. The original form will remain at all times with the sample. Every person handling the sample will be required to sign and date the original form.

The Custody and Record and Transfer form should be filled in as follows:

- 1. Sample I.D. No. this number must be the same as the one printed on the Sample Identification Tag.
- 2. Date Collected use the date on the Sample Identification Tag.
- 3. Sample Type see the Sample Identification Tag.
- 4. Collected by see the Sample Identification Tag.
- 5. ATC/PTO # see the Sample Identification Tag.
- 6. CMIS # write in the CMIS code for billing purposes. If there isn't one, put down "None".

- 7. Source Name and Address see the Sample Identification Tag.
- 8. Comments this section can be used to note whether the sample has been split (see item #5 under "Sample Transport or Interim Storage", below) or any other pertinent information.
- 9. Each time the sample is handled by another individual, the "Relinquished By" and "Received By" section of the form must be filled in. If the sample is shipped via a delivery service, the "Shipped to", "Shipped via" and Shipping/Waybill # blocks are also completed.
- 10. When the sample is disposed of, the last line is to be filled in.
- 11. If the three blocks in the bottom half of the form are insufficient, i.e., there are more than three transfers of the sample, use a second form. Note in the "Comments" section of the second form that it is a continuation of the first and include the number of the first form (in the upper right hand corner of each form, preprinted and unique).

# SAMPLE TRANSPORT OR INTERIM STORAGE

To maintain the chain of custody and the integrity of the sample, the following procedures shall be applied:

- 1. Upon returning to the office, all samples are either to be delivered to the Sampling Coordinator or shipped to the analysis laboratory. When authorized or directed by the Sampling Coordinator, the sample may be delivered on the following working day.
- 2. All samples will be shipped to the laboratory via a delivery or pickup service which guarantees next working day delivery (e.g., Federal Express, UPS). The sample, along with the carbonless copy of the Sample Identification Tag and original Custody Record and Transfer form, are to be securely packaged in an appropriate container. Because the sample should be handled by as few persons as possible, the individual having custody of the sample on the day of delivery should be the one who hands the packaged sample to the delivery person. A written receipt confirming the pick-up of the sample as well as proof of delivery, must be obtained. These receipts, the original Sample Identification Tag and a copy of the Custody Record and Transfer form shall be kept by the Sampling Coordinator.
- 3. Samples held beyond the collection date shall be secured in the Sample Holding Cabinet. The Sampling Coordinator shall have sole possession of the key to the Sampling Holding Cabinet which shall remained locked at all times.
- 4. Samples shall not be left unattended by the inspector/engineer until they are either delivered to the analysis laboratory or Sampling Coordinator. Samples may be locked in the

inspector/engineer's vehicle after they are collected, but not after the inspector/engineer returns to the office.

- 5. If a sample is split with a source or another agency, a separate Custody Record and Transfer Form is prepared for that sample and marked (in the "Comments" section) to indicate with whom the sample is being split.
- 6. Certain types of samples need to be refrigerated or otherwise preserved prior to and during shipment. Instructions are provided in the policy and procedures for specific sampling techniques (see Section III.C of the Manual).

### SAMPLE PACKAGING

Standard procedures for packaging and shipment of samples are necessary for at least the following reasons:

- 1. To protect persons handling, receiving and unpacking shipped samples
- 2. To minimize loss of samples through breakage or delays in shipment
- 3. To ensure documentation of sample integrity
- 4. To ensure that all shipments comply with applicable Department of Transportation (DOT) regulations (Title 29 of the Code of Federal Regulations, see Table 1)

The packaging instructions in this document are general in nature. Please refer to the policy and procedure for specific sampling techniques (Section III.C) for more detailed directions.

For samples whose toxic, flammable, corrosive or otherwise hazardous constituents represent less than one percent of the sample by volume, the following procedures will be applied:

- Pack the samples in a sturdy container using cushioning materials such as bubble wrap, vermiculite, styrofoam pellets, etc.
   Crushed ice or ice cubes should never be used for packaging material.
- 2. Samples that may be caustic or noxious will be placed in clean, previously unused paint cans before being placed in the shipping container. The recipient of the samples will be notified <u>in advance</u> so proper precautions may be taken when opening the shipping container.
- 3. If the samples are to be kept chilled, use a cooler as the shipping container. Place water-tight bags of ice, or preferably, cold packs over the tops of the sample containers.
- 4. The Sample Custody Record and Transfer Form is to be placed in the shipping container in a zip-locking bag to protect the form.

The bag is to be taped to the <u>inside</u> cover of the ice-chest, if an ice-chest is used as the shipping container.

- 5. More packaging material will be added, if needed, and the shipping container will be sealed with packaging tape. Packaging tape should be wrapped around the container perpendicular to the sealed opening in at least two places (in zip-locking bag to protect form). Tape to <u>inside</u> covering ice-chest, if used.
- 6. Two pieces of chain of custody tape will be affixed over the sealed top and bottom opening of the container and signed and dated. Cellophane tape will be placed over these chain of custody tapes to protect them.
- 7. The shipping container will be labeled with the name, address and phone number of the destination laboratory and return address and phone number. The label on the container will also identify the contents as "Laboratory Samples".

Samples which are known to contain or suspected of containing more than one percent (by volume) flammable, toxic, corrosive or otherwise hazardous materials are subject to the following additional requirements:

- 8. It is necessary to determine the DOT classification applicable to the shipment before exact labeling and shipping procedures can be determined. A qualitative knowledge of the composition of the materials is necessary for classification. Table 1 contains references for classification and applicable regulations.
- 9. Sample containers should be filled only to about three quarters capacity, to allow for expansion under changing temperature conditions. If the samples contain concentrated flammable, corrosive or toxic liquids, the sample jars or bottles should be packed in clean unused paint cans with vermiculite before being placed in the shipping container. The cans should be labeled to identify contents and to indicate the top (e.g., "This End Up").
- 10. No more than one quart of any liquid sample is to be packaged in the same shipping container.
- 11. Labeling on the shipping package must include:
  - The name of the applicable DOT classification (e.g., flammable liquids).
  - Any other labeling required by the applicable DOT regulations.

SANTA BARBARA AIR POLITION CONTROL DISTRICT
REGULATORY COMPLIANCE DIV NOT TRANSFER FORM
SAMPLE CUSTODY RECUAD AND TRANSFER FORM

RELINQUISHED BY:   CMIS#   Comments   Comments
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## SANTA BARBARA APCD SAMPLE IDENTIFICATION TAG

Sample Number (unique and preprinted	)		
DATE		•	
TIME			
SAMPLE TYPE			
PRESERVATIVE			
HOLDING TIME	v	_	
REQUIRED ANALYSIS		_	
Sample number (same as above)			
PROJECT NAME		_	
ADDRESS		_	
ATC/PTO NUMBERINSPECTOR/ENGINEER NAME			
SAMPLE LOCATION			
	<del></del> .		
REMARKS		_	

APCD FORM SID-1 (7-89)

NOTE: THIS WILL BE A TWO PART FORMWITH A CARBONLESS COPY OF THE PART ABOVE THE DOTTED LINE. THE BOTTOM HALF WILL NOT BE SENT TO THE LABORATORY TO PRESERVE THE IDENTITY OF THE SOURCE.