

# PDEQ Monitoring Overview

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Air Program Manager  
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# Overview

- Filter preparation
- Monitoring
- Preparing filters for analysis
- Transport to lab



# Filter Preparation

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- Filters are ordered and sent to PDEQ lab from manufacturer, Whatman
- Filters are equilibrated and weighed in PDEQ's lab





# Monitoring Continued

- Filters being sent to Pace Analytical for SERI follow the same preparation procedure and are sent out by UPS. These filters are tested for eight metals (Be, As, Cd, Co, Cr, Mn Ni and Pb)
- Results are sent directly to SERI

**Pace Analytical**  
 CHAIN-OF-CUSTODY / Analytical Request Document  
 The Chain of Custody (COC) is a document that tracks the history of a sample from collection to analysis.

Section A: Client Information  
 Section B: Requested Analysis  
 Section C: Laboratory Information  
 Section D: Requested Analysis (Y/N)  
 Section E: Additional Comments

Filter #	Location	Filter #	Request	DATE	TIME	ACCEPTED BY	DATE	TIME	RECEIVED BY	DATE	TIME
1	Overlin #1	Filter # C-113530	AS		04/03/02						
2	Clayton M.S.	Filter # C-113532	AS		04/03/02						
3	Las Animas	Filter # C-113537	AS		04/03/02						
4	Blanco JNK	Filter # C-113539	AS		04/03/02						
5	Shirley M.S.	Filter # C-113525	AS		04/03/02						
6	Los Hornos	Filter # C-113514	AS		04/03/02						
7	Clayton M.S.	Filter # C-113577	AS		04/03/02						
8	Sun Valley M.S.	Filter # C-113588	AS		04/03/02						
9	Transportation Hwy	Filter # C-113533	AS		04/03/02						
10	Overlin #1	Filter # C-113524	AS		04/03/02						
11	Las Animas	Filter # C-113565	AS		04/03/02						
12	Los Hornos	Filter # C-113578	AS		04/03/02						

ADDITIONAL COMMENTS: *See attached PDER sheets*

ANALYST: *M. Kelly*    PDER: *PDER*    SHER: *SHER*

FORMER NAME AND SIGNATURE: \_\_\_\_\_  
 PRINT NAME OF ANALYST: \_\_\_\_\_  
 SIGNATURE OF ANALYST: \_\_\_\_\_  
 DATE SHIPPED: \_\_\_\_\_

# Monitoring Continued



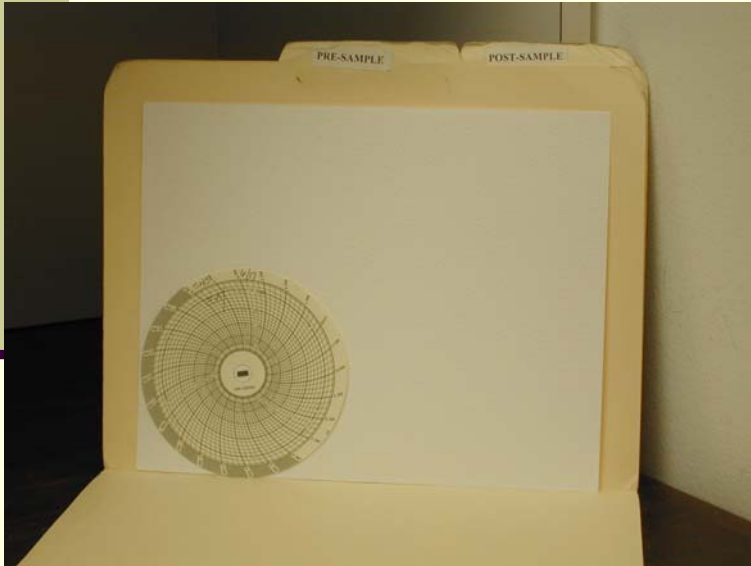
Chart to monitor run time

Timer to set run time



# Monitoring Continued

- SUSD maintenance personnel remove previous filter and insert clean filter into monitors

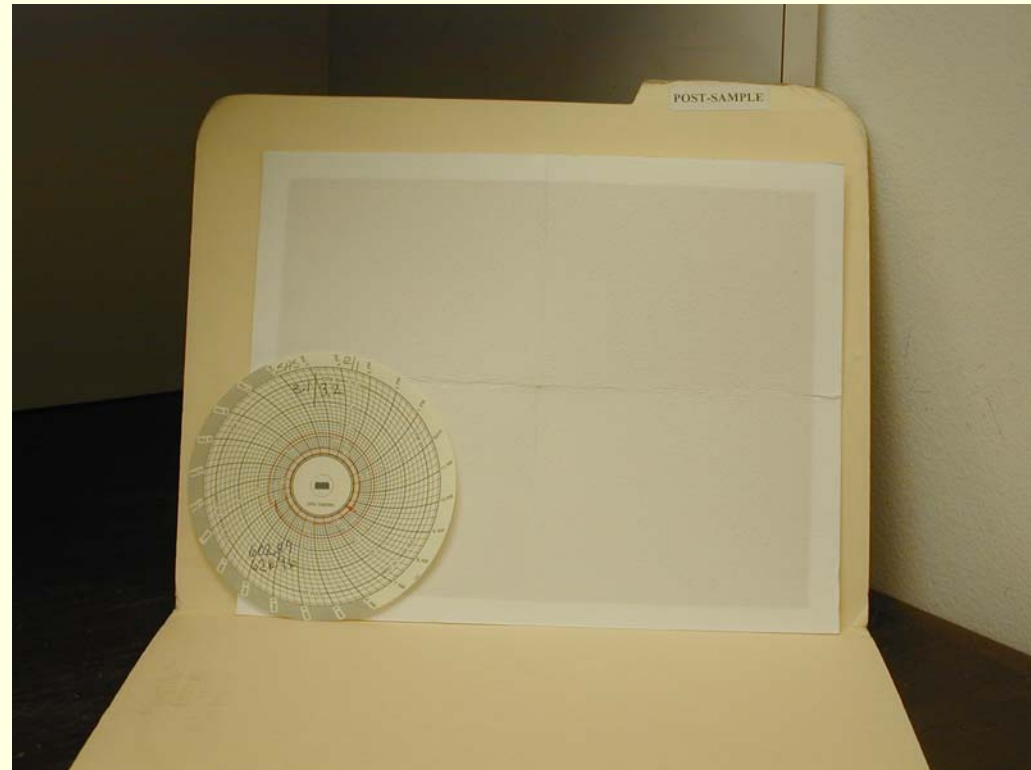




# Monitoring Continued

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- Six days later, after sample has been taken, maintenance personnel remove filters from monitors and return them to the office
- PDEQ personnel pick up filters from SUSD

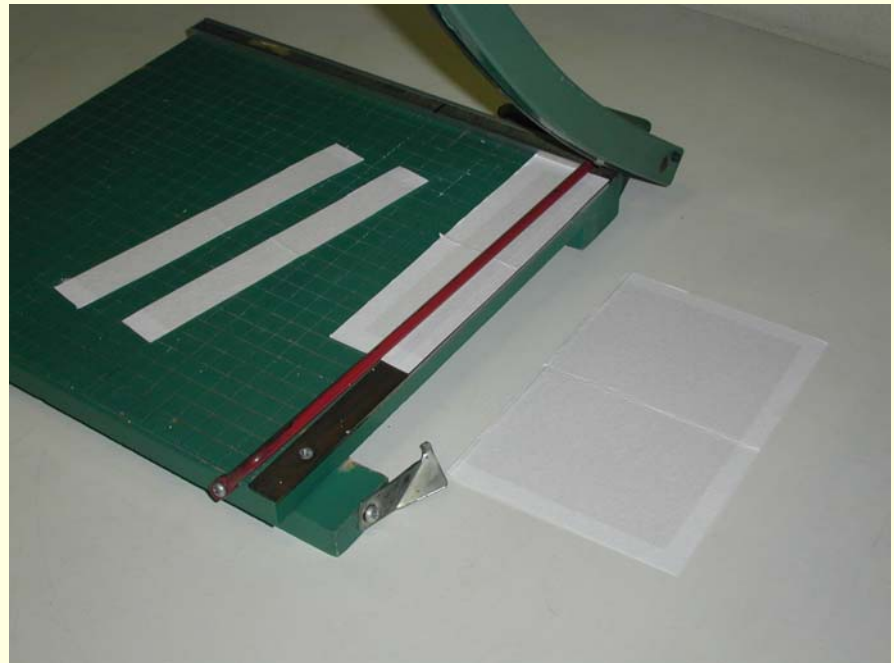




# Preparing Filters for Analysis

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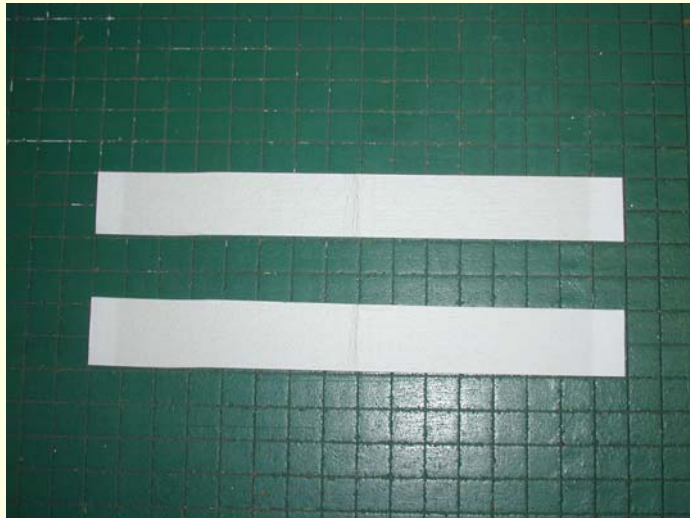
- Filters are equilibrated and weighed
- Filters are logged and cut in two one inch strips for analysis



# Preparing Filters for Analysis

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- Filter strips are packaged in an envelope with information required by the lab on the front and prepare for transport to PCRWRD lab



Los Amigos	8/5/2008
Filter #:	Q4113772
Avg. Flow (Lpm):	1156.8
Vstd (Liters):	1523359.0
Std Conc. ( $\mu\text{g}/\text{m}^3$ ):	21.3
Total Sample Time (min):	1440.6

# Transport to PCRWRD lab

- PDEQ drives filter strips to PCRWRD lab
- PCRWRD signs chain of custody to note receipt of filters

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR FILTER CHAIN OF CUSTODY

SAMPLER: Mike Draper 740-3861 FACILITY: Ambient Air Study

ALL SAMPLES START AT 03:00:00 (midnight-to-midnight)

NUMBER OF SAMPLES: 8

COMMENTS: \_\_\_\_\_

Location Name & Location Number	Ab Number	Sample Date Sample Time	Rep/Filter Air Filter Meas.
Chaparral M.S. 0002-0200	X Q0217667	4/22/2009 1443.0	X
Transpation Hwy. 0052-0700	X Q0217698	4/23/2009 1416.0	X
Sunyside H.S. 0032-0300	X Q0217699	4/24/2009 1409.0	X
Scottie #1 0052-0100	X Q0217696	4/25/2009 1429.6	X
Conflik #2 0052-0500	X Q0217696	4/25/2009 1443.1	X
Los Amigos 0052-0600	X Q0217694	4/29/2009 1432.2	X
Los Ninos 0052-0400	X Q0217693	4/27/2009 1443.4	X
Chaparral M.S. 0052-0200	X Q0217692	4/28/2009 1446.6	X

\* Arsenic, Cadmium, Cobalt, Chromium, Manganese, Nickel, Lead

*Mike Draper - 5-22-09*

Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

# Current Status

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- Filters are kept for at least two years or until the end of the study whichever is greater
- PCRWRD expects to be caught up with backlog by Sept 09
- All results have been non-detect (<0.265 ng)

# PDEQ Contact Information

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