

## VOC Sample Collection Chain of Custody Protocol

July 17, 2017

### Purpose

The purpose of this document is to unambiguously define the process for ensuring proper documentation of VOC canister samples triggered as part of air monitoring in the Peace River region. All parties associated with the sample collections and reporting are asked to follow the Chain of Custody Protocol.

This document is intended to be used (and updated accordingly) with the following document:

- Canister Change out Instruction – PRAMP 842 Station
- Canister Change out Instruction – PRAMP 986 Station
- Canister Change out Instruction – PRAMP Reno Station

### Canister Inventory Tracking Sheet

Maxxam will maintain and update the “Canister Inventory Tracking Sheet” spreadsheet. The purpose of this sheet is to keep track of which canisters are at site, when they expire, and when they have been triggered and collected. The spreadsheet includes the following:

- Canister ID
- Date Sent from Innotech Alberta Lab (if available)
- Date Evacuated
- Expiry Date (3 months after Date Evacuated)
- Canister Status (Current/Inventory)
- Date Triggered
- Action Required (if the canister is expired or close to expiry and needs to be sent back to Innotech)

### Canister Event Tracking List

Maxxam will maintain and update the “Canister Event Tracking List” spreadsheet. The purpose of this sheet is to keep track of all the canister events. The spreadsheet includes the following:

- Date/Time and NMHC concentration of a canister event
- Date/Time of canister being changed out
- Name of the person who performs canister change out

## Chain of Custody Process

	Notification of Trigger Events	Canister Change-Out	Tracking of Canister Events
Maxxam	<p>Maxxam includes note in the daily email indicating if a canister has been triggered or not, as well as the time and concentration for any canister triggered.</p> <p>Maxxam sends a canister change out request by email to local trailer contacts as well as PRAMP Technical Program Managers (TPM) as soon as the canister event is identified.</p> <p>Maxxam resends the canister change out request email to original email list as well as call personnel listed on the Call Down List if no response within 4 hours.</p> <p>Maxxam escalates to PRAMP TPM if no response within 24 hours of initial notification.</p>	<p>Provides technical assistance if required during change-out.</p> <p>Chris Wesson 780-446-2724</p> <p>Limin Li 403-483-5295</p>	<p>Maxxam to maintain Canister Inventory Tracking Sheet for each trailer.</p> <p>Maxxam to provide the up-to-date Canister Event Tracking List by the end of the month each month to PRAMP TPM.</p>
PRAMP	PRAMP Committee is included on the daily email distribution list.		
PRAMP TPM	PRAMP TPM to be contacted by Maxxam if no response from Local Trailer Contacts within 24 hours of initial notification.		
Call Down List Contacts	Receives alert from Maxxam and confirms with Maxxam the canister will be changed.	<p>Changes out canister according to Canister Change out Instructions posted in the trailer.</p> <p>Fills in the Analysis Request Form.</p> <p>Sends the canister to Innotech Lab.</p> <p>Notify Maxxam when the canister will be changed and confirm the time the canister is changed.</p>	
Innotech Alberta Lab			<p>Conducts analysis. Sends results to Karla, PRAMP TPM and PRAMP Office Manager.</p> <p>Results to include:</p> <ul style="list-style-type: none"> <li>* Analytical results (PDF and Excel)</li> <li>* Canister Analytical Request Form (copy from the field)</li> </ul>

## Canister Trigger – Contact List

	PRAMP 986 Station	PRAMP 842 Station	PRAMP Reno Station
<b>Maxxam –</b> Sends out alert in daily data	<b>Adewunmi Adekanmbi</b> 403-219-3677 aadekanmbi@maxxam.ca  <b>Michael Espiritu</b> 587-439-1525 mespiritu@maxxam.ca  <b>Limin Li</b> 403-219-3679 LLi@maxxam.ca	<b>Adewunmi Adekanmbi</b> 403-219-3677 aadekanmbi@maxxam.ca  <b>Michael Espiritu</b> 587-439-1525 mespiritu@maxxam.ca  <b>Limin Li</b> 403-219-3679 LLi@maxxam.ca	<b>Adewunmi Adekanmbi</b> 403-219-3677 aadekanmbi@maxxam.ca  <b>Michael Espiritu</b> 587-439-1525 mespiritu@maxxam.ca  <b>Limin Li</b> 403-219-3679 LLi@maxxam.ca
<b>Call Down List –</b> Phone Call from Maxxam until someone has confirmed the canister will be changed	<b>Jason Parker</b> 780-618-4333 Jason.parker@shell.com  <b>Kate Humphreys</b> 780-617-4967; 780-624-6830 Kate.humphreys@shell.com  <b>Robyn Kutz-Semeniuk</b> 780-617-7937 Robyn.KutzSemeniuk@shell.com  <b>Tye Barrett</b> 780-886-2994; 780-624-6826 Tye.barrett@shell.com	<b>Travis Tiffin</b> 780-618-5098 travis.tiffin@pennwest.com  <b>Roland Young</b> 780-625-6275 roland.young@pennwest.com  <b>Greg Kent</b> 780-618-8904 greg.kent@pennwest.com  <b>Tom Bissell</b> 780-617-0131 tom.bissell@pennwest.com  <b>Art Laurin</b> 780-536-6570 art.laurin@pennwest.com	<b>Jesse Gauchier</b> 780-617-4347 jesse.gauchier@baytex.ab.ca  <b>John Hickley</b> <b>780-625-2057</b> <b>john.hickley@baytex.ab.ca</b>  <b>Reno South</b> Jesse Gauchier John Hickley 780-625-1402
<b>PRAMP TPM –</b> To be contacted if there is no response from Local Trailer Contacts within 24 hours of email	<b>Mike Bisaga / Lily Lin</b> 780-266-7068 587-225-2248 pramptech@prampairshed.ca	<b>Mike Bisaga / Lily Lin</b> 780-266-7068 587-225-2248 pramptech@prampairshed.ca	<b>Mike Bisaga / Lily Lin</b> 780-266-7068 587-225-2248 pramptech@prampairshed.ca



## Example of Analysis Request Form



**InnoTech**  
AI RBRTA  
 Highway 16A & 75 Street  
 PO Bag 4000  
 Vegreville, AB T9C 1T4  
 Environmental Analytical Services  
 Phone: (780) 632-8403 Fax: (780) 632-8620

EAS CANISTER  
CHAIN OF CUSTODY FORM

Affix AITF Label Here

Date Received- Lab Use Only

<b>Client Contact Details:</b> Contact: <u>Karla Ressor, Michael Bisaga/ Lily Lin</u> Company: <u>PRAMP Airshed</u> PO#: <u>PRAMP 986 Station</u> Address: <u>Latitude 56.376056N, Longitude 116.940704W</u> Telephone: <u>403-8072995, 780-2667068/587-2252248</u> Email: <u>karla@prampairshed.ca, pramptech@prampairshed.ca</u>		<b>RUSH (Surcharge)</b> <input type="checkbox"/> Invoice Instructions: Send to "officemanager@prampairshed.ca", karla@prampairshed.ca, pramptech@prampairshed.ca Attention: PRAMP Office Manager Any correspondence related to canister analysis, send the information to karla@prampairshed.ca and pramptech@prampairshed.ca InnoTech Contact: <u>Graham Knox</u> Phone: <u>780-6328403</u> Cell: <u>780-6321519</u> Email: <u>Graham Knox@innotechalberta.ca</u>			
Unique Sample ID (As it will appear on the report)	Canister Number	Sample Description/Source	Date/Time Sampled		Analysis Requested
	Sampler ID		From/To	Time (24 Hr) (MST)	
PRAMP_986-		<b>Collected By:</b>  <b>Company:</b>  <b>Contact Number:</b>  <b>Date/Time (MST) Collected:</b>			AIR C1C4, AIR VOC, AIR RSC

## Example of Canister Change Out Instruction

### PRAMP – PEACE RIVER AREA MONITORING PROGRAM

## Canister Change out Instructions

### 986 Station


September 2017

#### Trigger Notification

Operator has been notified that the canister needs to be changed. The notification from Maxxam must include the date and time the canister was triggered at (this is the Date/Time Triggered).

#### Procedure for Collecting Canister

- 1) Check Canister pressure (if it is close to ZERO that means canister was triggered).
  - a. If the canister still has a negative pressure of -10" Hg or greater, the canister has likely not collected the sample properly and is not representative. The canister should be replaced and sent into InnoTech Alberta Lab with an explanation.
- 2) Shut off canister valve.
- 3) Undo the 9/16" nut directly above the canister's valve
- 4) Cap canister and put in box for shipping.
- 5) Fill out Canister Label:

 Canister ID: <u>12245</u> <small>This cleaned canister meet or exceeds TO-15 Method Specifications</small>	Sample ID: <u>PRAMP_986-20160101</u>	
	Sampled By: _____	
Proofed by: <u>InnoTech</u> on <u>Jan 1, 2016</u> Evacuated on: <u>Jan 1, 2016</u> Canister Expiration: <u>3 months post evacuation</u> <small>Laboratory Contact Number 780 452-8468</small>	Starting Vacuum: _____ "Hg	End Vacuum: _____ "Hg

- **Sample ID:** This has to match the Sample ID on the Canister Analytical Request Form. This needs to be a unique identifier for the sample, so please follow this naming convention:
  - **PRAMP\_986 – YYYYMMDD**  
The date is the date the canister was triggered (included in the alert from Maxxam); this is usually the day before the canister is collected.
- **Sampled By:** Name of Operator switching out the canister
- **End Pressure:** Please fill this out in psig or "Hg, just note which units. If the canister sampled properly, this should be close to 0.

6) Fill out Canister Analytical Request Form:



Highway 16A & 75 Street  
 PO Bag 4000  
 Vegreville, AB T9C 1T4  
 Environmental Analytical Services  
 Phone: (780) 632-8403 Fax: (780) 632-8620

EAS CANISTER  
CHAIN OF CUSTODY FORM

Affix AITF Label Here

Date Received - Lab Use Only

<b>Client Contact Details:</b> Contact: <u>Karla Ressor, Michael Bisga/ Lily Lin</u> Company: <u>PRAMP Airshed</u> PO#: <u>PRAMP 986 Station</u> Address: <u>Latitude 56.376056N, Longitude 116.940704W</u> Telephone: <u>403-8072995, 780-2667068/587-2252248</u> Email: <u>karla@prampairshed.ca, pramptech@prampairshed.ca</u>	<b>RUSH (Surcharge)</b> <input type="checkbox"/> Invoice Instructions: Send to "officemanager@prampairshed.ca", karla@prampairshed.ca, pramptech@prampairshed.ca Attention: PRAMP Office Manager Any correspondence related to canister analysis, send the information to karla@prampairshed.ca and pramptech@prampairshed.ca <hr/> InnoTech Contact: <u>Graham Knox</u> Phone: <u>780-6328403</u> Cell: <u>780-6321519</u> Email: <u>Graham.Knox@innotechalberta.ca</u>
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Unique Sample ID (As it will appear on the report)	Canister Number	Sample Description/Source	Date/Time Sampled		Analysis Requested
	Sampler ID		From/To		
			Date (dd/mm/yy)	Time (24 Hr) (MST)	
PRAMP_986-20160201	12345	Collected By: <b>TYE BARRETT</b>  Company: <b>SHELL</b>  Contact Number: <b>780-555-6666</b>  Date/Time (MST) Collected: <b>01/01/2016 @1600h</b>	01/01/2016	0900h	AIR C1C4, AIR VOC, AIR RSC

- **Sample ID:** This has to match the Sample ID on the Canister Label. This needs to be a unique identifier for the sample, so please follow this naming convention:
    - PRAMP\_986-YYYYMMDD
 The date to use here is the date the canister was triggered; this information will come from Maxxam.
  - **Canister Number:** The number showing on the canister. This should match the Canister Label.
  - **Collected By:** The name of the Operator switching out the canister. This should match the Canister Label.
  - **Company:** The company of the Operator switching out the canister.
  - **Contact Number:** The phone number of the Operator switching out the canister.
  - **Date/ Time Collected:** This is the date and time (MST) the Operator switched out the canister.
  - **Date/Time Triggered:** This is the date and time (MST) that the canister was triggered. Maxxam will provide this information when the alerts are sent out to change the canister.
- 7) Install a new canister.
  - 8) Ensure new canister is not expired. **Canisters are expired if it is more than 3 months since the evacuation date on the canister label.** If there are expired canisters, please package up the canister to send to AITF and prepare the Canister Analytical Request Form with the comment “unused canister past expiration date”.
  - 9) Remove the cap from the new canister and place the flow-regulator and tubing on top of the canister’s valve. Tighten the 9/16” nut to ensure an air-tight seal.
  - 10) Open the canister valve.
  - 11) Press the black reset button for at least 2 seconds
  - 12) Fill out the Trailer Log-Book form according to example below:

**Trailer Log-Book Example:**

Date/Contact	Journal Entry
Feb 1, 2014 – Tye Barrett (587)-555-6666	Removed Canister ID: H3281 @ 17:08 @ Opsi Sample ID: PRAMP_986-20160201  Installed Canister ID: H2800 @ 17:11 @ -29 psi

**Technical Contact:** For problems/issues with the air monitoring trailer that require immediate assistance, please Chris Wesson at (780) 446-2724.

**Note: When a canister is triggered, the canister must be shipped to the Lab for analysis within 14 days so it does not pass the canister sample hold time. The sample hold time is 21 days.**