

Sample Management Process

This document describes the process by which environmental sample containers and environmental samples are collected in a country in Latin America or the Caribbean and the samples are analyzed by a NELAP certified laboratory in the United States. This process applies to all countries in the region where EMC has not yet identified an environmental laboratory suited to meet Chevron's requirements.

1. Contractor responsible for sample collection determines the number of samples and analyses needed for the site.
2. **Contractor requests sample kit form (Attachment 1).**
3. IAG prepares sample kit which includes pre-cleaned & certified sample containers (pre-preserved if necessary), labels for containers, chain of custody (COC) forms, bubble wrap to pack the samples, coolers, soil permit for the laboratory analyzing the samples, and Toxic Substance Control Act (TSCA) form.
4. IAG ships the sample kit via overnight courier to country where samples will be collected, in compliance with 49 CFR 173.4. The shipment includes commercial invoice and statement of temporary import.
5. IAG tracks sample kit and maintains communication with courier company until kit is delivered.
6. Contractor verifies that sample kit was received in good condition with proper number of sample containers.
7. **In countries where contractor is shipping samples for the first time, contractor most conduct a pre-sampling meeting with the local FedEx office manager (IAG will coordinate the meeting). During meeting with FEDEX, contractor will verify the list of documents needed to ship samples. In addition, the contractor should conduct a "Dry Run" shipment. This shipment should consist of no more than 3 samples with no real value to the contractor, but this shipment must mimic the process by which real samples will be sent.**
8. Once samples are collected, contractor will pack the coolers in strict accordance with packing and shipping SOP (**Attachment 2**).

9. The contractor places a copy of the laboratory's soil permit, TSCA form and FedEx Packaging Design Acceptance letter (**Attachment 3**) to the outside of the cooler. Without the following FedEx certification, local FedEx offices will not accept the coolers for shipment: "FedEx Packaging Design and Development has completed the packaging tests and concluded that the packaging configuration is acceptable to ship plastic coolers containing bagged, wet ice. Status of "Accepted" pertains to shipments both domestic and international. Shipments are certified for transportation within the FedEx network and FedEx agents for import into the United States".

10. The contractor provides IAG with the tracking number of the shipment and electronic copies of the COC forms via e-mail to maria@iaglabs.com or fax (954)-894-4501 in order to expedite log in of the samples.

11. The sample custody department of the laboratory will receive the samples and verify the condition of sample containers, cooler temperature, holding time, etc. In addition, sample custody will verify that sample labels and the COC are in agreement. A sample receipt check list is produced.

12. IAG should communicate to the contractor any anomalies observed upon receipt of the samples.

Note: Currently sample management is handled by IAG, an independent laboratory consulting company that provides additional services to EMC in Latin America and the Caribbean. These additional services are: independent third party data review, liaison between the contractors and the laboratory, and laboratory consultant to EMC. In addition, IAG has provided expert testimony to local regulatory agencies on behalf of EMC and its contractors.

Attachment 1

Sample Kit Request

IAG SAMPLING KIT REQUEST

Requested By:	Date:
FedEx or DHL acc # :	Phone:
Authorized by :	e-mail:

Attn:
Ship to:(Company Name)
Street Address:
City/State:
Phone:
Note:

Date Needed:

Site name/Project No.	Matrix	Quantity	Analyses Requested

For IAG use only

Tracking #	Notes:
Acc #	
# of coolers	
Documents Included	

PLEASE USE IAG CHAIN OF CUSTODY FORMS

Attachment 2

Packing SOP

SAMPLE PACKING

This section outlines how sample coolers should be packed for transport. Experience has demonstrated that use of hard plastic coolers and appropriate packing of each separate sample cooler is critical for maintaining the integrity of the samples upon receipt at the lab. Following these procedures will help limit potential for sample container breakage and maintain the cooler temperature within 2 degrees of 4°Celsius. A diagram of a packing sequence for a cooler is shown on Figure 1.

- Samples should be packed in plastic hard coolers
- Wipe cooler dry
- Line bottom of cooler with approximately 1" of padding (recycled newspaper).
- Insert large plastic bag (~20 gallon size) in cooler, and place about 1" of padding along the bottom of the bag.
- Place bags filled w/ice on top of the padding, all along the bottom of the bag. Or, solid cylinders of ice if they are sold in plastic bags. Each cylinder is approximately 12" in length by 4" in diameter.
- Insert cold sample bottles, individually wrapped in bubble wrap, in the bag, above the ice.
- Place bags filled with ice on top of the sample containers, and along the sides if there is enough space. As a rule of thumb, 25 to 30% of the volume of each cooler should be ice.
- Place an additional layer of padding (~1" thick) on top of the ice bags.
- Pull ends of plastic bag up, squeeze air out of bag, twist and knot shut the plastic bag
- Place an additional layer of padding (approx. 2 to 3" thick) on top of the plastic bag
- Place chain of custody forms inside a 1-gallon Ziploc bag and tape the bag, on all sides, to the inside of the lid of the cooler with packing tape
- Close the cooler, and seal with packing tape, wrapping the tape vertically around the cooler in two places.

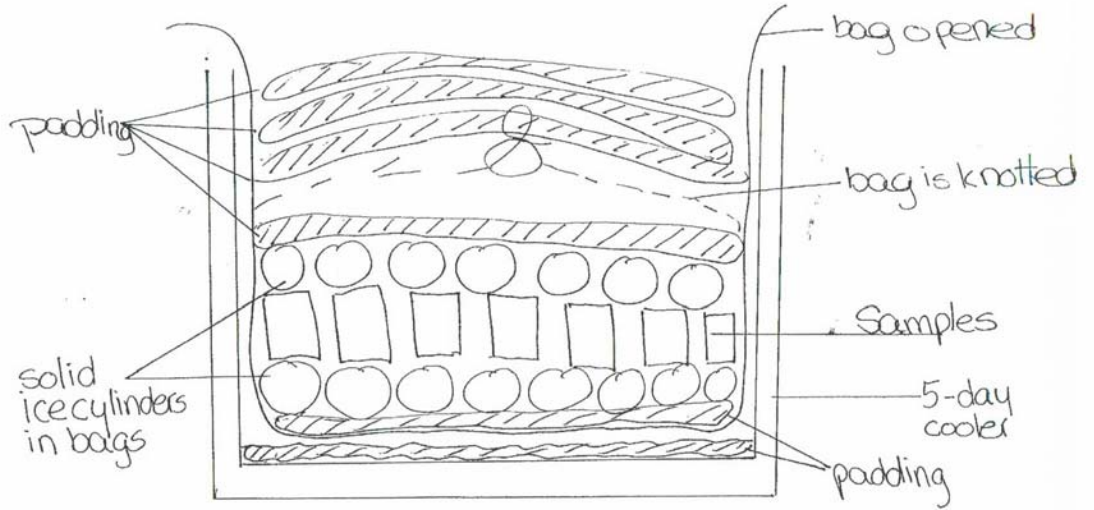
Sample Cooler

P.3

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Attachment 3

FEDEX Certificate

February 18, 2009

Severn Trent Labs (STL)
4101 Shuffel Dr. NW
North Canton, OH 44720

Attention Severn Trent Labs:

The following packaging is acceptable for shipping:

Product information:

Environmental Samples / Water Soil

Outer container:

Hard plastic cooler with handles

Closure method:

Multiple strips of plastic pressure sensitive tape

Inner packaging:

Samples wrapped in bubble wrap. Wet ice inside sealed plastic bag. With newspaper placed in 4.0 mil thick plastic liner bag sealed with a plastic cable-tie. Additional newspaper on top and bottom.

FedEx Packaging Design and Development has completed the packaging tests and concluded that the packaging configuration is acceptable to ship plastic coolers containing bagged, wet ice. Severn Trent Labs (and all branches or divisions of its network) status of "Accepted" pertains to shipments both domestic and international. Shipments are certified for transportation within the FedEx network and FedEx agents for import into the United States destined for STL locations.

Shipments must be properly sealed with the appropriate amount of absorbent material and exhibit no sign of leakage upon consignment to FedEx or FedEx authorized agents. Wet ice is to be contained in plastic bags and securely sealed within the plastic cooler.

David Arbeit
Packaging Engineer, CPLP
FedEx Packaging Design and Development

List of Shipping Documents

The following list of documents is required to import the samples into the United States:

- FEDEX shipping labels
- FEDEX Commercial Invoice (the reported value CANNOT be \$0, it must have a value)
- TSCA form (for water samples)
- Laboratory's Soil Import Permit (for all samples)
- FEDEX Packing Certification letter

Please note that in some countries the local FEDEX office may require additional forms to accept the samples. The above list needs to be verified with the local FEDEX office at the time of the pre-sampling meeting.