

**Volatile Organic Contaminants (VOC) Samples  
Collected at Points-of-Entry (POE)**

COMPLIANCE SAMPLE COLLECTION INSTRUCTIONS

for

KANSAS PUBLIC WATER SUPPLY SYSTEMS

USING THE KANSAS HEALTH & ENVIRONMENTAL LABORATORIES



Kansas Department of Health and Environment  
Bureau of Water  
Public Water Supply Section

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## Volatile Organic Contaminants Sampling at Points-of-Entry (POE)

Compliance volatile organic contaminants (VOC) monitoring is part of the Phase II/V Rules. VOC monitoring requirements are stated in the Code of Federal Regulations 40 CFR 141.24, and can be found online at the Kansas Department of Health & Environment, Public Water Supply Section website <http://www.kdheks.gov/pws> .

VOC monitoring at POEs includes the following analytes.

1,1,1-TRICHLOROETHANE  
1,1,2-TRICHLOROETHANE  
1,1-DICHLOROETHYLENE  
1,2,4-TRICHLOROBENZENE  
1,2-DICHLOROETHANE  
1,2-DICHLOROPROPANE  
BENZENE  
CARBON TETRACHLORIDE  
CHLOROBENZENE  
CIS-1,2-DICHLOROETHYLENE  
DICHLOROMETHANE  
ETHYLBENZENE  
ETHYLENE DIBROMIDE  
O-DICHLOROBENZENE  
P-DICHLOROBENZENE  
STYRENE  
TETRACHLOROETHYLENE  
TOLUENE  
TRANS-1,2-DICHLOROETHYLENE  
TRICHLOROETHYLENE  
VINYL CHLORIDE  
XYLENES, TOTAL

The purpose of this document is to provide instructions for handling sampling kits from the Kansas Health and Environmental Laboratories (KHEL) for collection of compliance monitoring VOC samples. A Phase II/V Rules Survival Guide is available online at the KDHE, Public Water Supply Section website <http://www.kdheks.gov/pws/> , and is a more extensive guide on all facets of the Phase II/V Rules.

The Kansas Health & Environmental Laboratories (KHEL) is part of the Division of Environment under the Kansas Department of Health & Environment (KDHE).

Upon receipt of a sampling kit, it is best not to assume what is inside. Open and review the contents to

- Check the sample collection date that is on the sample submission form, and
- Check that the sample submission form shows your system's name and federal ID #.
- Place the ice packs that are included in the kit in the freezer so they will have time to freeze before shipping collected samples

#### **What Is In A VOC Sampling Kit from KHEL?**

- Two 40cc clear glass vials with preservative
- Cooler
- Ice packs
- Sample submission form with the bottom half containing 8 small labels and two address labels.

The sample collector is responsible for making sure that each bottle in a sampling kit has one of the small labels from its sample submission form placed upon it. This ensures that the sample bottle and the sample submission form will stay with each other from time of collection all the way until the sample results are reported. Do not be concerned about any leftover, small labels; unused ones can be left on the form.

#### **Collecting and Shipping the VOC Sample**

The form inside the sampling kit will specify a time frame in which to collect the sample. The Collect On date is a suggestion of which week to collect the sample. The sample must be collected before the end of the compliance monitoring period (usually, within the calendar quarter or within the calendar year) or the system may incur a Failure to Monitor Violation.

#### **Collecting**

Before collecting the sample, read through the sample collection instructions that came in the sampling kit. For questions or concerns about the sample collection process, please call KHEL at 785-296-1620 for assistance.

Samples should be collected on a Sunday, Monday, or Tuesday. The samples should be placed in a refrigerator to chill overnight. Do not place in a freezer or the bottles may bust.

VOC compliance monitoring samples are collected from finished water. Listed on the sample submission form is the Site ID number where the sample needs to be collected. At the sample collection site there should be a STATE OF KANSAS tag with a number that matches the Site ID number on the form. The Collection Location is the name of the site as it exists in the KDHE database, and it will often reflect which water sources flow to that particular POE.

### **Shipping**

Before packing, place the adhesive address labels from the sample submission form onto the shipping box. Place into the styrofoam cooler the labeled containers with the collected samples, the completed sample submission forms, and the ice packs. If collecting multiple samples from multiple collection sites, be sure that bottles are shipped in the same box as their corresponding sample submission form. Tape the box shut for shipping and ship as soon as possible after collection. The samples must be prepared for analysis within 7 days from the date of collection, and they must also keep their chilled temperature during transportation to the laboratory. Water systems are encouraged to pay for additional courier services (next day or priority shipping) to ensure their sample will be delivered to KHEL before they expire due to collection date or temperature. It is highly recommended that VOC samples not be shipped after a Wednesday.

### **Summary of VOC Sampling**

- Upon receipt of a sampling kit, it is best not to assume what is inside. Open and review the appointed sample collection date that is on the sample submission form.
- Check that the sample submission form shows your system's name and federal ID #.
- Place the ice packs in the freezer
- Follow the sample collection instructions that came with the sampling kit.
- Each bottle in a sampling kit needs a barcode label from its sample submission form placed upon it so that it will stay matched with the correct sample submission form from time of collection until the time results are reported.
- Fill out the sample submission form neatly.
- Once collected, place the samples in a refrigerator to chill overnight
- Use the address label from the sample submission form for shipping the collected sample back to the lab.
- Include the completed sample submission form in the cooler with the corresponding samples and ice packs.
- Ship using courier services such as next day or priority shipping.
- Do not ship samples after Wednesday.

Calling KDHE with questions or concerns you may have is highly encouraged.

For questions about your VOC sampling kit or the sample collection process, please call KHEL at 785-296-1620.

For questions about VOC compliance or your compliance monitoring schedule, please call KDHE's Bureau of Water, Public Water Supply Section at 785-296-6434.