

**Inorganic 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

June 2017

## **Inorganic Sampling at Points-of-Entry (POE)**

Compliance inorganic monitoring is part of the Phase II/V Rules. Inorganic monitoring requirements are stated in the Code of Federal Regulations 40 CFR 141.23, and can be found online at the Kansas Department of Health & Environment, Public Water Supply Section website <http://www.kdheks.gov/pws> .

Inorganic monitoring at POEs includes the following analytes.

ALKALINITY, TOTAL  
ANTIMONY, TOTAL  
ARSENIC  
BARIUM  
BERYLLIUM, TOTAL  
CADMIUM  
CALCIUM  
CHLORIDE  
CHROMIUM  
CONDUCTIVITY @ 25 C UMHOS/CM  
FLUORIDE  
HARDNESS, TOTAL (AS CaCO<sub>3</sub>)  
IRON  
MAGNESIUM  
MANGANESE  
MERCURY  
NICKEL  
NITRATE  
PH  
PHOSPHORUS, TOTAL  
POTASSIUM  
SELENIUM  
SILICA  
SODIUM  
SULFATE  
THALLIUM, TOTAL  
TOTAL DISSOLVED SOLIDS

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 inorganic 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 #.

### **What Is In An Inorganic Sampling Kit from KHEL?**

- For Nutrients – 250 mL brown plastic bottle with preservative
- For Heavy Metals – 250mL round, white plastic bottle with preservative
- For Minerals (such as arsenic and selenium) – 250 mL white plastic bottle with preservative
- For Nitrate or Fluoride – 125cc round, white plastic bottle
- 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 Inorganic 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.

Inorganic 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 shipping box the labeled containers with the collected samples and the completed sample submission forms. Tape the box shut for shipping and ship as soon as possible after collection.

### **Summary of Inorganic 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 #.
- 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.
- 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 package with the sample, and ship as soon as possible after collection.

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

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

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