



# Board of Public Utilities MEMORANDUM

**TO:** Me  
**FROM:** Joe  
**DATE:** Jar  
**SUBJECT:** PC  
He

## **Background**

The Kansas City, Kansas, Board of Public Utilities, Board of Public Utilities Unified Government of Wyandotte, Board of Public Utilities, Board of Public Utilities both electricity and drinking water, Board of Public Utilities, Board of Public Utilities stations and two drinking water plants, Board of Public Utilities, Board of Public Utilities water customers in our Wyandotte County.

To serve our customers, we maintain 28 electrical substations and 28 electrical transformers.

Polychlorinated Bi-phenyls (PCB) are present in a few of the transformers because they impact transformer oil waste disposal.

This testimony provides the following:

- Responses to PCB-related
- BPU Spill Response Procedure
- Photos of electrical transformers

## **1. Tell the Committee the extent and their location throughout your system.**

BPU utilizes “Transformer Management System” to track transformers on its electrical system. The system includes serial number, location, history, and status. A Distribution transformer and substation to the present is included in the T

In addition, each transformer is sampled and the PCB concentration is known prior to junked transformer shipment off site.

**2. Tell the Committee the number of transformers that contain PCBs in the distribution system.**

Estimates on the number of transformers in the distribution system are difficult to ascertain. Based on the numbers of transformers returned to our transformer shop (Shop) from the system, we see that the vast majority of transformers contain PCB levels that are less than detectable.

Based on the results of analysis for each transformer at the Shop, we estimate that approximately 90% of all our transformers contain mineral oil *only* at less than detectable PCB concentrations. We further estimate that 9% contain PCB concentrations in the 0-49 ppm range and 1% in the 50-499 ppm range.

**3. Tell the Committee what problems you have disposing of transformers containing PCBs when they are replaced.**

BPU's greatest concern is not our own handling of PCB wastes or articles, but the final, off-site disposal locations. In recent years BPU has entered *de minimis* settlement agreements with the USEPA for the cleanup of two PCB-contaminated sites formerly operated as PCB waste disposal companies:

- PCB Treatment Inc. Site - Kansas City, Missouri and Kansas City, Kansas (\$193,841.24)
- Osage Metals Site – Kansas City, Kansas (\$4,173.00)

BPU makes every effort to ensure that its waste shipments are transported, managed, and disposed of correctly. However, we believe that better, continuous feedback about the results of regulatory inspections, notices of violation, administrative fines, or other judgments rendered against waste disposal companies would help us track and make better decisions about the companies we chose to work with.

**4. Describe for the Committee your actions to replace those transformers containing PCBs over the past ten years, the net result of those actions, and your plans for the future regarding transformers containing PCBs.**

Since 1995, BPU verifies the PCB concentration of all transformers brought offline prior to shipment offsite. The Transformer Management System (TMS) database is consulted prior to testing to identify existing analytical data. If no data is available, it is tested for PCB content. PCB transformers and Non-PCB transformers are “junked” and sent to Solomon for disposal. All “junked” PCB transformers are accounted for on the Annual PCB Log at the end of the year.

BPU plans to continue rigorous monitoring and proper disposal of all junked transformers.

### **BPU Spill Response Procedures Checklist (Attached)**

The checklist used by BPU's Environmental Services Department to investigate and report spills is attached.

### **Photos of electrical transformer environmental work (Attached)**

The attached photos show a typical transformer spill situation (car into pole) and an atypical transformer spill situation (tornado aftermath).

# **SPILL RESPONSE PROCEDURES**

Environmental Services Department  
Board of Public Utilities  
Kansas City, Kansas

## **ALL SPILLS**

Environmental Services Department will respond to all spills that are reported to us.  
The ESD responder will be responsible for ensuring that the spill is remediated, reported and documented properly.  
All spills will be photographed and color copies, with site name, spill date and relevant info noted on the photos.  
All spill responses will be logged on the spill tracker form in the file room.  
All spills will be reported via fax to KDHE NEDO  
The spill file will contain an MSDS for the material spilled.  
GPS coordinates

## **SPILLS TO WATER SURFACE**

Spills that enter ditches, creeks, storm drains or other surface waters will be reported by phone to NRC and KDHE.  
TCRs will be used to document all calls to regulators (note spill report numbers and name/title of regulator).

Signed, detailed field notes of the BPU's spill response and remediation activities will be maintained for inclusion into the spill report file.

## **TRANSFORMER SPILLS**

Transformers will be assumed to contain PCBs until proven otherwise.  
The PCB status for all transformer spills will be documented in the spill file:  
TRDS printouts  
Field screening results (Lot No. and Exp Date) Comparison to Transformer Mfgr PCB Table,

# **FILE CHECKLIST for SPILL REPORTS**

## **ALL SPILLS**

Completed KDHE Spill Report Form  
Fax cover sheet to KDHE NEDO  
Spill photographs with site name, spill date and relevant info  
Copy of MSDS for spilled material  
GPS Coordinates  
Log response on spill tracker form

## **SPILLS TO WATER SURFACE**

Telephone Conversation Records for calls to NRC and KDHE.  
Field Notes

## **TRANSFORMER SPILLS**

Mfgr, Mfgr Date, SN for transformer spills  
Documentation of PCB status:  
• "TRDS" printouts  
• Field screening results (Lot No. and Exp. Date)  
• Comparison to Transformer Mfgr PCB Table  
• Analytical results



**“Typical” Transformer Spill Situation (1995)**

**Vehicle into utility pole with mounted transformer**



**“Atypical” Transformer Spill Situation (2003)**

**In the aftermath of the May 2003 tornado, Curt Deitz, BPU Senior Environmental Scientist, uses a portable GPS to verify the coordinates of a transformer buried in the debris.**

