



PCOC LISTS

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Re-Visited



Potential Contaminants of Concern



The Project

NEED

- APs have different opinions on what PCOC apply to industrial activities
- Fill, waste oil, gas stations, dry cleaners
- Variety of resources (EPA, Health Canada etc)

The Project

SCOPE

To create a guidance document outlining the normal PCOC associated with the most common commercial industrial land use activities

Topics and Challenges

- Professional judgement vs. checklist
- Crowd sourcing / Wiki format
- Differences between references
- Matrix vs. text
- APEC vs. Schedule 2 Uses
- Omnibus
- Emerging contaminants
- What is useful?



Text Version

- Guidance document
- List of PCOC for 25 most common Schedule 2 Activities
- Not exhaustive
- Requires judgement
- Provides references
- Proposes “primary / secondary”

B4 – Electrical Transmission or Distribution Substations

Electrical substations contain transformers and other electrical equipment that may contain or have previously contained oils, PCBs, or tetrachloroethylene. Vegetation is a threat to equipment and underground grounding wires and is often aggressively controlled with herbicides.

PCOC Substance Class	Activity/Source	Comments
Petroleum hydrocarbons	Transformer oil	LEPH and HEPH
Herbicides	Vegetation control	e.g., atrazine, bromacil, 2,4-dichlorophenoxy acetic acid (2,4-D), diuron, glyphosate, linuron, simazine, tebuthiuron, among others
PCBs	Liquid dielectrics in transformers and capacitors	Most common pre-1980. PCB-containing equipment remains in use in some electrical transmission and distribution facilities until 2025.
Chlorinated aliphatics		Tetrachloroethylene and breakdown products - mostly used post-1980
1,2,4-trichlorobenzene		1,2,4-trichlorobenzene and breakdown products.
Metals	Handling and storage of cable and electrical components, herbicides.	Particularly arsenic (from herbicides), copper and lead

Primary/Secondary

- Loosely used by most consultants
- “if you don’t find this, you won’t find that”
- Remediation/delineation drivers

What's Missing

- Moves the ball, but far from perfect...or final
- Doesn't address “we never or seldom find this”
 - e.g. chlorinated solvents in soil/gw at service stations
 - Glycols in groundwater
 - No literature comes from experience, how to harness
 - Novel contaminants lack experience base
- Remediation/delineation drivers
- MOE “Complete” site characterization goal

What's Next?

- Technical Review Committee
- Membership distribution
- Feedback on draft
- Revisions
- Use or contaminant Wikis?
- Repeat?



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