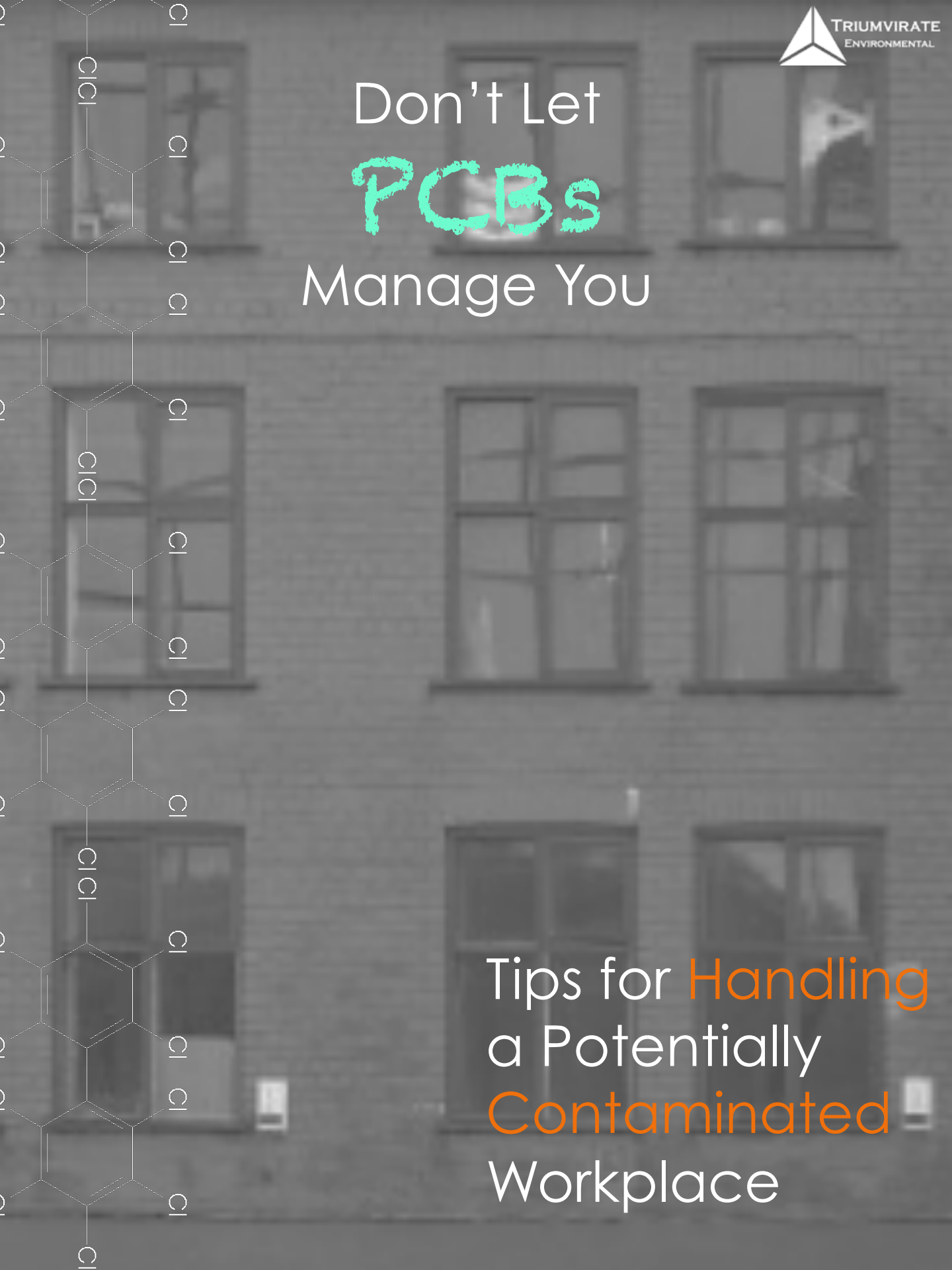
TRIUMVIRATE
ENVIRONMENTAL
Don't Let
PCBs
Manage You
Tips for Handling
a Potentially
Contaminated
Workplace

About the Expert

TRIUMVIRATE ENVIRONMENTAL

Craig Sasse has worked at Triumvirate Environmental for over 6 years and has been environmental consultant for over 18. He performs environmental consulting and engineering services to assess, manage and mitigate environmental liability. He has done PCB consulting for some of the top Universities in the U.S.

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Introduction

Polychlorinated biphenyls (PCBs) in building material are in the news everyday. The **potential health risk and liability**make them a wide-spread concern of EH&S staff, employees, building owners and construction .

Because the EPA guidance and regulations on the testing of potential PCB-containing materials is written as a recommendation rather than requirement, many**are left with ambiguity in navigating through this complex, expensive, and time-consuming issue**.

In this guide you will **learn best management practices** to help you easily navigate through the world of PCBs.

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What are PCBs?

Polychlorinated biphenyls (PCBs) **are man-made chemicals that had various uses, includingthe manufacturing of building materials** between the 1950's and the 1970's. During this time, PCBs were used as plasticizers and were added to various building materials to increase flexibility and durability. PCBs were banned from use in manufacturing in 1979; however, they remain in many buildings built or renovated between 1950 and 1979.

What properties do PCBs have?

Desirable commercial properties of PCBs - **why they used to be used in manufacturing**:

- Chemical stability
- Heat stability
- Non-flammability
- High boiling point
- Do not conduct electricity
- Variable viscosity

Fast Facts

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Where are PCBs found?

- Transformers
- Capacitors
- Hydraulic fluids
- Oil-based paints
- Fluorescent light ballasts
- Lubricating & cutting oils
- Floor finishes
- Fire retardants
- Thermal insulation materials (foam, felt)
- Caulking & grout
- PVC coatings for electrical wire & components
- Carbonless copy paper
- Inks and dyes
- Adhesives/ mastic

Where are they regulated?

The Toxic Substances Control Act (TSCA, 15 USC Chapter 53) granted EPA the authority to create a regulatory framework for control methods to prevent chemicals from posing unreasonable risk. **The regulatory framework for PCBs is found in 40 CFR 761.** This prohibits and sets forth requirements for PCB manufacture, processing, and distribution in commerce. The regulation also specifies storage and disposal requirements of PCBs and PCB items. **It governs owners, operators, and persons conducting cleanup of PCB contaminated property.**

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The first step in managing PCBs is to take an in-depth inventory of all buildings under your management. This could consist of a school system, a group of municipal buildings, a college campus, or a real estate portfolio**. The inventory should include an evaluation of the age of the building, type of construction, and any renovation history**. Next, inspect and inventory all suspect materials in "pedigree" buildings.

Questions to Ask:

- **Was the commercial building built between 1950 and 1979?**
- **Were there renovations completed between 1950 and 1979?**
- **What materials are suspect?**
- **Where are suspect materials?**
- **Will renovations disturb suspect materials?**
- **How much suspect material will be disturbed?**

If you were to answer "Yes" to the first two questions, then it is possible that the building was constructed using PCB-containing materials.

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After you've inventoried the existing structures, it is important to review upcoming, planned construction and renovation projects. Below are some questions to ask yourself.

Is the disturbed building(s) scheduled to have the suspect caulking, such as windows replaced, as part of an energy-saving project in the near future?
If so, focus your efforts on understanding the inherent risks in the widow replacement renovation. If the windows were installed before 1979, it is very likely that the caulking and even glazing used in construction contained PCBs. Work may be adjusted to avoid liability.

Was that caulking used on a porous surface, such as brick or concrete?
If so, the PCBs could have leached into the porous materials. Focus your immediate efforts on the projects that are already planned, and ensure that they will be completed in a safe and compliant fashion. Solving PCB questions before construction commences is the only way to keep the contractors doing the work and the people occupying the building safe.

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How do you handle it?

All generators of waste are responsible for accurately characterizing waste per TSCA regulations. Despite this mandate, some generators are willing to take on the risk of mischaracterization and choose to assume that their materials are PCB containing. Often times, this decision is made with the thought that **treating all materials as PCB containing will reduce cost by not triggering TSCA required remediation of all the PCB contamination.**

However, treating materials as something they have not been characterized as is a risky business. Facilities receiving the waste have the right to test it upon receipt before treating and disposing of the waste. **If the waste is tested and the disposal facility realizes the waste has been inaccurately treated, the facility will not accept waste.** This **can be costly for the generator** and can open it up for liability and more expenses.

Manage Construction

Another factor that needs to be considered is the health of employees. Often, unsuspecting contractors are dealing with this potentially hazardous material during construction, renovation, and maintenance. **Depending on the treatment and characterization of this material employees or subsequent occupants may experience chemical exposure and ultimately lead to great liability and potentially legal action.**

CAUTION:

You are not obligated to test.
If you do decide to perform a PCB analysis, you are required by TSCA to act if results show levels > 50 ppm

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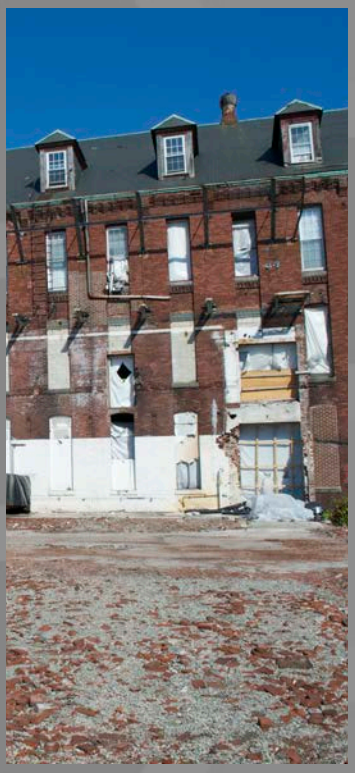
Use Consulting

PCB building materials management and projects are **complex, multi-level endeavors that require tight oversight, expert knowledge, skilled labor, and a means of safe removal and disposal.** Contracting with an experienced consultant will be invaluable**. Utilize a team with PCB-specific experience - one that that can manage the project from inventory, to risk assessment and mitigation, to removal and disposal.** An experienced consulting team will be proactive in inventorying materials, management of PCB waste, and budgeting; which leads to reductions in exposures, ensured compliance and safety, and avoidance of costly surprises.

Quotes for PCB removal services will vary; however, it is imperative to partner with an experienced vendor who has a history of successfully completed PCB remediation projects.



Learn About Our Services

Triumvirate Environmental has a team of PCB experts with several decades of field experience. Triumvirates PCB services include:

- **PCB Sampling and Testing**
- **PCB Risk Assessments**
- **PCB Remediation Plan Development**
- **PCB Removal and Disposal**
- **And More**

Click the links below to learn more about our PCB services and programs.

Learn More About Our PCB Services Here

Request a PCB Consultation