



**DATE:** March 11, 2019

**TO:** Council Sustainability Committee

**FROM:** Director of Utilities and Environmental Services

**SUBJECT:** PCBs Management for Demolition Projects

## **RECOMMENDATION**

That the Committee reviews and comments on this report and makes a recommendation to Council regarding revisions to the Municipal Code to include an article to control Polychlorinated Biphenyls (PCBs) from entering the storm drain system from demolition projects.

## **SUMMARY**

The Municipal Regional Permit (MRP) mandates the control of PCBs from entering the storm drain system and polluting the San Francisco Bay. Compliance with the mandate requires appropriate management of materials during demolition projects. This report provides a summary of the mandate to control PCBs in demolition debris and recommended actions to comply with the mandate.

## **BACKGROUND**

PCBs were once widely produced as a common coolant and insulating fluid for a variety of electrical products such as transformers and capacitors. PCBs were also used in oils, lubricates, coatings, sealants, adhesives, and paper. PCBs are widespread, do not easily break down or degrade, and readily penetrate skin. Due to their persistence in the environment from leaking equipment and exposure from the abundance of manufactured products over several decades, studies have found the lasting effects of PCBs on humans and wildlife. PCBs are probable human carcinogens and have been shown to cause cancer in animals. Historically, per the Environmental Protection Agency (EPA), studies have found increases in malignant melanoma and rare liver cancers in PCB workers. The EPA banned the production of PCBs in 1979. PCBs remain in electrical equipment due to economic need. The EPA regulates the remaining usage and disposal of PCBs.

PCBs have been detected in elevated levels in certain sport fish in San Francisco Bay. To improve water quality and to make the fish safer to eat, PCBs sources to the Bay need to be identified and controlled. Urban runoff is considered a significant pathway for PCBs into the Bay. Accordingly, regulatory agencies are requiring that Bay Area municipalities address sources of PCBs in stormwater runoff discharged to the Bay from municipal storm drain

systems. This regulation targets selected priority building materials that may contain relatively high levels of PCBs, especially in buildings constructed or renovated between 1950 and 1980. During demolition, these building materials and associated PCBs may be released to the environment and transported to the Bay by stormwater runoff. The priority building materials are caulking, thermal/fiberglass insulation, adhesive/mastic, and rubber window gaskets.

*Municipal Regional Permit* – The National Pollutant Discharge Elimination System (NPDES) program was established in 1972 by the Federal Clean Water Act (CWA). In 1986, the NPDES program was amended to regulate stormwater runoff and established a permitting structure for municipal discharge to the waters of the state. From 1990 to 2009, each municipality was regulated under countywide stormwater permits. The first *regional* stormwater permit, the Municipal Regional Permit (MRP), was adopted by the San Francisco Bay Regional Water Quality Control Board (Water Board) in 2009 and it was updated in 2015. The MRP regulates municipalities within Alameda, Contra Costa, Santa Clara, San Mateo counties as well as the cities of Fairfield, Suisun, and Vallejo and the Vallejo Sanitation and Flood Control District. The MRP, adopted as a five-year permit, requires stormwater pollution prevention control measures for both public and private properties and activities including municipal operations, development, inspections, response to illicit discharges, education and outreach, water quality monitoring, and specific controls for pollutants of concern identified by the Water Board.

## **DISCUSSION**

### *MRP Provision C.12.f – Manage PCB-Containing Materials and Wastes During Building Demolition Activities So that PCBs Do Not Enter Municipal Storm Drains*

Provision C.12.f of the MRP (see Attachment II) states the city shall develop and implement an effective protocol for managing materials with PCBs concentrations of 50 ppm (parts per million) or greater in applicable structures at the time such structures undergo demolition so that PCBs do not enter the storm drain system. Applicable structures include, at a minimum, commercial, public, institutional and industrial structures constructed or remodeled between the years 1950 and 1980 with building materials with PCBs concentrations of 50ppm or greater. Single-family residential and wood frame structures are exempt. PCBs are typically found in caulking, and other sealants used in and around concrete structures such as windows and door frames. PCBs from these structures can enter storm drains during and/or after demolition through vehicle track-out, airborne releases, soil erosion, or stormwater runoff.

To comply with Provision C.12.f, the City is required to develop and implement a protocol by June 30, 2019, that includes:

- a. The authority to ensure that PCBs do not enter the storm drain from PCB-containing materials in applicable structures at the time such structures undergo demolition;
- b. A method for identifying applicable structures prior to their demolition;
- c. Method(s) for ensuring PCBs are not discharging to the storm drain from demolition of applicable structures; and
- d. A data collection program to quantify PCB loads reduced through implementation of the protocol.

To implement Provision C.12.f, the Bay Area Stormwater Management Agencies Association (BASMAA), which is the regional entity working to implement the stormwater regulation, has provided a model ordinance and is assisting cities and assessment methodology and data collection program to quantify reductions in PCBs loads to the storm drain system through new programs for controlling PCBs during demolition of applicable structure. The methodology and forms for data collection are provided as Attachment III and the ordinance is provided as Attachment IV. Cities will be responsible for informing demolition permit applicants that their project is subject to the requirements, necessitating an initial screen for priority PCBs-containing materials. The screening will require that applicants fill out a form with data that will determine whether or not the building is an applicable structure, and the estimated mass of PCBs in each priority material in applicable structures. Cities will require applicants submit a copy of these completed forms to BASMAA so BASMAA can determine the number of applicable structures demolished each year and estimate the mass of PCBs managed.

To comply with Provision C.12.f(a), staff recommends including the attached ordinance in the City's municipal code to give the City the specific authority to request any demolition applicant to implement the required forms, monitoring, and handling of PCB waste to ensure no PCB contamination enters the City's storm drain system.

### **ECONOMIC IMPACT**

Compliance with the MRP mandate for managing PCB laden waste during demolition will increase costs for certain demolition projects. Staff will provide sufficient advance outreach to notify contractors of this new program via the City's website, a handout in the Permit Center, and targeted outreach to the development community.

### **FISCAL IMPACT**

Oversight of a PCB management program will impact staff resources. Staff will monitor the time required to review assessment forms and sampling data to assess whether the existing fees are sufficient to cover staff time.

### **STRATEGIC INITIATIVES**

This agenda item does not relate to one of Council's three Strategic Initiatives.

### **SUSTAINABILITY FEATURES**

Preventing PCBs from entering the storm drain system will benefit Haywards aquatic ecosystems and the health of the San Francisco Bay.

### **PUBLIC CONTACT**

No public contact has been made regarding this agenda item.

## **NEXT STEPS**

Upon direction from the Committee, staff will present to the full Council an article for the municipal ordinance to address PCBs during demolition projects and will pursue citywide initiatives to comply with the MRP Provision C.12.f.

*Prepared by:* Elisa Wilfong, Water Pollution Control Administrator

*Recommended by:* Alex Ameri, Director of Utilities & Environmental Services

*Approved by:*

A handwritten signature in black ink, appearing to read 'K. McAdoo', is written over a horizontal line.

Kelly McAdoo, City Manager