A-28: Demolition of Buildings

Stormwater runoff (rainwater and snow melt) is the largest source of pollution to our lakes, streams and Puget Sound. King County requires businesses to implement measures to protect our shared waters. If the requirements below do not prevent pollution, additional measures are necessary.

The following best management practices (BMPs) apply to the removal of existing buildings and other structures by controlled explosions, wrecking balls or other methods, and subsequent clearing of the rubble.

Required BMPs

- Up until 1979 PCBs were added to materials to increase their longevity. PCBs are persistent, bioaccumulative and toxic so removal and disposal of PCB-containing material must be done properly. If demolition includes buildings or structures constructed or renovated between 1950 and 1980, assess the building materials following the guidance provided by the Washington State Department of Ecology's *How to Find and Address PCBs in Building Materials*.
- While awaiting active demolition, monitor the integrity of PCB-containing materials—such as caulk, sealants paint, siding and roofing—and take actions to prevent PCB-containing dust and solids from entering stormwater, stormwater drainage systems and surface waters—such as lakes and streams.
- To prevent PCBs in building materials from entering stormwater prior to active demolition, routinely monitor the areas where PCB-containing building materials are likely to exist to check that they have remained intact. If PCB-containing materials become noticeably worse prior to demolition—such as flaking or peeling, install BMPs to prevent PCB-containing runoff from entering the stormwater drainage system, such as:
    - install catch basin filter inserts
    - dry sweep adjacent hard surfaces
    - prevent washwater or irrigation water from coming into contact with the PCB-containing building materials
    - educate landscaping and maintenance staff about avoiding the use of leaf blowers around the building.
- Contact the local jurisdiction's stormwater program to inform them when PCB-containing materials are, or are likely to be, present. King County Stormwater Services can be reached at (206)477-4811.
- Train employees about the need to control site activities to prevent stormwater pollution, and train them in spill cleanup procedures
- Protect the stormwater drainage system from dirty runoff and loose particles by placing catch basin covers, or a similarly effective containment device, on all nearby storm drains.

  - Place the covers (or devices) on the storm drains at the beginning of the workday.
  - Inspect daily and maintain the covers (or devices) to ensure they are working correctly.
  - At the end of each workday, collect and properly dispose of the accumulated materials before removing the covers (or devices).
  - Use dikes, berms, or other methods to protect natural drainage paths from dirty runoff if storm drains are not present.
- Remove all covers and devices when the job is completed.
- Cover waste container and dumpsters and ensure they are not leaking.
- Sweep surrounding streets, sidewalks, driveways, and other paved surfaces as needed and at the end of the workday to collect loose debris and garbage. Properly dispose of collected debris and garbage. Do not hose down these areas to the stormwater drainage system.
- Handle and dispose of all waste materials and demolition debris in a manner that does not cause contamination of stormwater.
- Control windblown dust and fine materials by applying water or dust suppression products, avoiding excessive application to prevent runoff. Do not use oils for dust control.

Supplemental BMPs

- Construct a screen to prevent stray building materials and dust from escaping the area during demolition. Size and orient the screen to capture windblown materials and contain them onsite.
- When feasible, schedule demolition to take place at a dry time of the year to prevent stormwater runoff from the demolition-site.

Additional Information

- Potential pollutants can include: PCBs, metals, nutrients, pH, sediment, and other pollutants.
- *Stormwater Pollution Prevention Manual*, Chapter 5: Information Sheets
  - Catch Basin Insert
- *King County Surface Water Design Manual*, Appendix D: Construction Stormwater Pollution Prevention Standards
- Washington State Department of Ecology, *How to Find and Address PCBs in Building Materials*, https://apps.ecology.wa.gov/publications/documents/2204024.pdf
- Additional regulations regarding PCBs may apply, including but not limited to the federal Toxic Substances Control Act (TSCA). For more information, refer to the U.S. EPA's guidance for PCBs at https://www.epa.gov/pcbs.