Section 1:

1. Analytical sampling from a stack test detected a benzene concentration of 4,500 ppm. Convert this result into lb/ft^3. Assume standard ambient temp and pressure (SATP).

    Conversion Factors and Constants
    1 mole of gas = 24.45 L @SATP
    1 lb = 454 grams
    1 cubic foot = 28.32 litres

2. Your facility incidentally manufactures 1,500 pounds of Lead II chromate ($PbCrO_4$) in a plating process. How would you report on the lead in the compound (reporting only for Cat 1026, lead compounds in this exercise, ignore the chromium for this exercise).
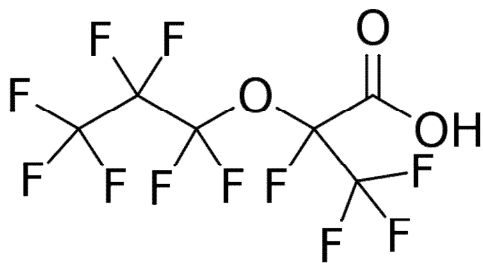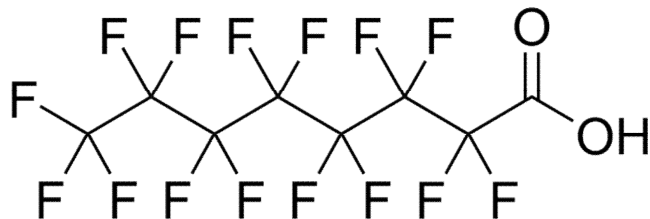
    Manufactured:

    By-Product:

    Chemical in a compound:

Section 2:

Discuss in your group if we should have expected GenX (hexafluoropropylene oxide dimer acid (HFPO-DA)) to be a good replacement for PFOA?

GenX   PFOA