Using What You've Got! Intro to Mercury Minimization Plan Writing



Paul Kramer City of Gresham

NPDES Requirement

- Read guidance Implementation of Methylmercury Criterion in NPDES Permits
- Looked Through Checklist
- Spoke with permit writer



• Treated the requirement like I'd expect an SIU would.

NPDES Permit excerpt

Mercury Minimization Plan

11.

Within 24 months of the permit effective date, the permittee must develop and submit for approval an MMP (Mercury Minimization Plan) tailored to the facility's potential to discharge mercury. At a minimum, the MMP must include the following:

a. Identification and evaluation of current and potential mercury (both methyl mercury, known as MeHg, and total mercury) sources

b. Identification and evaluations of conditions (i.e. anaerobic conditions) that contribute to the methylation of elemental mercury in the collection and treatment systems

c. Identification of large industrial, commercial and residential sources that could contribute significant mercury loads to the POTW

d. If applicable, a Monitoring Plan that will identify current or potential sources of mercury

e. An Action Plan that will:

i. Identify potential methods for reducing or eliminating mercury. This may include but is not limited to assigning limits to potential industrial and commercial sources of mercury to a collection system or requiring BMPs such as:

- 1) material substitution
- 2) material recovery
- 3) spill control and collection
- 4) waste recycling
- 5) process modifications

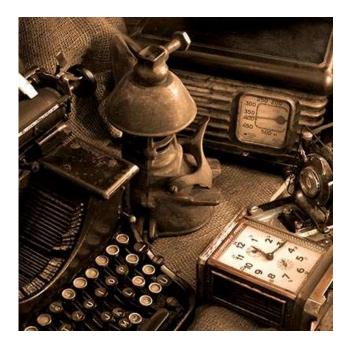
6) proper housekeeping and laboratory use and disposal practices, and

7) public education

ii. Identify potential methods for reducing or eliminating conditions that contribute to the methylation of elemental mercury

Identification of potential Sources

- SIUs
- The guide provides tables describing facilities
- Business licensing
- Environmental Survey
- Business Survey
 - Multiple ways





"Ding dong"



Identification of Conditions that promote Methylation

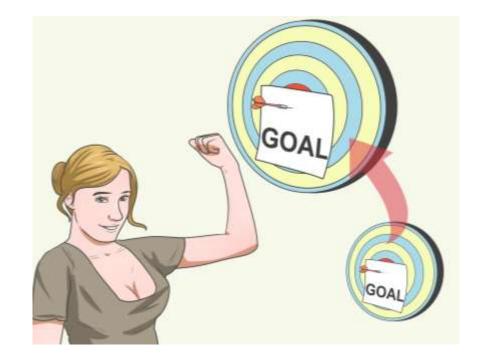
- Wet wells, Wetlands, Ponds, and Lagoons
- Sediment accumulations



 Gresham doesn't utilize natural treatment and has a high removal rate.

Action Plan

• Do an internal city "survey"



- Most of us are already doing something to some degree
 - Environmental survey Helps with categorizing potential sources
 - IPP SIUs
 - Storm water Various
 - Ground water protection Various
 - Dental and Medical Facilities

Mercury Reduction Activities

• Residential

- Solid waste and Recycling
- Pharmaceutical collection

• Commercial

- GREAT business Program
- Well Field Protection Program
- Automotive Related Businesses Program
- Toxic Metals Management Program
- Permitted Industrial Dischargers
- City of Gresham
 - Streetlights
 - Fluorescent Replacement
 - Net Zero



Monitoring Plan

- WWTP sampling
- Biosolids
- SIU



Questions?

The

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