## Advanced Sediments

Coordinating Cleanup



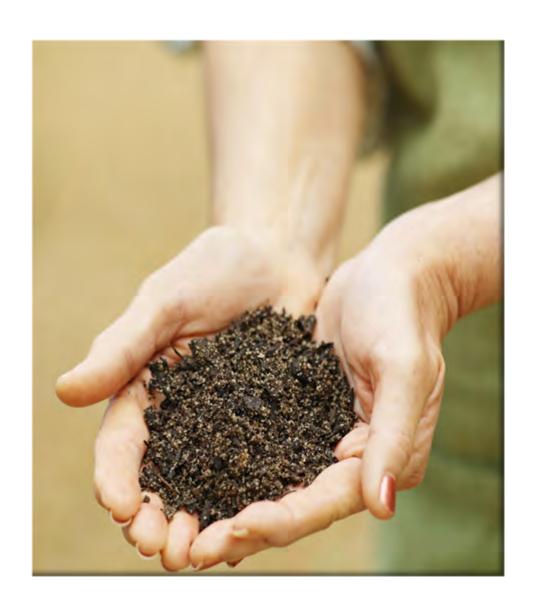
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## Coordinating Cleanup: A Buddy Act



#### What Makes A Site

- Release of a hazardous substance into the environment
  - Soil
  - Groundwater
  - Surface Water
  - Sediment
  - Ambient Air
- Site is defined by where a hazardous substance has come to be located.
- Remedial action is required at a site if the contamination is a risk to human health or the environment (i.e., is above the cleanup level)



## You have SMS in my MTCA Site! You have MTCA in my SMS Site!

WAC 173-340-710(7)(d) indicates that for sediment cleanup actions you comply with cleanup standards in WAC 173-204 (SMS rule).

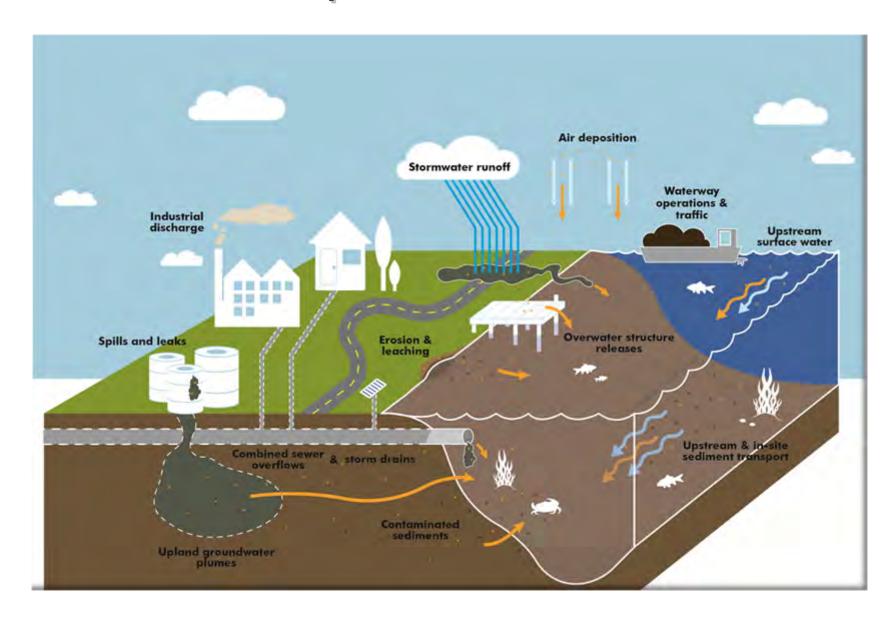
WAC 173-340-760 clarifies that in addition to complying with the requirements in MTCA, sediment cleanup actions must comply with the requirements of the SMS rule.



### Pathways Include:

- (1) Direct discharges of pollutants to the waterway, both permitted (e.g., NPDES permit) and unpermitted;
- (2) Stormwater pathway via storm drains and pipes, ditches, creeks or directly from properties adjacent to the waterway;
- (3) Combined sewer overflows (CSOs) discharging stormwater, municipally permitted industrial discharges, and untreated sewage directly into the waterway when the sewers have exceeded their capacity;
- (4) Groundwater entering directly into the waterway via seeps or infiltrating storm drains, pipes, ditches, or creeks that discharge to the waterway;
- (5) Erosion/leaching of waterway bank soil, contaminated fill, waste piles, landfills and surface impoundments that enter the waterway;
- (6) Spills, dumping, leaks, and inappropriate management practices that may result in contaminant releases to soil, groundwater and/or stormwater;
- (7) Waterway operations and traffic resulting in contaminants from riverside docks, wharves, piers and vessels being released to the waterway;
- (8) Air pollution and deposition of contaminants entering the waterway directly or through stormwater; and
- (9) Transport of contaminated sediments by tidal or flood events, marine traffic, sediment cleanup dredging or other waterway activities.

## Conceptual Site Model



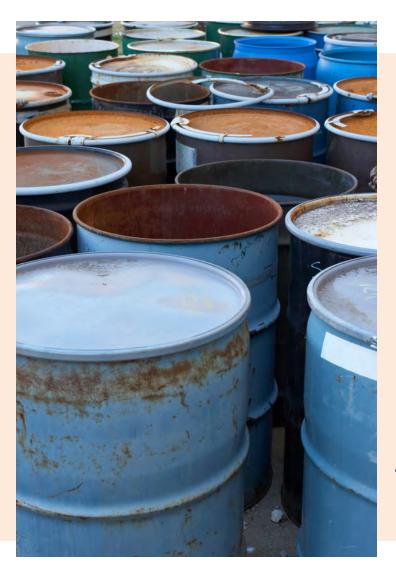
#### Kimberly-Clark Facility Features **Operational Areas Major Features Former Petroleum Storage and Distribution Former UST Locations** Navy Homeport Former Industrial Discharge **East Waterway** Some waste streams: Lead based paint chips **K-C Property Boundary** Paint waste Corrosives/acids **Hog Fuel** •Glues/adhesives **Pulp Mill Former** Log Pond Digester 2 Bleaching Tissue Mill Wastewater **Treatment Distribution Former** Wood Wastewater Chipping Treatment

## Cleanup Levels Need to Address All Media

MTCA requires that [groundwater/soil/surface water/air] cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, soil, surface water, sediment, or air cleanup standards established under MTCA or other applicable state and federal laws.



#### **ARARs**



When a person conducts a remedial action under MTCA they must comply with all laws that are "applicable" and those Ecologyidentified "relevant and appropriate" requirements (ARARs). See RCW 70.105D.090 and WAC 173-340-710. "Applicable" laws are those where the law has jurisdiction over the cleanup action. "Relevant and appropriate" requirements are those where it is common sense to apply them to the site.

## Tribal Standards May Be "Relevant and Appropriate Requirements"

- ■The SMS rule includes tribal laws in the definition of "applicable laws" where Ecology determines the tribal law meets the criteria for "relevant and appropriate requirements" in WAC 173-340-710(4).
- •A tribal law may be "relevant and appropriate" for application at a site where site contamination is outside of the reservation boundary but impacting tribal land.
  - For example: The site includes a reservoir which shares a border with a Tribe. The Tribe has established water quality standards. The Tribe's standards may be considered an ARAR if Ecology determines the standards meet the criteria.
- ARARs are also considered as a factor in setting sediment cleanup standards

#### Potential ARARs for In-Water Work

- Clean Water Act (CWA)
- Endangered Species Act (ESA)
- Rivers and Harbors Act
- National Historic Preservation Act/Archaeological and Historical Preservation Act
- National Pollution Discharge Elimination System (NPDES)
- Shoreline Management Act (SMA)
- Growth Management Act(GMA)
- Washington Hydraulics Code



# Cleanup Alternatives Need to Address All Impacted Media

As part of the feasibility study, the review and development of the cleanup action needs to take into account:

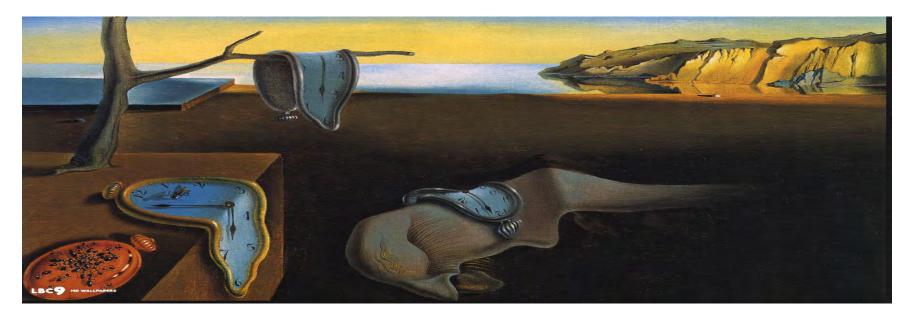
- Do the alternatives addresses all the impacted media
- Timing of cleanup activities
- Meeting ARARs
- Best tool for the job



### Timing is Important

Talk to the site manager early and often about timing

- At the site, what happens where and when
- Identify what permits are needed
  - Think about the timeframe for the application and review
- What studies are needed to support permit applications
- Is source control investigation or cleanup necessary?



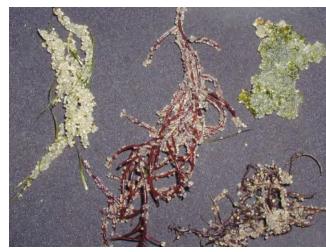
#### **Common State Permits**

Permit/Agency	Trigger/Activity	Timeframe
Hydraulic Project Approval (HPA) WDFW	Use, diversion, obstruction, or changes to waters of the state	45 days after SEPA determination
Coastal Zone Management (CZM)  Ecology	Federally funded or permitted activities and development affecting coastal resources	Less than 6 months after Corps public notice
Water Quality Certification (WQC)  Ecology	Section 401 - Federally permitted activity with potential for discharge of dredge or fill material into waters or wetlands	Up to 1 year, usually less than 3 months
Isolated Wetlands Approval Ecology	Dredge or fill of wetlands	1 to 6 months depending on project complexity
Aquatic Use Authorization  DNR	Use of state owned lands (harbors, tidelands, shorelands)	6 months to 1 year
State Environmental Policy Act (SEPA) Checklist State or Local Agency	Proposal requiring state or local approvals	90 days after a complete application plus comments/appeals

Note: Many projects may also require Construction Stormwater Pollution Prevention Plans (Construction SWPPPs), and a Certified Erosion and Sediment Control Lead (CESCL) to meet Ecology's Construction Stormwater General Permit requirements.

## Reports and Studies to Meet Federal, State and Local Requirements

- Ordinary High Water Mark Determinations or Stream Surveys
- Wetland Delineation
- Eelgrass/Marine Macrovegetation Survey
- Fish and Forage Fish Spawning Survey
- Cultural Resources Survey
- Geotechnical Evaluations or Slope Surveys
- Biological Evaluation or Assessment (BE/BA)
- Construction Stormwater Pollution Prevention Plan (SWPPP)
- Habitat and/or Wildlife Management Plans
- Photo-Documentation



#### Source Control – Not Just For the LDW

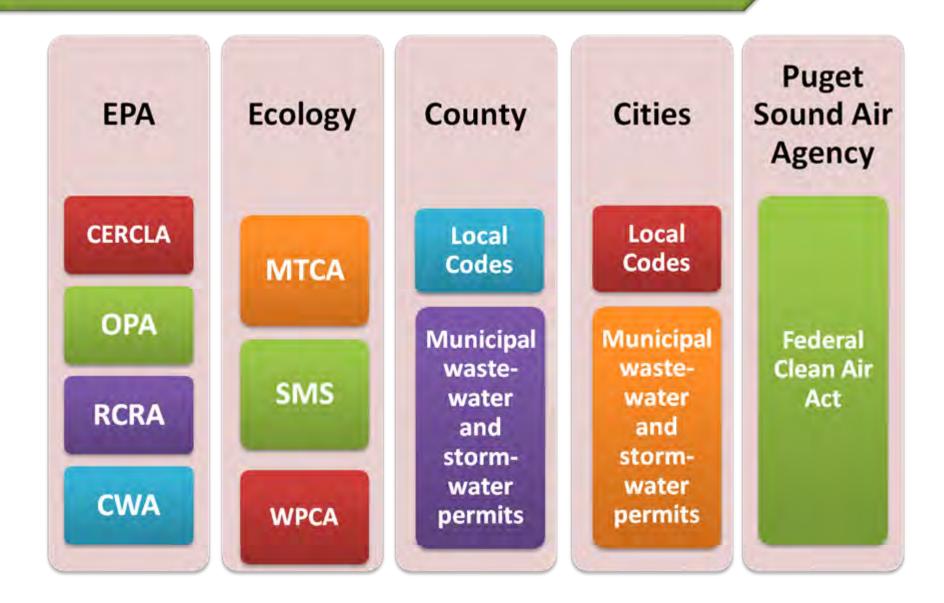
- Traditional Cleanup addresses historical sources of contamination; source control covers both historic sources and ongoing sources of contamination
- □ Primary Goal address existing ongoing sources of contamination to a cleanup site.
- Long-term Goal minimize recontamination of a cleanup site after remedial actions have occurred.
- Source control activities will take place prior to the cleanup action and after the cleanup action.
- "Source control is like laundry. It is never finished."
   (Kris Flint, USEPA, retired)

## MTCA or WPCA?





#### **Addressing Contamination**



### Questions?

