Environmentally Responsible Best Management Practices

¹³ Erosion and Sediment Control

This section is intended for industrial facilities which may have areas of landscaping or exposed soils that are subject to the erosive action of wind and water. It is not intended as a guide to construction projects. Regular inspection and prompt maintenance are critical to the success of all the practices in this section. The following best management practices can be used for these areas:

- ✓ industrial sites with exposed soil due to steep slopes
- ✓ soil stockpiles
- ✓ heavy equipment traffic
- ✓ minor construction projects

Erosion Control

• Existing vegetation is frequently the best preventive measure for erosion. Because native or existing vegetation is already established, it is usually better cover species than introduced species. Where possible, establish "do not disturb" zones on your site.

• Vegetative and soil protection practices for soil that is already exposed reduce erosion in several ways:

- shield the soil from the direct impact of rainfall or runoff
- increase soil porosity and water storage capacity
- reduce the energy of the runoff
- physically hold the soil in place with the root system of vegetation

• Vegetative erosion controls (not well suited to heavy traffic areas) include:

• Vegetative cover, either as a permanent cover or as a temporary measure prior to permanently stabilizing the area. This can be accomplished by seeding, seeding and mulching, seeding and matting, or sodding.

- Create a buffer zone between activities and receiving streams.
- Mulching or erosion control mats or netting to physically protect exposed soils. This is a short term measure designed to provide immediate protection.

• Structural controls can reduce the energy of water flowing across soils and divert flows from exposed areas.

- ✓ level spreaders or interceptor dikes and swales
- ✓ pipe slope drains
- ✓ outlet protection
- ✔ check dams
- ✓ paving or gravelling of roadways and driveways
- ✓ stream bank stabilization
- ✓ terraced slopes

Sediment Control

• Vegetation can retard the velocity of sedimentladen flows, thereby reducing erosion and allowing for settling of turbid waters.

Structural controls can trap sediment, reduce stream energy, and allow for settling of turbid waters:

- ✔ filter fabric silt fences
- \checkmark detention basins or settling basins
- ✔ check dams
- ✓ paved or rocked road or entrances



ENVIRONMENTAL SERVICES CITY OF PORTLAND **CLEAN RIVER WORKS** Dean Marriott, Director

ISW 0007-13 10-2000

