Train Derailment and Oil Spill Into Clark Fork River in Montana

The Ugly, the Bad and the Good



#### **Presented by**

#### **Jane Nakad**

## **Oil Spills**

Oil spills can be damaging to the environment and expensive to clean up.

Oil spills can result in bad publicity for the responsible company and ill will from the community in which they occur.

Penalties can be incurred for oil spills.

End result can be some good benefits.

# THE UGLY



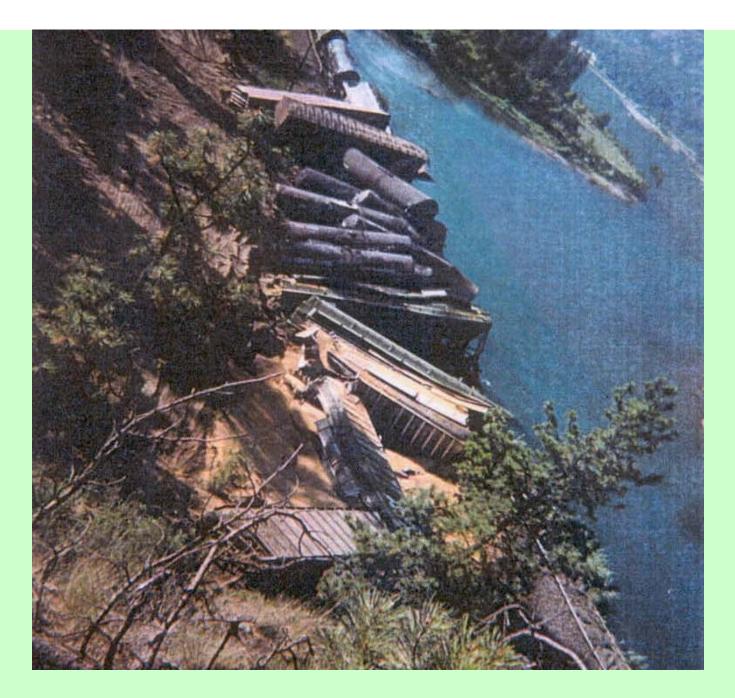
## Oil Spill From Train Derailment

Notification to National Response Center of an oil spill from a train derailment on July 11, 1999.

29 of 74 railroad cars derailed.

Asphalt, propane and corn sweetner were discharged into the Clark Fork River in Montana.

**EPA OSC and START contractors responded to the scene on July 12.** 



Train derailment as seen from cliff overlooking the Clark Fork River



Rail cars derailed all along the tract which is parallel to the Clark Fork River.



#### **Discharges Into Water**

Two rail cars in the river containing 30,000 gallons of hot, molten asphalt. An unknown quantity was released from the submerged rail cars.

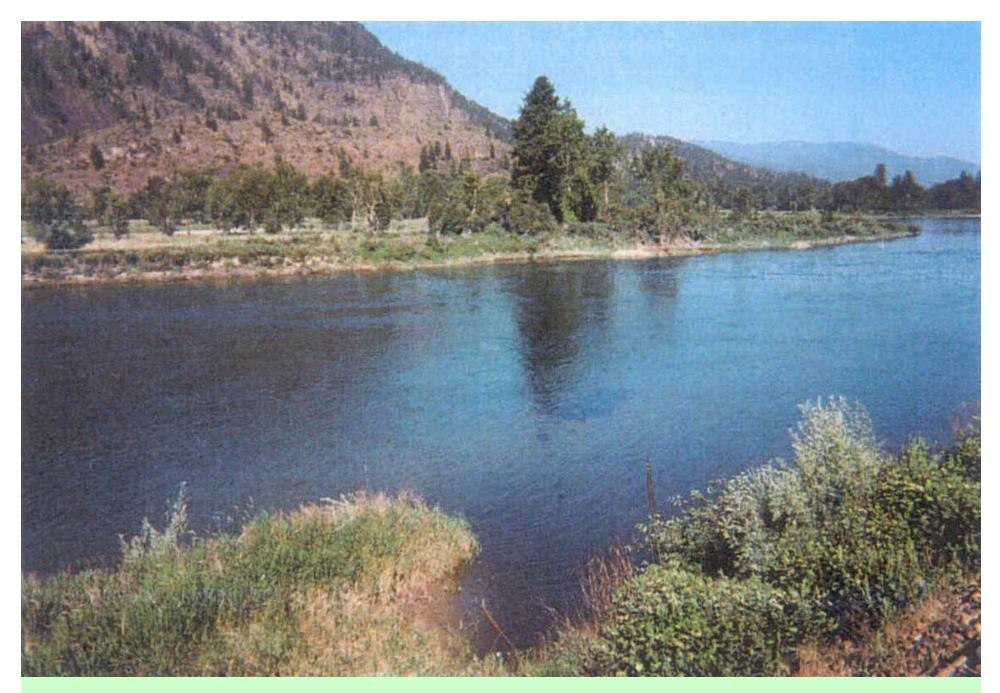
Approximately 7,500 to 10,000 gallons of asphalt was also released into the river from a rail car lying on the bank of the river.

One rail car containing corn sweetner was also in the river. An unknown amount was released into the river.

The propane car remained intact and was believed to not have released any product into the river.



Crew assessing damage of the derailment.



Asphalt emulsion spilled into the Clark Fork River.

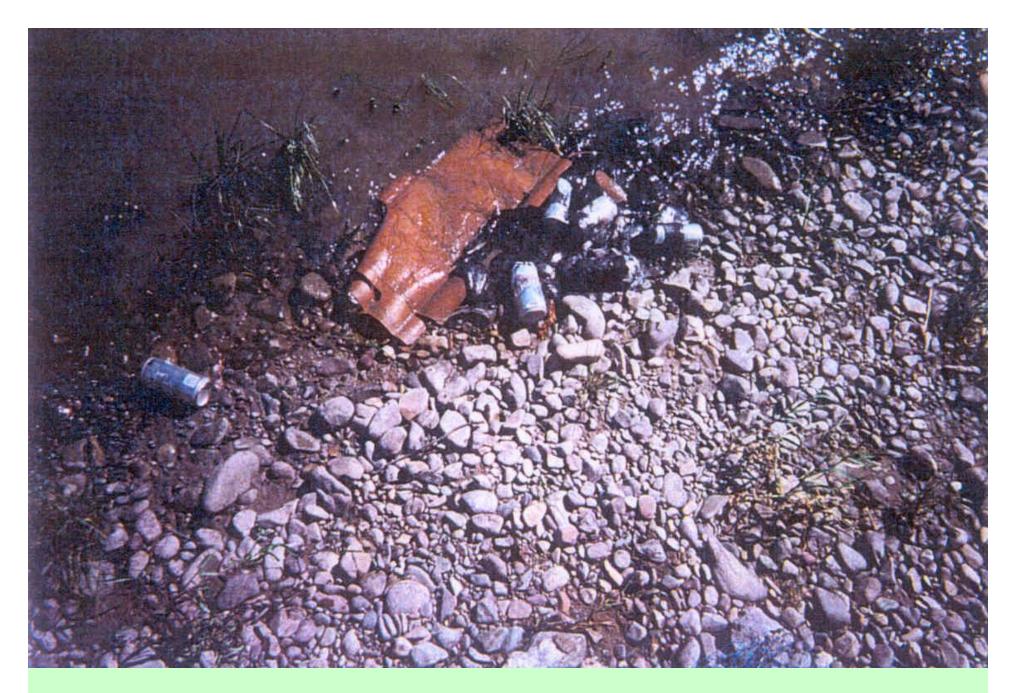


### **Impact of Spill**

Liquid asphalt, and several thousand containers of beer which was contaminated with asphalt, was found to be lodged at several locations along the river bank and continued 26 miles downstream to the Thompson Falls Reservoir.

Very small quantities of asphalt were discovered downstream of the Thompson Falls Dam.

Approximately 51,000 square feet of vegetation was damaged along the railroad right of way.



Typical asphalt contamination downstream of the derailment site.

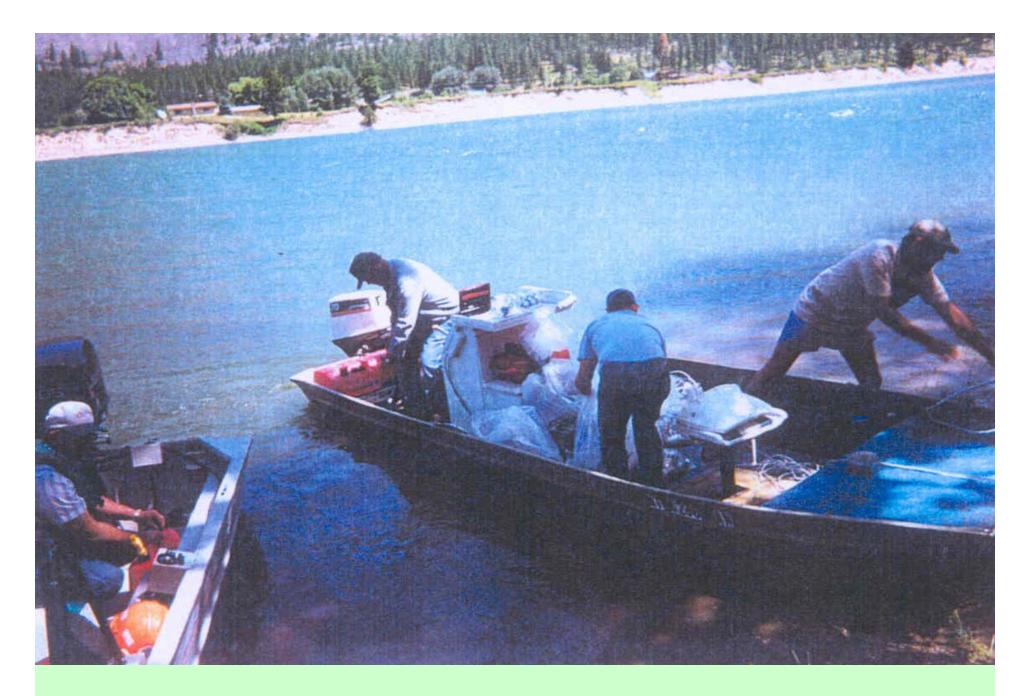


#### **Response Efforts**

**Multi-agency:** 

Sanders County Disaster and Emergency Services, Sanders County Sheriff Office, Plains Fire Department, Local Conservation District, State of Montana DEQ, Fish & Wildlife, EPA, Coast Guard, Strike Team, Corps of Engineers, National Transportation Safety Board,

Railroad company, contractors, and vender representatives.



**Cleanup activities at the mouth of Thompson Falls Dam.** 

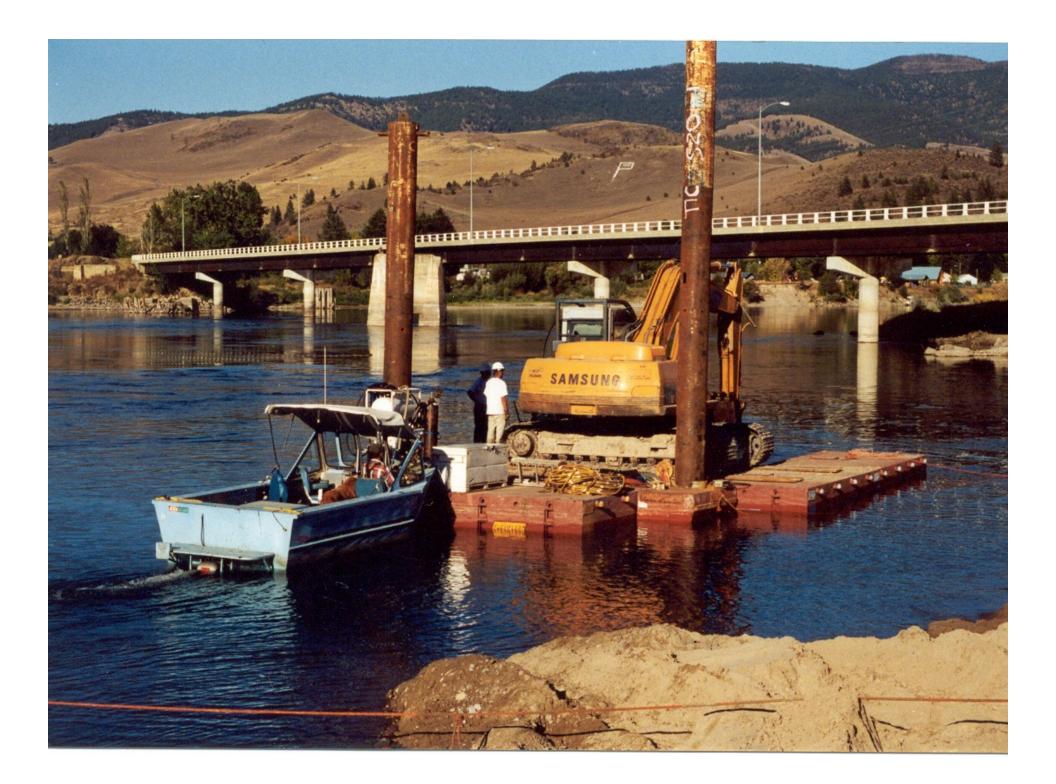


#### **Response Efforts**

Divers, cranes, barges, boats and other heavy equipment was utilized in the response and cleanup.

10 boats and 35 workers were engaged in cleaning debris from the Clark Fork River.

Response during first 2 days focused on removal of 4 rail cars submerged in the river and repair of the track.





Removal of one of the asphalt cars from the Clark Fork River.



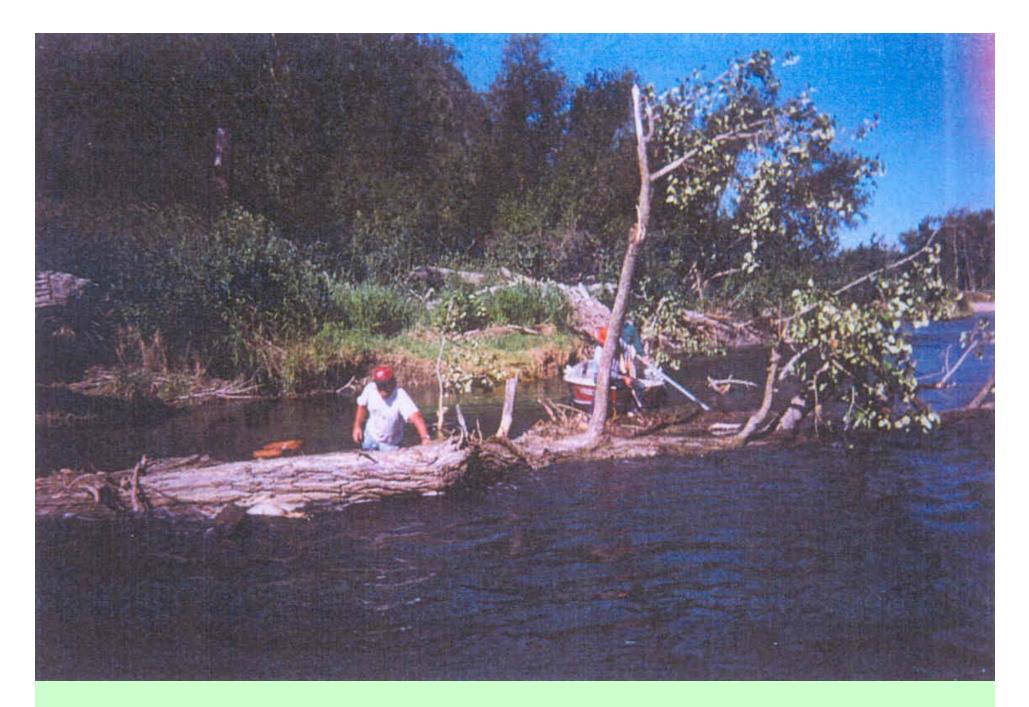
Removal of asphalt car from Clark Fork River.



#### **Cleanup Efforts**

Debris, including asphalt and asphalt contaminated beer cans, was removed over a two week period.

Approximately 39,500 of the 40,000 gallons of discharged asphalt was recovered and disposed of.



**Crews collection asphalt contamination along the shore.** 



Beer cans contaminated with asphalt collected near Thompson Falls Dam.

# THE BAD



#### **Adverse Publicity**

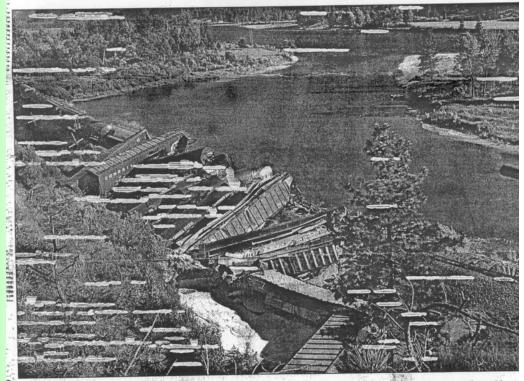
Headlines in newspapers throughout the state.

Cleanup crews cut a Touch America fiber-optic cable Monday afternoon, disrupting telecommunications service in parts of western Montana, Idaho, eastern Washington and Oregon.



MISSOULA, MONTANA

29 Montana Rail Link cars jump the tracks



A Montana Rall Link train derailed near Paradise on Sunday afternoon, leaving two tank cars submerged in the river, one stuck on a sandbar and the res

Cargo of asphalt, beer spills

#### By BETSY COHEN and JAMIE KELLY of the Missoulian

PLAINS – Extremely hot temperatures may have caused 29 cars of a Montana Rail Link train to derail near Paradise on Sunday afternoon, officials say.

afternoon, officials say. Four cars containing asphalt, propane, beer and fell into the Clark Fork River after the 74-car westbound train derailed around 4 p.m., two miles west of Paradise. Two 10,000-gallon tankers of hot liquid asphalt and one car filled with Coors Light beer spilled into the river, but the propane car was lodged on a sandbar and intact, said MRL spokeswoman Lynda Frost. Beroone crows were also concerned that

Response crews were also concerned that one car of corn sweetener was leaking into the river.

An absorbent "boom" - a giant sponge was expected to be laid across the river to soak up the liquid asphalt floating on the river's surface.

A two-acre fire started by the sparks of the derailment kept more than 30 firefighters busy, trying to stretch water Incogniers busy, trying to stretch water hoses more than a quarter of mile from a knoll on Highway 200 to the railroad tracks, said incident commander John Holland. Neither the train's engineer nor his co-pilot were injured in the accident, but two transfert who ware viden is a context.

transients who were riding in a car in the back of the train complained of whiplash, Holland said. They did not seek medical treatment.

Montana Highway Patrol officers kept a sharp eye on the riverbank, asking

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### Administrative Penalty Order

Violated Section 311(b)(3) of the CWA; prohibited discharge of oil into navigable waters of the US.

Paid cash penalty of \$17,000;

Expend not less than \$55,000 for Supplemental Environmental Project. THE GOOD



#### Supplemental Environmental Project - SEP

Purchase and staging of emergency response equipment for Sanders and Park counties' Department of Emergency Services (both operate in river environments)





Provide training for emergency response personnel in Sanders and Park counties to enhance their capacity to respond to oil spills.



#### Emergency Response Equipment

1 jet boat

**1 response trailer** 

**1 response truck** 

400 feet - 6"x100' boom

200 feet - 6"x25' boom



Jetboat purchased with SEP funds.



**Response truck purchased with SEP funds.** 



Boom stored in response trailer.



Boom in Response Truck.



#### Emergency Response Equipment

2 floating drum oil skimmers 7000 watt generator **4 light plants** 2 air compressors **Post pounder and posts** Supplies for response trailer and truck (rope, plastic, tape, gloves)



Skimmer



Air compressors.



#### Emergency Response Training

Two Emergency Response Training courses for on water response; one for Sanders county personnel and one for Park county personnel.



Local emergency responders receiving training on equipment.



Training on boom deployment.



#### **SEP Results**

Two counties are now equipped to respond to oil spills into the Clark Fork, Yellowstone, and Flathead rivers, the Thompson Falls reservoir, and other streams and creeks.

**Response time is accelerated.** 



#### **SEP Results**

Emergency response agencies in the two counties now have responders who are trained in on water response for oil and hazardous material spills.

Competency and efficiency of future response efforts is improved.



#### **SEP Results**

Relationships have been established between the railroad and local emergency mangers and responders.

Perception of the railroad company is improved.

#### Conclusion

No one wants to see oil discharged into our waters which can damage the environment and threaten drinking water supplies.

No company wants to receive a penalty for spilling oil.

But if it happens, then positive benefits can result when the responsible company, EPA, and the local community work together.

#### **QUESTIONS ????**

Thank you



#### **Contact Information**

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