Understanding the Health, Environmental and Economic Impact of Crude Oil Transport and Storage

**Vancouver: Proposed Tesoro-Savage Oil Terminal**

**Health Risks**
- Train noise
- Increased air pollution
- Increased water pollution
- Delay of emergency vehicles
- Potential rail car fires and explosions

**Environmental Risks**
- The volatility of Bakken crude
- Oil spills during loading and transport
- Climate change

**State environmental impact:**
Much of the rail corridor lies along the Columbia River. A derailment and subsequent spill threatens valuable wildlife and an intricate ecosystem. (*Source: Sightline Institute*)

**Cities at risk:**
Tesoro Savage Proposal would bring an additional 4 loaded oil trains/day through WA, carrying 360,000 barrels of crude oil per day exposing communities all along the rail corridor to chronic toxicants and a potential major disaster. (*Source: Sightline Institute & Earthjustice*)

**Economic Risks**
- No profit sharing with rail cities such as Spokane
- Displacement of specialized professions such as longshoremen
- Local business owner concerns

**Rail communities receive out of a population of over 161,000**

110 FT Jobs*

= 1 Job gained by oil

16 Local jobs at risk*

A major oil spill could cost WA:
$10.8 billion
165,000 jobs

Evaluate the local economic impact:
The introduction and use of BNSF rail lines to transport crude could result in loss of jobs related to freight of other cargo. Professions such as longshoremen and other freight personnel are at risk. (*Graphic and info taken from vancouver101.us*)

On an average day:
An addition of eight trains per day (4 loaded, 4 unloaded) will result in an approximate increase delay of 41 minutes per crossing per day. Think about trucks, deliveries, and commerce that would be slowed by this delay. (*Source: Tesoro Savage DEIS*)

Businesses that rely on freight by rail:
Crude-by-rail train traffic is already blocking and slowing other train traffic. If additional crude-by-rail trains are added to the rails, it will further slow train transportation through the state. (*Map taken from sightline.org*)

**Noise pollution can result in:**
- Sleep disturbances
- Cognitive impairment
- Cardiovascular disease
- Psychiatric disorders

**Pulmonary System**
- Increased cancer rates of breast and lung
- Increased risk for Asthma

**Cardiovascular System**
- Cardiac arrhythmias
- Myocardial infarctions
- Ischemic heart disease
- Congestive heart failure

**Reproductive System**
- Reduced sperm quality

**Increased risk for:**
- Stroke
- Development delays
- ADHD
- ASD
- Lowered IQ
- Adverse behaviors

**Babies are at the greatest risk from DPM air pollution**
- Higher rates of neurodevelopmental disorders
  - Autism Spectrum Disorder
  - Attention Deficit Disorder
  - Lowered IQ & Adverse Behavior
- 6% higher risk for asthma bronchitis and significantly increased risk of asthma diagnosis with increased severity and frequency of attacks
- Disruption of sexual differentiation during fetal development
- Increased cardiovascular, pulmonary and overall mortality

**Emergency Preparedness**
- In a survey of the state’s 278 fire districts near crude by rail routes, 62% believe that their departments are not sufficiently trained or do not have the resources to respond.
- Delays at rail road crossing could delay emergency vehicles. 1000+ train cars can exceed more than 1 mila in length.

**Health information taken from WPSR**

**Noise information taken from WPSR**

**Environmental information taken from Earthjustice.org**

**WA Census Bureau**

**Washington Physicians for Social Responsibility**

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