

# Idaho SWET

## East Idaho Workshop

### Biomass Fuel Supply

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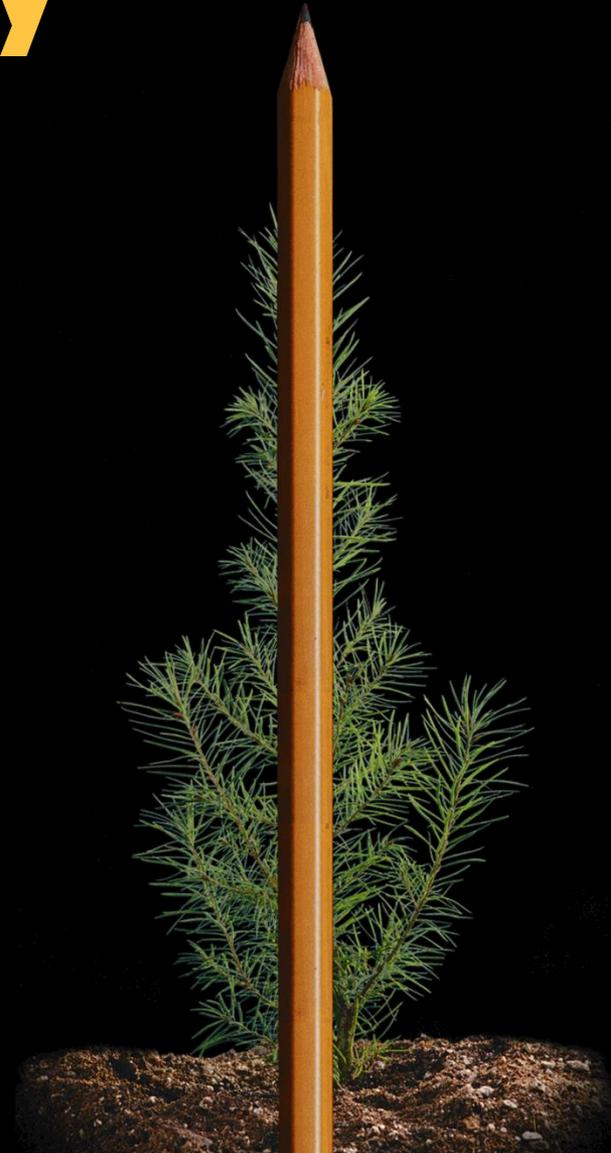
Northern Region

June 17, 2014



# Fuel Supply

- ❖ **Identify and Quantify Sources**
- ❖ **Develop Fuel Specification**
- ❖ **Procurement Process**



# Identify Sources

- ❖ **Slash from forest management**
- ❖ **Residues from manufacturers**
  - Post and Pole
  - Sawmills
  - House logs
- ❖ **Power line/development clearing**
- ❖ **Local landfill/urban waste**



# Quantify Fuel Sources

- ❖ **When do you need this?**
- ❖ **How detailed should it be?**



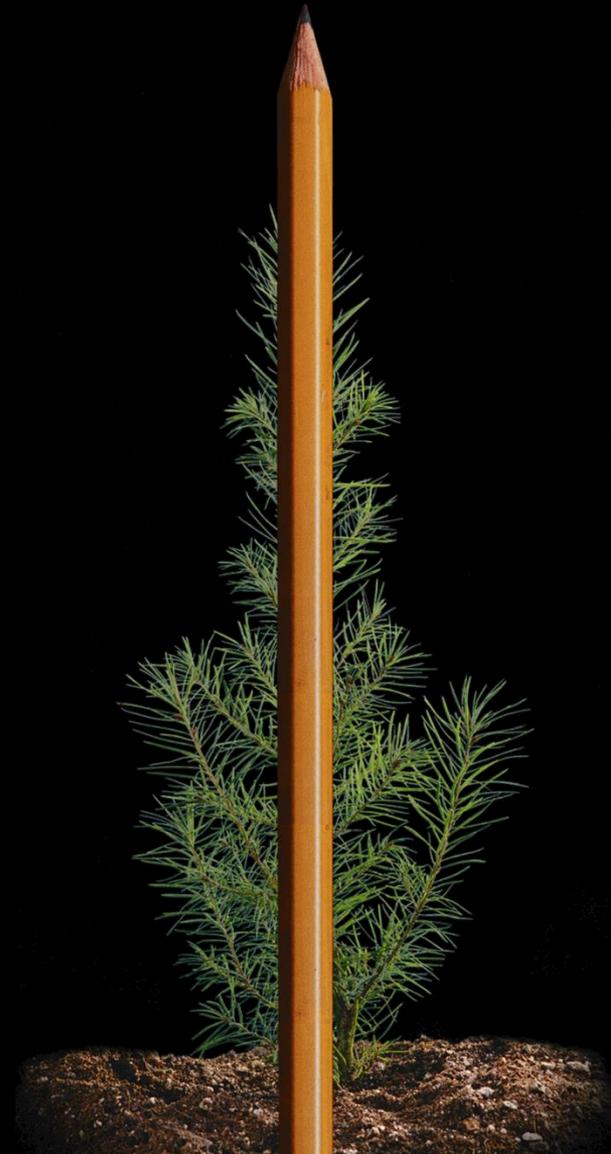
# Quantify Sources

- ❖ **How far to reach out?**
- ❖ **Planned land management**
  - Socially/economically feasible
- ❖ **Quantity of slash?**
- ❖ **Historic level of activity on private lands**



# Sources

- ❖ **Compile a report**
  - Potential Suppliers
  - Facility/Community
- ❖ **Agency efforts**
  - FS Region 1
  - MT DNRC



# Agency Efforts



# Fuel Specification

- ❖ **DEFINES acceptable fuel for supplier**
- ❖ **Tells boiler manufacturer WHAT YOU PLAN TO BURN**



# Fuel Specification

- ❖ **Size Range**
- ❖ **Processing Method**
- ❖ **Composition**
- ❖ **Moisture Content**

**COMMUNICATION IS KEY**

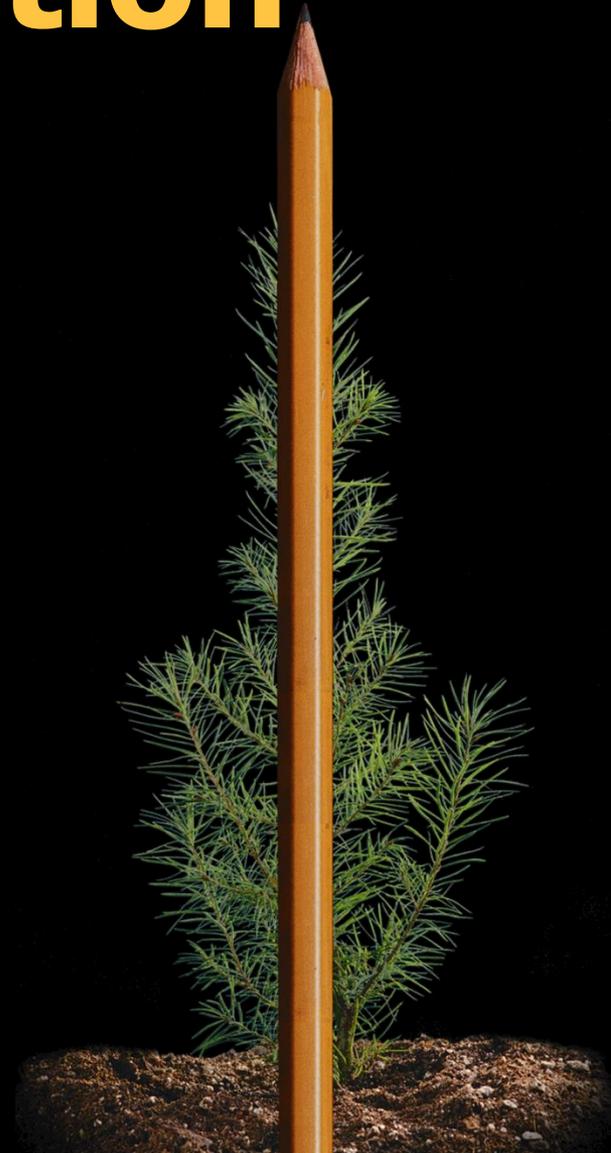


# Processing



# Fuel Specification

- ❖ **Affects Fuel Costs**
- ❖ **Affects operation & maintenance costs**
  - **Conveyance**
  - **Combustion**



# Fuel Conveyance



# Fuel Conveyance



# Combustion Issues

- ❖ **Mainly related to fuel composition**
  - bark, needles, dirt?
- ❖ **Size of material can cause combustion-related issues**

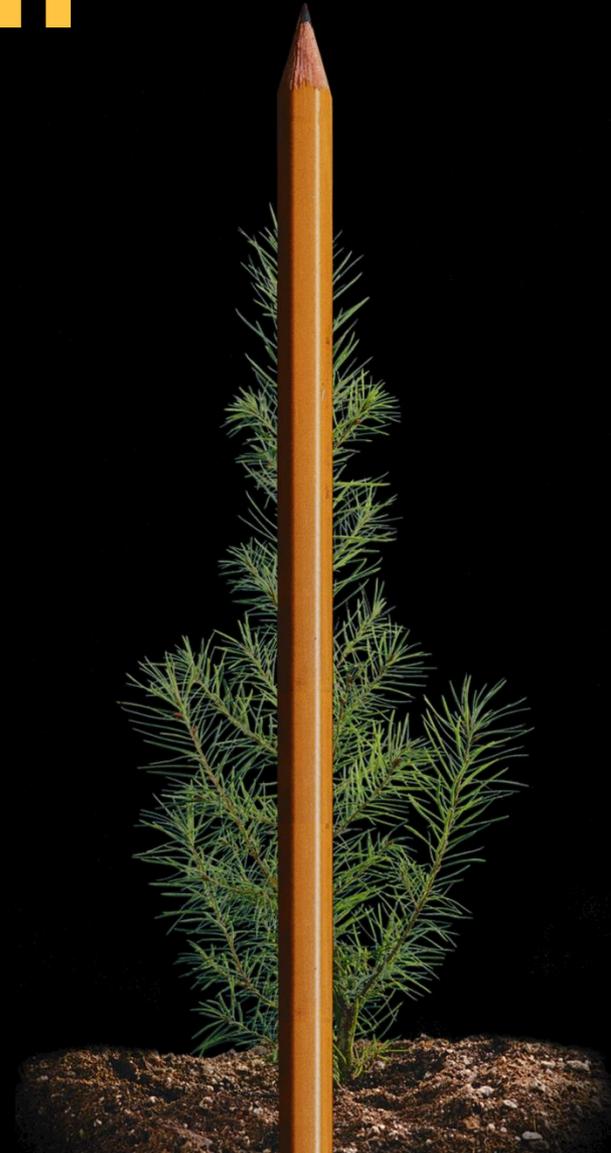


# Combustion

## ❖ Clinkers

## ❖ Ash Removal

- speed
- quantity



# Conveyance & Combustion



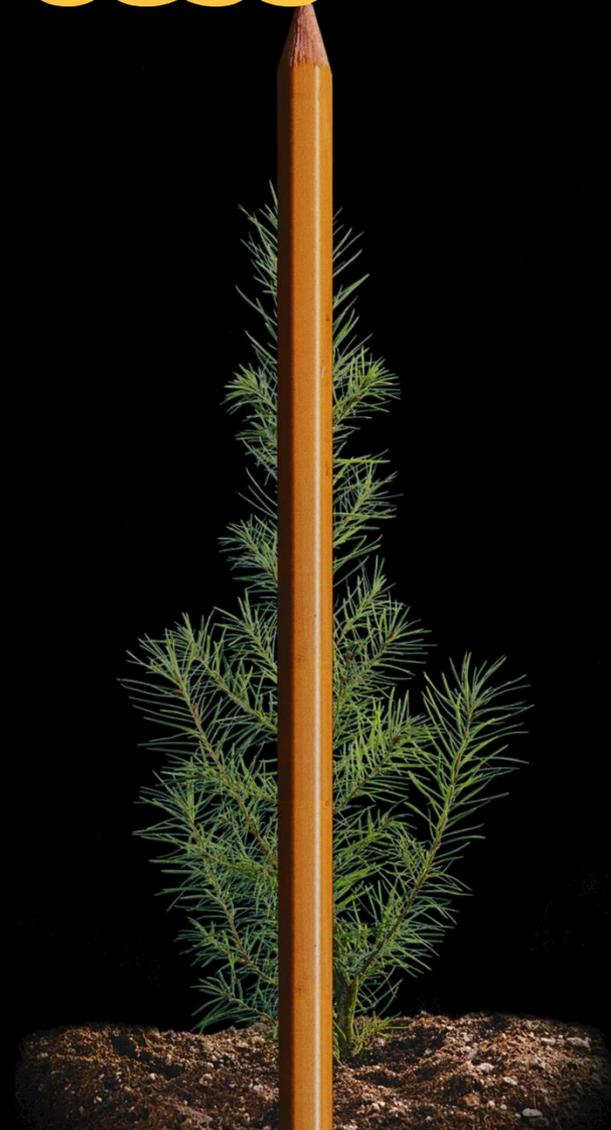
# Supply Bid Process

- ❖ **Description of Bin & Area**
  - vs. type of truck
- ❖ **Stockpile/Storage?**
- ❖ **Delivery Timing**
  - process for requesting
  - max expected daily/weekly
  - full bin on Fridays
- ❖ **Quality Control/Penalties**



# Supply Bid Process

- ❖ Length of contract
- ❖ Payment schedule



# Questions?

- ❖ **Sample Fuel Specification**
- ❖ **Outline of Fuel Supply ID Process**
- ❖ **Sample Fuel Supply Report**
- ❖ **Sample Fuel Supply Contracts**



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