Transporting Biosolids

The Most Visible Part of Your Operation



Tony Chiras - King County Wastewater Treatment



Dave Ruud - Boulder Park, Inc.

Equipment Options

- Tankers
- Utility trailers
- End dumps
- Side dumps
- Belt trailers
- Dump trucks



Tanker



Utility Trailer

Aluminum End Dump





Side Dump



Belt Trailer

Custom-Built Dump Truck and Trailer





Community Awareness

Contracting Options

- Utility owns equipment and hauls (Chelan PUD, Douglas Co, Leavenworth)
- Utility owns equipment contracts hauling (King Co)
- Combined trucking and land application contract (trucking subcontracted) (BPI - Jacobsen/VanDalen/Groat)

Generator Responsibilities

- Cradle-to-grave responsibility for biosolids
- Need to stay involved with applicator and hauler
- Spill plans required by Ecology
- Generators need to verify hauler's credentials, spill plans & emergency contacts



Ecology's Spill Plan

Regular inspections and servicing of equipment

- Full coverage tarps
- Leak-proof trucks
- Emergency contacts
- Cell phone, gloves, boots, flares, cones, shovel, bagged hydrated lime

Driver Responsibilities

- Load is secure, not exceeding legal weight
- Experience with severe weather & road conditions
- Assess delivery site prior to entering
- Clean truck after unloading

Drivers are key to your biosolids program.



What the Public Sees

- Number of trucks
- Truck cleanliness
- Speed slow or fast, is it ever right?
- Driver courtesy
- Travelling singly or together
- Stopping to buy fuel locally
- Spills on road



What the Landowner Needs

- Delivering inside storage area
- Staying out of the crop
- No tracking material (mud, biosolids) out of the field
- Dust control (slow down!)
- Keep piles high and tight

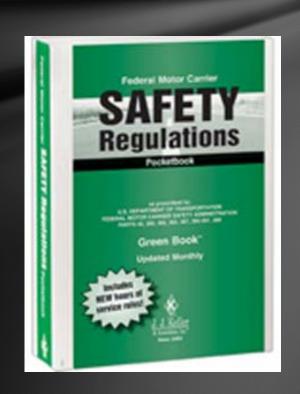


Federal Regulations

Federal Motor Carrier Safety Administration

- Hours of Service Rules
- CSA Program: Compliance, Safety, Accountability

Applies to all commercial vehicles >10,001 pounds



Hours of Service (HOS) Rules

- 11-hour limit on daily driving time
- 14-hour limit for total workday
- Mandatory lunch breaks



Electronic logbooks mandated by 2017



Accidents will happen:



Trailer tracked too close to edge of logging road

Cleaning up



Vactor truck make short work of cleanup



Driver not aware of ice on off-ramp, I-90 Thorp, WA

Driver could not stop on icy turnout. Truck and trailer slid down embankment, landing in Swauk Creek, Kittitas County, January, 2015



Swauk Creek, 9 months later.



After the Spill

Rapid communication is important:

- State Patrol / 911
- Hauling contractor/dispatcher
- Biosolids generator
- Ecology
- Cleanup contractors

Follow your Spill Prevention/Response Plan!

Later

- Debrief with haul contractor and biosolids generator
- Lessons learned

Transportation Costs Are Increasing



- Technology
- Maintenance
- Tires
- Labor costs
- Equipment costs
- Insurance

Other Challenges

- Stricter regulations
- Driver shortage / retention
- Traffic
- Construction
- Weather and road closures



Overwhelmed yet?



Questions?