

Columbia Emergency Planning Association  
Meeting Minutes  
February 3, 2015

Present:

Tony Hyde	Columbia County
Earl Fisher	Columbia County
Henry Heimuller	Columbia County
Diane Dillard	CRFR/Chamber/Sacagawea Health Center
- Tom Previsch	Guest Speaker
Greg Hinkelman	City of Clatskanie
Anne Parrott	Columbia County Public Health
Brandon Gimper	Global Partners/Columbia Pacific Bio-Refinery
Craig Ashenfelter	Portland & Western Railroad
Brad Landers	Portland & Western Railroad
Brian Little	NW Innovation Works
Mike Greisen	Fire Chief - Scappoose
Lonny Welter	Columbia County Road Department
Monique Oliver	Columbia Pacific Food Bank
Kristi Ward	Georgia Pacific
Terry Wolfe	Oregon State Fire Marshal
Bryan Profit	Portland Fire & Rescue
Kris Hansen	State Public Health
Jeremy Frazier	Columbia County Emergency Management (AmeriCorps)
William Bence	American Red Cross
Michael Bender	Portland General Electric
Loren Klepper	ARES/RACES
Renate Garrison	Columbia County Emergency Management
Vince Aarts	Columbia County Emergency Management
Cynthia Jaeger	Education Service District
Patrick Trapp	Port of St. Helens
Cindy Becker	CERT
Annie Christiansen	Envision Columbia County
Darrel Whipple	Envision Columbia County
Carroll Sweet	Envision Columbia County
Paulette Lichatowich	Columbia City
Marge Murphy	Private citizen
Beth Santangelo	Armstrong
Jacque Lomsdal	Dyno Nobel
Paulette Lichatowich	Columbia City resident
Kathy Davies	PGE/ KB Pipeline
Mike Stanton	?
Craig Allison	Port of St. Helens
Jeremy Frazier	Columbia County Emergency Management
Kristin Rasmussen	Representative Bonamici
Sue Otjen	Oregon State Fire Marshal's office
Sally Ann Marson	Council – Columbia City
-already listed above	

Malcolm Hiatt	Oregon Department of Forestry
Jeanine Dilley	Columbia 911
Mike Kummerman	Northwest Natural
Robbie Roberts	Oregon Emergency Management Association
Joe Errante	CERT
Michael Bender	PGE
Mark Kreutzer	Columbia River Fire & Rescue

The meeting was called to order by Jay Tappan – Welcome. Thanks to NW Innovation Works for the treats and door prizes.

Special guests – all three county commissioners. Introductions. Big turnout (47 in attendance).

Guest Speaker - Dr. Tom Previs – non-paid. I am researching this topic because I live here in Columbia County– my background “combustion type of person” – have been involved in the fuel cell industry. I am more of a combustion engineer not a rail safety expert – I started looking into this topic when I read letters to the editors.

Is Bakken Crude more dangerous than other hazard materials to transport?  
What can be done to improve safety?

Crude oil from Bakken oil deposits in North Dakota – it is primarily from fracking – 2008 less than 10,000 rail cars and in 2013 there were 415,000. Light sweet crude – low sulfur. Easy to process into value-added materials. It is also easier to vaporize and spread liquid when spilled.

July 2013 in Quebec – 48 people died when a runaway with 74 cars of Bakken crude rolled down the hill. It was absolutely operator error. Blast area was 150 yards. There have been four recent accidents in AL, VA, ND and New Brunswick with no fatalities.

Bakken crude is being shipped to Port Westward – about 12 trains a month – up to 34 trains are proposed contingent upon track modifications.

Is Bakken crude more dangerous?

There are three camps –

- Government entities – concerned about safety at all costs
- Petroleum industry – government leaders – balance safety with business interests
- Environmentalists

Three aspects of Flammability

1 – Boiling point – vapor part we worry about

2 – Flashpoint – if you have a mixture right percentage of fuel/air – and then spark – it may go off at higher temperatures.

3 – Auto ignition temperature – really doesn’t apply for fuels in this presentation, as typical exposure temperatures are well below AIT values.

4 – Vapor Pressure – known as volatility. Propensity for flammable gases to separate from liquid, light crudes are inherently more volatile than heavier crudes, some tests indicate Bakken may be worse than

other light crudes ---But still <15 psi, well below 43 psi – which is requirement for Class 3 shipping threshold. It is in the right containers and legal for shipment.

Looking at all the characteristics of materials that come through our county –

#### **Gasoline, LPG propane, Ethanol, Heating Oil and Bakken Crude**

Absolutely all light crudes more dangerous to ship than heavier –

Ethanol is not as volatile as Bakken crude but has a marginally worse flashpoint –

Gasoline and propane are more flammable – public accepts risk of shipping these by trucks and one railcar holds same volume as 4-10 trucks.

More testing is being done – it is a hot topic.

Let's think about this – tanker cars with other hazardous chemicals may be a greater risk – e.g. toxic gases like chlorine, which could affect many more people and e.g. anhydrous ammonia from Dyno Nobel

Is Bakken crude exceptionally dangerous, per se? – **NO**

Should we be concerned about rail shipments through the County – **YES** – we should be concerned, if for no other reason than the high volumes being shipped, but we can take action to minimize risk:

### **Averting Derailment Disasters**

#### **Rail Maintenance and Inspection**

Upgrade tracks and integrate rail monitoring system

Implement regular inspections and pre-shipment

In Col County though:

Tracks are relatively new

Portland and Western RR sends track inspectors ahead of trains

A number of rail improvement projects have been implemented and more under evaluation

#### **Maintain Slow Speeds**

NTSB recommends less than 40 mph

Reduces chances of derailment – however 9 out 13 happened at 25-30 mph

Tradeoffs for slow speeds

Longer wait at crossings

Increased traffic incidents involving autos in right lanes

May limit economic growth.

In Col County

Speed limited 10 mph in towns – 25 elsewhere

Dozens of crossing

Near term goal to 25

#### **Upgrade Tanker Cars to Safety Standards**

DOT 108 and DOT III tankers currently being used

DOT-111 made after Oct 2011 conform to CPC-1232 standards: thicker head and shell wall thickness, half-height head shields, normalized steel, improvement to top fittings, reclosing pressure relief device.

These are great improvements but 10 out of 13 cars that derailed and exploded were CPC 1232 DOT 117 tankers now proposed for October 2015 offer even more protection.

In Columbia County – Global Partners in May 2014 said they would accept only CPC 1232 at Port Westward

**Ensure disaster response teams are prepared**

- Typical train lengths of 100 cars can overwhelm local firefighters
- Foam and specialized equipment needed
- Containment of spills to avoid safety

**Ship by pipeline or barges**

Minimize interactions with moving vehicles, mitigate immediate hazards  
Tradeoffs

New pipelines are expensive, need to be maintained, barge shipments big rivers, including chance of spills in river

**Process Light crude near oil well.**

- Drive off more volatile hydrocarbons to improve stability
- Energy efficiency loss and environmental concerns
- Crude oil less valuable and harder to process

Common practice in Eagle Ford shale oil fields in Texas – pipelines easily transport light NGLS because gulf coast refineries are closer, and it is economical

Conclusions

In general Bakken crude is not more dangerous than many other chemicals being shipping through Columbia County

Safety of rail shipments – even if hazmat at 99.997 safe – this is one train or an accident in 80 years  
In Columbia County we may already be better – but let's set the bar at 800 years

Recommendations!

Demand and publish P&W reports on rail inspections and upgrades

Improve public trust

Leverage concerns over Bakken crude to outside funding – rail/city improvements, training and equipment for hazmat incidents

Keep 10 & 25 mph limits pending further studies on CEPA 1232 effectiveness – even DOT-117 proposals set 17-28 mph as head-on puncture-resistance Get people on these DOT 117 committees

Get involved in adoption of DOT-117 railcar stands (expected 2015-2020)

- Higher flow pressure relief devices
- Improved bottom outlet valve to reduce change of opening during accident
- Thermal insulation/jacketing
- Full metal shielding
- Enhanced braking

Incorporate spill zones in high risk, high impact areas (where practical)

Stay abreast of new test results on Bakken crude and ethanol flammability – (and methanol)

References:

- 1) A survey of Bakken Crude Oil Characteristics Assembled for the U.S. Department of Transportation, American Fuel and Petrochemical Manufacturers/Dangerous Goods Transporting Consulting, Inc. May 2014
- 2) Safety Data Sheet, Bakken Crude Oil. ConocoPhillips May 2014
- 3) DOT-111 Tank Car Design. U.S. NTSB, P. Stancil, 2012
- 4) Biomass Energy Data Book. U.S. Department of Energy, 2011
- 5) T108 Tank Cars: Chemicals, Ethanol, and the Green Economy. E.A. Neubauer, 2010
- 6) Lower Columbia River Rail Corridor Rail Safety Study, Final Report. HDR Engineering, May 2009
- 7) An Introduction to Combustion, Concepts and Applications. S. R. Turns, 1996.
- 8) "Why New Improved Oil Trains Are Not Nearly Good Enough," E. dePlace, Sightline Daily, Jan 2015
- 9) "Docket No. PHMSA-2012-0082 (HM-251)," Hall and Associates LLC , Oct 2014
- 10) "DOT Oil Rail Safety Transport Rules Will Be Costly," M. Gasaway, Law360, Sep 2014
- 11) "Bakken crude characteristics topic of U.S. House hearing," E. Assand, The Bakken Magazine, Sep 2014
- 12) "U.S. to Study Volatility of Fuel Transport," Insurance Journal, Sep 2014
- 13) "We are Focusing on the Wrong Problem When It Comes to Oil Transit Accidents," K.P. Green, The Huffington Post, Aug 2014
- 14) "Bakken crude oil moving by rail could be made less volatile," B. Tumulty, Poughkeepsie Journal, Aug 2014
- 15) "U.S. DOT Announces Comprehensive Proposed Rulemaking for the Safe Transportation of Crude Oil, Flammable Materials," U.S. Department of Transportation, July 2014
- 16) "U.S.: Remove or retrofit old oil tankers in 2 years," Minneapolis Star Tribune, Jul 2014
- 17) "New Dot Crude-by-rail Rules Could Cost \$2.6 – \$6 Billion," Benicia Independent, Jul 2014
- 18) "DOT Proposes New Tank Car Standards, Classification Rules & Operational Controls for Crude Oil & Ethanol Transportation," Thompson Hine LLP, Jul 2014
- 19) "DOT-OST-2014-0067", Letter from B. Salo, Union Pacific to S. Otjen, Oregon State Office of Fire Marshall, June 2014
- 20) "Global Partners to require newer tank car design," South County Spotlight News, May 2014
- 21) "Derailed CSX train carried Bakken oil for Plains All American," P. Rucker, Reuters, May 2014
- 22) "Safety debate eyes taming Bakken crude before it hits rails," K. Hays, Reuters, May 2014
- 23) "Interview with Anthony Foxx," Rachel Maddow Show, [www.msnbc.com/rachel-maddow-show/watch/dot-secretary-infrastructure-not-keeping-up-256235587803](http://www.msnbc.com/rachel-maddow-show/watch/dot-secretary-infrastructure-not-keeping-up-256235587803), May 2014
- 24) "National Transportation Safety Board Rail Safety Forum: Transportation of Crude and Ethanol," RSI, April 2014
- 25) "Transcripts from National Transportation Safety Board meeting on tank car safety," <http://ntsb.capitolconnection.org/042214/ntsb042214.htm>, April 2014
- 26) "Safety concerns reappear after third oil train derailment," S. Phiel, The Chronicle, Jan 2014
- 27) "About Propane and LPG," PropaneCarbs.com, 2014
- 28) "Extreme Makeover . . . Tank Car Edition," UTLX, Southwest Association of Rail Shippers, 2014
- 29) engineeringtoolbox.com, 2014
- 30) "The DOT-111 Reader," <http://dot111.info/fags/>, 2014
- 31) "Crude oil tank cars ablaze after train derails in Alabama," V. Gates and E. McAllister, Reuters, Nov 2013

- 32) Association of American Railroads Committee Meeting Review, <https://www.aar.org/newsandevents/Upcoming-Events/Documents/AAR%20Tank%20Car%20Committee%20Meeting/Chapter%201-6%20review%209-11-2013.docx>, Nov 2013
- 33) Port of St. Helens Resolution 2013-81, Nov 2013
- 34) Tabulated data from *U.S. Department of Energy Alternative Fuels Data Center*, Aug 2013
- 35) "Graphic: Timeline of Events in Quebec Train Disaster," R. Johnson, National Post, July 2013
- 36) "Rail car design flaw ignored," Associated Press, Sep 2012
- 37) "Bakken Crude Properties," North Dakota Petroleum Council, 2012
- 38) "DOT-11 Tank Car Design," P. Stancil, 2012
- 39) "Trojan's nuclear waste on-site, protected," KGW.com, Mar 2011
- 40) "DOT111A100W1 Specification Sheet," American Rail Car Leasing, Jan 2006
- 41) "Easing of Capacity Limit Cited in Tanker Explosion," M. Wald, The New York Times, May 1994

Kristin – Public Health – She lived in North Dakota and recommended we talk to other people about their planning and talk with people who are actually doing the work. After living there for five years and seeing the growth – a lot of planning needs to be done.

Other discussion ensued.

### **Old Business**

Had a board meeting at 9 today – reviewed executive board and updated with new members. Will distribute that list to our membership. Donkey Basketball fundraiser a no go this year, CEPA Expo will not be held this year, discussion on new members for EHS and coordination with OSFM office about re-focusing on hazardous materials. AirGas is a new EHS member. Need a speaker for March

Talked about 911 system updates and some new information on CAN alerting – relocation of CEPA office to Fire District. Received a planning grant for software. Mike will be working with Sue Otjen and others at OSFM

Request from Warren Water District – wants to join CAN alerting network – it was approved.

### Agency reports

**Red Cross** – Willie reported they have a contract to operate warming centers in Portland – we have part time employee, Shaunee Ritz, who is doing amazing job. Fairly quiet winter

**Columbia County** – Tony reports that in regards what we heard today – working hard on rail improvements in Rainier – and thanks to rail folks for that application. He will be going to Salem on Thursday along with emergency management personnel for a class on oil train safety program at OEM Just signed agreement with RDPO – Columbia, Clackamas, Washington, Multnomah and Clark County – these are all part of cross-training agreements with counties and fire districts. Legislative session started yesterday – interested in regional strategies for economic development. Need to get schools earthquake prepared – ONC funding (there is a bill that passed the house twice and we are hopeful that we can get some permanent funding). Tony will be going to Washington DC to work on this issue.

**Scappoose Fire** – Mike sent people to ethanol class through funding OSFM – not sure of the final count fire law enforcement, TIMS – traffic incident management classes – got 30-50 people in Columbia County. CC is doing a lot of the right things (Lonny Welter).

**CERT** – Cindy reported they will be meeting this Thursday here at the 911 Center for MRE training – new CERT training begins April 2<sup>nd</sup>.

**Columbia County** – Vince - held our readiness identification training – Vince said we had a good meeting and now the behind scenes is taking place. If we train together we respond better together.

**Envision Columbia County** - Annie – so thrilled with today’s presentation, however, my experience are those records are difficult to get.

**Envision Columbia County** - Darrell – appreciates this program too – I’m little reluctant to put a lot of faith in foam... need to look at evacuation plans and blast zone delineation

**Columbia County Emergency Management** – Renate working on budget – looking forward to exercise in Salem on Thursday.

**Food Bank** – Monique Oliver - on Feb. 14 Dutch Bros will sponsor a food drive both in St. Helens and Scappoose – 3 cans of food you get a free coffee

**Portland Fire and Hazmat Team 1** - Bryan will be in Salem too for the training – we have outreach training with Scappoose tomorrow

**Dyno Nobel** - Jacque Lomsdal – lots more tents going up – it is a big turnaround year – guessing about 1000 contractors a day .

**Carol Sweet** – it was crisis intervention training and more in April.

Armstrong – finished our Russia plant – doing some hiring – we are 304 days safe – only 52 more for a safe year

**Marge** – invited by student from SH high school to talk about CERT – talked about disaster preparedness. Got a lot of responses from the kids.

**Oregon Public Health** – Kris Hansen – measles is on our minds a lot. Just from the Disneyland case, now spread to 14 states – 102 cases in the nation. Oregon is one of the least likely states to be fully vaccinated. One of talking points – if you were born on or after 1957 and have no documentation of having measles – you need to get another series. As we have seen with pertussis our immunity wanes. Ebola will always on our mind – we have some persons under monitoring (People under Monitoring) “PUM”. Measles can live in the air living for two hours....highly contagious.

**Cindy – NWESD** – Interested in hearing why schools are not involved in the Crisis intervention team discussions. – is there anyone from the schools – this is first I had heard about it – we should have school representation

Public Health – Columbia County Anne – flu update – nationwide with minimal flu activity – still small in number of cases – 605 confirmed cases in Oregon – right along with national average. Extremely high numbers in states surrounding us.

**CERT** – two days training coming up. Joe said training is good

**Port of St. Helens** –Patrick reported that he and Heimuller and Councilor from Rainier recently attended a review of OARS hazardous communications – hopefully rewrite will be in final draft and put in front of ODOT on February 19<sup>th</sup>

**Columbia County Road** – Lonny Welter reports we’ve had a mild winter. At office working on our continuity of operations plan – all staff members can put stuff in a briefcase size container and relocate and be able to operate in case we have to evacuate. We have 20 bridge kits – in case of an earthquake they can inspect a bridge and report back to EOC. Went to discussion about “Cascadia Rising” exercise that will be held in 2016 – replicate earthquake of 9+ - EOC will operate for two days and a 4 day exercise – Lonny said it will be present OEMA – how they will respond to this earthquake along with national guard and federal military units. Most supplies coming from Idaho. In Columbia County, we are not going to receive priority response. We need to be prepared because our County is not a high priority. Citizen Corps – “rocket stove” and water filter training this – Thursday 6:30 at the 911 center. Last two hours

**City of Clatskanie** - Greg – Grant writing last couple weeks – Emergency Management/Homeland Security – also put grant request to Port of St. Helens.

**County Commission** - Earl working with the Sheriff's committee on the levy – continues to meet. We got to visit the jail and inspect – I would recommend – it is a good visit to see what actually goes on. Thursday he will testify on bills concerning bomb threats. Hwy 30 Safety Committee will meet sometime this month. Concerned about legalization of marijuana and what that means for “safe driving.” Thank City of Portland for participating in CEPA.

**ODF** – Malcolm we are hiring for summer positions now – they will be open until June. It is a great job for our youth. Completed 2013 FEMA audits in hopes of recouping 2013 monies spent on forest fires. Participated in RTIP last month – in my estimation Columbia County is way ahead of Multnomah County – and Multnomah County is stepping it up

**CRFR** – Mark – Oregon legislature is back in session – already 1400 bills introduced. Fortunate that Betsy and Brad give us time once/week – interested in participating in weekly phone calls – we need a good turnout. Get a hold of Jay – if we can have 10-15 people at these sessions – usually 7 a.m. once/week – they need our input. Call cell 503 369 0189 – [tappanj@crfr.com](mailto:tappanj@crfr.com). The meetings are held at the fire district – one week Betsy calls in and the next week Brad.

**OSFM** – Sue Otjen – State Emergency Response Commission coordinator – working on a State Administrative rule that will finally finalize EPCRA – puts us more in line with other states- it establishes executive committee. Hazardous materials planning coordination – designates each county as an emergency planning district or counties could combine – Linn/Benton became one LEPC. It just outlines the responsibilities of the LEPC. The grants will close on Feb. 26 – planning, training and exercise projects for transportation – the State's application will go to federal government April 4. Our LEPC conference is May 12-14 in Seaside. No fee. We also have funding for mileage and lodging for up to 100 people.

**Sacagawea** – Heart Campaign is in full swing – Gold hearts \$5 and pink hearts \$1...visit local merchants and help us raise money to continue providing medical/mental health services for children from kindergarten through high school.

**Ford Family Foundation** – Brian Little – interested in promoting vitality in rural community – today's door prizes are gift packages of edibles from Columbia County. One of the big things we can do is shop locally. Last statistics – about \$300 million of income goes out of the county – if we can move the needle 10% - \$30 million would be spent here in CC. That money will circulate 7-10 times more.

Next meeting is March 3, 2015 – treats and door prizes will be provided by Columbia County. Tentative speaker is Brandon Gimper from Columbia Pacific Bio-Refinery.