



# Copper River Watershed Project

*Voices for a Wild Salmon Economy*

## TRANS-ALASKA PIPELINE CITIZENS OVERSIGHT STAKEHOLDER WORKSHOP

MAY 5, 2010, KLUTI-KAAH MEMORIAL HALL, COPPER CENTER

### PARTICIPANTS:

Kate Alexander, CRWP	Lucus Gamble, attorney & Kenny Lake landowner	Carla Somerville, Kenny Lake resident, CRWP board member
Jerry Brossia, BLM/JPO	Dennis Gnath, ADF&G	Matt Obermiller, Tielke Valley resident
Anne Browne, SPCO	Darcy Harris, DNR/PSIO	Victoria Rego, Copper Center resident
Jeff Bruno, SPCO	Shilah Kellso, Gulkana Village Council	Justin Selvik, SPCO
Kristin Carpenter, CRWP	Dan Lawn, retired DEC	David Solomon, Ahtna Inc. Land Protection Officer
Matt Carle, Alyeska	Mike Levschakoff, Alyeska Elmer Marshall, Tazlina Village Council	Mike Wrabetz, BLM/JPO
John Craig, Ahtna Inc.	Judy McCormick, Alyeska	Rochelle Van den broek, Cordova District Fishermen United
Katie Devenport, Gulkana Village Council	C.D. McCurry, Kenny Lake resident/business owner, CRWP board mbr.	Rick Young, Tazlina Village Council
Cliff Eames, Copper Country Alliance	Ruth McHenry, Copper Country Alliance	
Lois Epstein, LNE Engineering & Consulting		
Richard Fineberg, Research Associates		
Bill Flanders, DOT/PHMSA		
Bonnie Friedman, BLM/JPO		

### WORKSHOP MINUTES:

**Alyeska presentation** (see Copper River Watershed Project presentation.ppt)

Matt Carle: 5% decline over last few years (5% per year?). Big topic in Juneau this past session. Alyeska was asked to address four questions.

1. How does APSC interact with owners and make spending decisions? Have a TAPS owners cmte. With APSC whom leadership team interacts, put ideas to the team. Draft Long Range Plan submitted to the owners, guides how money is spent from year to year. Long Range Plan covers from 1 – 5 years depending on the issue.
2. What operations data are currently available?
  - Public Awareness Program as described in **API 1162**
  - DOT posts its inspection findings on its web site
  - Annual reports developed by oversight agencies \*\*\*
  - Public information meetings in ROW communities
  - Contingency plans

APSC public web site

3. Opportunities for improving access to data on operations?  
Meetings like this and our public awareness program provide a good framework for discussing
4. Opportunities for citizen involvement: Primary Action Responder Citizen XXX capacity exists in Glennallen, Stevens Village, Ahtna goes through lots of training and has received awards

Lois: how much of the risk assessment information is available to the public – info. Used when making spending decisions?

Dan Lawn: if you had a better way of disseminating information to communities, you could get more credit. Need to do a better job of telling people.

Matt: Public Awareness program is pretty robust. We live and breathe it just like you live and breathe it, and we try to do the best we can. If you have ideas of how to get information out, that would be useful.

Matt Obermiller: how much oil could spill in any one segment between gate valves? What trips them? Is it a pressure difference? What level is required to trip it? If there's a smaller event, can small events go undetected?

Matt Carle: you're asking about operations of remote gate valves and about leak detection. I don't have the engineering background to answer that.

Jerry: C-Plan is based on realistic maximum spill (?). Maximum is 64,000 barrels for any segment. Leak detection system question has several parts to it. Pipeline can be shut down at any time but don't want to create a hydraulic hammer. Would take 8 minutes to shut down pipeline if there were an earthquake. Regs. Require leak detection ability of 1%, 6,500 barrels.

Bill Flanders: by law (CFR 49, part 195.412), APSC required to inspect ROW 26 x per year. Surveillance flights are one method of inspecting the right of way.

Matt O: use of infrared imagery? I've been told by an Alyeska employee that the company was approached by feds to use satellite imagery for surveillance – very good images. Offer was rejected. APSC makes claims that helicopter flies every day, but it doesn't happen. Satellite imagery sounds like a good way of detecting leaks, could be good way to track leaks.

Bill F: infrared is used for inspection of heat pipes on Alyeska's pipeline support system. It has not been used for water in the insulation (corrosion) on the above ground pipeline.

Dan: no spill detected on the line was detected by instrumentation. All leaks have been detected by people. Bullet hole was found by an over-flight. Leak detection is not an exact science. Not trying to dispute what agencies are saying. Concern is that there are fewer people out there now. Used to be people out there every day, people could see that the line

had moved. What's in place to compensate for lack of people in the field? We're fortunate that the pipeline was so well constructed. Don't have to dig up line very often the way they do in the Lower 48, fortunate in that regard.

Matt Carle:

John Craig: overflights – how often are they done? What's the purpose? Is it for inspection?

Matt C.: for inspection and security. Don't know whether flights are daily. Could find out and get back to you.

David Solomon: flew helicopters model XXX. Just for surveillance. Remember Livengood – if helicopter wasn't flying over that day, would never have caught the guy, saw the 4-wheeler driving away. At Pump 11 track every flight from 492 to Pump 1. Helicopters can cover areas where we can't patrol. Depends on weather conditions, have to fly a different route sometimes because of weather. Two people in helicopter. Pilot and armed security guard.

Lois: encourage APSC to get back with a response about what triggers an overflight. Requirement is 26 x per year. In lower 48 it was so people could see whether development was moving toward ROW, or if vegetation had died it would be because of leak. Sounds like APSC is more aggressive than they need to be given federal requirements, but why?

David S.: worked up on Kuparuk for 3 years and they used infrared (get that right? Used it or not?)

John Craig: believe money would be better spent by having people on the ground daily – helicopter isn't accomplishing anything if it isn't flying. Retired off line after 22 years. That's always been my concern that things could go undetected on the ground on a daily basis – could save money by not flying so much vs. putting people on the ground.

Dan Lawn: lots of things have changed since 9/11 in terms of security. Can't tell that something's being surveilled just because there's a helicopter. There are reasons for flying but APSC can't say. Not as much surveillance as I would like to see in any regard.

Elmer: needless to say the pipe is a lot older than when they started, you'd think they'd be doing more surveillance rather than less.

**Jerry Brossia, BLM**, BLM's authorized officer in JPO (see BLM JPO.ppt)

No law that created JPO. Have been a number of agreements between agencies that bring us together. Many agencies that may be seen to have duplication but when look in detail they don't. May be some overlapping responsibilities through oil spill planning response. This office has brought all these groups together. BLM C-Plan review is on a one year cycle. DEC is on a five year cycle.

Office of federal Authorized Officer was established for the construction of the TAPS. Created relationship with joint monitoring surveillance agreement. Office of Federal Inspector, one of the earlier attempts. Shortly before JPO was established in 1990 by state-federal agreement, massive corrosion was found. 1,400 permits had to be issued during that review of the oil spill plan. The incident command was created, training programs were created, equipment was pre-deployed, drills started happening – all that came out of those original few years when the office was formed. Then had whistleblowers, 1993 - 1994 had issues raised (electrical, integrity) – went through a major corrective program and then a verification program to be sure changes were made.

Alyeska is part of a big pipeline system. DEC was primary group in the office – used to have close to 30 people from DEC alone in early 1990s. Oil and gas system in Alaska has numerous parts (slide on Oil Flow Steps).

The industry's original plan was to bury about 95% of the pipeline, but about half of line is buried, half is above ground. Big area of discussion because of moving warm oil through the ground. Much discussion about how much geo-technical assessment work needed to be done beforehand. Agencies wanted lots, APSC wanted to do it as they went.

TAPS through-put: production declining. Cold re-start is another issue with declining production. The trip for oil takes longer and product is getting colder. APSC is working on a big study and anticipates having results by the end of the year regarding what changes will have to be made.

Congressional oversight accusation that agencies “stove piped” oversight – compartmentalized. BLM was criticized heavily because it's part of Interior. Put BLM into electrical oversight – had 76,000 items identified. Hired contractors to identify solutions, Dept. of Labor brought in an electrical inspector and BLM brought in Stone and Webster. Congress kept holding us to greater accountability. We've developed an oversight program that looks at lots of issues over time – inspections are rolled into assessment reports. Easy to find deficiencies, but hard to see whether it means APSC's facilities are defective.

Sabotage is greatest risk. Slide of risks is not in priority. Sabotage, operator error, corrosion – Jerry started to rank.

Lois: where does looking at new technologies fit in with slide “JPO has Refocused TAPS Objectives and Priorities”?

Jerry: under Planning. We've been working with APSC since 1996. One thing we've been doing is enhanced leak detection at river crossings. Some things we can't talk about, classified information – satellites can collect classified information.

Lois: how would slack line be addressed? Leak detection will get harder and harder as throughput declines

Jerry: yes, especially with vibration.

Dan Lawn: people in Thompson Pass are the ones who brought issues to APSC's attention re: vibration in 1996. How are citizens involved in this process? They are the observers, they are out there. We see things more clearly than people who are stationed 300 miles away. How do we take advantage of what citizens see?

Jerry: configuration management. In today's world, need to be able to design a piece of equipment, document the design, make sure it does what it needs to do,

Dan: when we experienced 2002 earthquake, we went back and looked at design specs. And found out that TAPS was under-designed by some areas. When you talk about designing for the "real event," you might find after the fact that circumstances didn't exactly match the predicted conditions and that you need to go back and re-design.

Jerry: requirement for PIGing is in Federal ROW grant and State lease, not in regulations. Have come to agreement with APSC that we run smart PIG every 3 years and cleaning PIGs every 5 years. New regulations since 2001 with DOT, new regulations with DEC in last 10 years. Stipulations were written BEFORE agencies had certain regulatory requirements, e.g. stipulations required de-ballasting seawater certain ways before Alaska had state requirements about coastal waters.

Start-up After Quake slide. Dan Lawn commented that APSC's original design called for half as many VSMs as the State ultimately required, and during the Denali quake about half of them fell down.

Operations Control Center (Anchorage) monitors line 24/7 – many more sensors for pressure, temperature, hydraulic profile. Contact Matt Carle to ask about visiting OCC.

Post 9/11 reality – security is a much more critical process now. Law enforcement may restrict access to a site now because of safety and that can stall spill response. APSC does have a lengthy repair and restart process in place.

**Mike Wrabetz, BLM** (see OSCP General Overview.ppt)

Stipulation 2.14, Contingency Plans – owners must have a plan by which they can detect spills, stop the spread, clean up the spill, tactics . . . Federal Right of Way Grant does not specify what those minimum requirements are. Grant specifies "best practicable technology". Applicants must submit annually a plan for BLM approval – this is unique and not the same for other agencies. DEC is on a 5 year cycle and has a public involvement process – BLM does not have a similar public involvement process (?).

Highest probability is a low volume spill, lower probability spills are high volume spills.

DEC was much more specific in developing a planning standard volume for different scenarios. BLM and DEC through JPO work very closely together on this – don't foresee a conflict arising.

Plan oversight – oil spill response requires trained people and equipment. One of BLM's primary functions is making sure there's sufficient equipment and personnel. DEC counterparts to Mike W and Bonnie are Graham Wood and Bill XXX. In Valdez there's John Engle, Joe Hughes (BLM), in Fairbanks – Sean Swanson and Reid Smith, maybe 20 % of their time. Mike says there's a matrix in the plan on training conducted. Communications come up again and again under "lessons learned" on oil spill response.

New technology: pipeline clamp. Also, inflatable culvert plugs – canvas . . . lots more effective than sandbags or rocks to block off culverts.

Matt Carle: there's a part of every drill during which visitors can participate. Visitors are welcome to attend the drill during which APSC is going to practice applying the new clamp. May 21 on Chatanika (??) River.

Bonnie Friedman: highlight part of Contingency Plan that deals with risk. Four risk assessments conducted since 1990. Agencies required DNV risk assessment because of strategic reconfiguration. In oil spill contingency plan, agencies required APSC to come up with 14 scenarios (initially 12) to model spill response. Response planning standard is capability to respond to 52 barrels spilled on land into water at Minton Creek.

Slide on BLM monitoring, surveillances and assessments. BLM receives quarterly contractor training reports.

**Bill Flanders, Office of Pipeline Safety and Hazardous Materials Administration**, Community Representative for Alaska (see PHMSAGlennallen Rev 4 2010.ppt).

Kuparuk is becoming a bigger and bigger percentage of what goes through TAPS.

NTSB hasn't been to AK for eight years. Made some recommendations that weren't looked at til' after Bellingham pipeline explosion. Most corrosion is below ground, external. Jerry says often it's in wet ditches. Temperature is another big driver in corrosion – since oil is cooling off in the pipe, corrosion growth has slowed.

Integrity management assessment – Standard inspections on Alyeska are usually on an annual cycle. Integrity management and Standard Inspection reports are publicly available on the PHMSA Stakeholders Communication web page.

Judy: in 2009, ran cleaning PIGs several times before we ran the smart PIGs.

Spill response plan: detailed analysis done by JPO (BLM/DEC). We have to work together. DOT probably has more expertise in PIGing.

Dan Lawn: if the original standard was leak-tight and now we allow a 1" hole, who decided that was ok?

Bill Flanders: federal regulations CFR 49, part 195.420 don't address leak tightness but do require that valves be maintained in good working order. No crystal clear regulation that's enforced.

Jerry Brossia: complete analysis is done on valve failures because it's a critical system.

Kristin Carpenter: so they check every year?

Bill Flanders: No. They just stroke them.

Jerry Brossia: If they don't leak much, we check them every seven years.

**Lois Epstein, LNE Engineering and Consulting** (see 05.04.2010.TAPS.draft#5.pptx) on Regulatory Parameters of TAPS 101.

BLM oversight enforcements: first a letter, then a notice, then issue a finding (law allows notices of deficiencies, findings which require corrective action, and special requirements which are formal modifications to terms of lease).

Mineral Leasing Act: would need changes to this law to change or alter types of enforcement allowable by the BLM Authorizing Officer.

Anne Browne: each agency has its own statutory authority. "Best available technology" is a list right now, so there may be things that haven't made it on to the list.

Lois: PHMSA web page on Stakeholder Communication may be used as a model for JPO.

Jerry (?): in 1990, the BLM embarked on enhanced cathodic protection -- \$25 million invested into cathodic protection. Growth rate of corrosion is slowed down. The temperature is dropping and that slows corrosion down.

Mike Wrabetz: instrumentation has improved too – one PIG can perform more than one function so need to do fewer PIG runs.

Criteria for corrosion is based on 2 million barrels flow rate (which is not the original flow rate) – should that still be the criterion?

Anne Brown: noted the challenge of unmanned pump stations, and that SPCO is also working now on in-state and export natural gas pipelines.

Dan Lawn: how you make unannounced inspections when the staff is no longer based at many pump stations, as before, on a full-time basis?

**Richard Fineberg, Research Associates** (see Fineberg TAPS Briefing 100503.ppt)

For another view of Alyeska's low flow studies, see report by Jerry Modisette, former NASA engineer (presented in TAPS property tax litigation).

Operational issues:

- Strategic Reconfiguration
- Low flow studies
- Corrosion and in-line inspection (pigging) procedures

- Anne Brown: the 2006 BP North Slope spill could have been caused by a change in an additive being used without assessing what the new additive would do.
- Bill Flanders: 40 mils/year of internal corrosion, 20 mils/year of external corrosion. Important to analyze PIG run data and over-lay with previous PIG runs to determine active corrosion areas.
- Dan Lawn: internal corrosion occurs 2 – 5 times faster than external corrosion.
- Elmer: I worked at PS 8, we PIGed every 3 – 4 days. If you deviated by one day, the wax build-up was tremendous, about 20 barrels full.
- Valve maintenance and replacement: Valve maintenance: should we be re-visiting the seven and 15 year valve review cycle? What about the testing criteria for testing one valve and operating valves on either side of that one?
- Automated pump stations and pipeline control systems are placing great reliance on computers and communications, while removing persons familiar with TAPS problems and initial spill responders from the pipeline.

Overlap of ownership of pipeline and oil transported in the pipeline: very important and not very well understood. For example, the historic and forecasted value of TAPS for property tax. TAPS isn't a stand-alone facility. Property tax increase would be a fraction of tariff ( perhaps \$ .25 per barrel). Also, the cost to heat the oil to reduce low-throughput problems would only be a small fraction of the price of the oil being transported.

Dan Lawn: the owner vs. operator issue is illustrated by the example of Dan Hisey being let go after he exposed needed repairs.

Owner's share of net profit is nearly \$20/barrel. With declining throughput the desire to maximize revenue puts the state and the owners in a sensitive spot.

**Synthesis and next steps:** Would decision making be improved by independent citizen oversight?

Lois: seems like an obvious "yes" – always good to have checks and balances.

Dan Lawn: pipeline was designed well.

C.D.: independent oversight could look at risk – how good are our responses now?

Lucus: independent oversight could be "best available technology".

Ruth: I think it would be useful to have a group that's not burdened with a lot of paperwork. The oversight agencies are stuck under a mountain of paperwork. One of the benefits of an independent group might be the ability to take a different approach.

C.D. could help avoid "stepping on toes."

Cliff: I want to add a "yes" in support of citizen oversight. Difficult for an agency to make a decision because agencies might fear budget cuts from the legislature.

Independent oversight committee could help with "translating" complex issues for citizens, provide a service.

Matt Obermiller: look at strengths and weaknesses of PWS RCAC.

Elmer Marshall: facilitate a contingency base station and crew in Chitina, similar to Rampart. Chitina is the last chance to catch oil before it enters the canyon.

Lois: I'm skeptical that if it's a big spill, a Chitina response station could be effective.

David Solomon: it's all about education. We get a lot of tourists, I got a question from one woman "how does that barrel get down the pipeline?"

C.D.: prevention is key. Rapid containment, need to form a local citizens response crew.

Elmer: PS 11 is very thinly manned.

Lucus: we shouldn't confuse citizen response with citizen oversight.

David Solomon: doesn't Stevens Village have trained responders?

Dan Lawn: how can you assure that volunteers are available? Would need to compensate people in some way.

C.D.: our whole valley runs on volunteers.

Lucus: but with volunteers in other functions, you know the equipment is going to work (e.g. an ambulance). Need to know that in spill response situation.

Lois: Cook Inlet RCAC and PWS RCAC hire engineers. We could narrow areas of concern, e.g. leak detection, corrosion, valves, and retain engineers to do some analysis. See the Pipeline 101 section on PHMSA's web site. University in (?? Canada?) does some pipeline training.

Ruth: PWS RCAC has had some successes. They must have said, (1.) we want X and Y; and then figured out (2.) how do we get there? So what do WE want? Raising heat, is that a step that would help? Cold restart problem: is too much water in the line? Need to stop the cheating by operators.

Cliff: we shouldn't kid ourselves about the potential for damage from a catastrophic spill. And the key word is "independent".

Matt Obermiller: I want someone at the table who represents my interests, but now my interests only get addressed as part of the agencies' jobs. Our role is to work on getting tighter standards, set a higher bar.

Dan Lawn: no one is auditing the agencies.

Ruth: I see 2 - 3 tracks:

1. What can citizens do now without a lot of funding?
2. Should we be pursuing something similar to PWS RCAC that would be government sanctioned?

Cliff: an oversight committee could recommend changes to regulations and standards

Kate: an oversight committee could use volunteers to be yes on the ground - e.g., if you're out checking a trapline, could a person make some observations?

