

**OPEN MEETING MINUTES
NOVEMBER 18&19, 2008
IDAHO DEPT OF TRANSPORTATION CONFERENCE ROOM
COUER D'ALENE, IDAHO**

November 18, 2008; 3:00PM – 5:00PM

November 19, 2008; 8:00AM – Noon

INTRODUCTIONS

OLD BUSINESS

1. Review minutes

Approved as presented

2. Pooled Fund Research Project (Corrosion effectiveness of deicer products)

- Monty

➤ Project Status

- Research ended first year
- 2nd year is starting – documents are on the PNS website
- Infrastructure has been mostly established
- The Steering Advisory Group performed a field trip to look at the site and visit the lab at MSU.
- All six (6) tanks are in place and filled (UV resistant poly tanks); 3-tanks are agitated and 3 are not
- 2 covered storage
- 2 uncovered pads
- Still working through getting a viable Category 4 product
- Category 1, Category 2, Category 4 and a brine with GLT as an inhibitor
- 1st year was to define the parameters
- Field research will start this winter with 2 artificial events (black ice, & light snow) and 1 natural event
- Snow making machinery, water, possible snow fencing, procured light duty application equipment
- MDT provided materials to build asphalt slabs for testing
- WTI has committed to resolve the problem of collecting samples after an event; looking at different ways to get the most recovery from the pavement
- Suggestion: Maybe think about using steel tanks for storage as the results may be different from the poly tanks.

11 states, Ontario and 4 private concerns on the Steering Committee

Have approximately \$600,000 for this research with WTI's matching funds

Next spring or summer would be a good opportunity to get the TAC committee together to discuss what results we have at that time.

3. Deicer Category Addition/Updates – Ron

- Category 9 – Corrosion Inhibited Liquid Sodium Chloride
 - 23% brine; no more than 6% of inhibitor added
 - Maybe look at lowering the concentration of the sodium chloride number to facilitate the ability to bring in more inhibitor groups
- Category 10 – Corrosion Inhibited Liquid Sodium Chloride + Calcium Chloride
 - Ability of the concentration and the inhibitor coming in at a higher concentration?
- Category 8 - #8 sieve gradation change
 - There was a request at the May meeting to look at this gradation. The folks that contacted us concerning this request have not provided the information that Ron had asked for. Therefore, this has not been addressed at this time.
 - Idaho – have not seen many failures on the #8 sieve
 - Justun – What is the need for gradation? Doesn't seem to be much risk or liability. Concerned that we are assessing penalties when we don't see any difference in performance in the field. Is there any difference between 8A-R and 8A-B? Depends on the manufacturer. Anti-caking agent (YPS) could elevate the cyanide content of the brine.

Want to expand the categories and what is allowable in each in regards to inhibited sodium chloride brine.

Performance based category – who cares what it is if we determine that we want the product to perform in this way and it does?

High performance cold weather product - Will PNS look at this?

Changing these requirements may lead to products being listed in more than one category.

Why not go to a 27% mag as this would not need to be de-sulfinated, more competitive cost since the salt brine of 23% is not a performance product?

Seems like the PNS is constrained by the categories, most of the states don't go outside the PNS categories.

Need to make sure that the brine categories have to meet the same criteria as the other categories.

PNS started in a direction of environmentally acceptable, performance, etc products and now we are using salt brine - that is coming full circle.

Salt Brining:

Environmental concerns

Infrastructure concerns

PM10 concerns – dried salt particles becoming airborne

Idaho will have a more defined policy in regards to brining.

Would like to see some standards on corrosion rates on stainless steel and aluminum in our research. Especially with salt brine. Need to make some decisions on what alloys we will use.

Ron will work through the categories and will post them on the web in draft form for comment.

NEW BUSINESS

1. Deicer Contracts – What is happening this year in each State/Province?

➤ Washington

- Opened this past summer; core the same; contract is a 2 year renewable contract
- Did away with the 60 day delivery pricing – not utilizing it
- Did not bid category 4
- Got a little lower price in the solids; liquids stayed about the same

➤ Montana

- Solid salt – do a lot of blending of salt/sand
- In the Butte Division, we only bid kiln dry salt; got a quicker start with it this year; next year we will bid both category 8A and 8B
- Category 1; rebid this contract; little higher price
- Using mag in our bridge deicer system
- Salt brine – Missoula and Helena operational – will be pushing the limits on the storage capabilities in Helena. – we are inhibiting the brine
- Experimenting with increasing the salt in our sands and backing off the application rates; seeing some leeching concerns; taking steps to mitigate this (containment pads, covered storage)
- 2010 initiative; reduction of 20% energy usage by 2010; travel reductions, winter maintenance will not be sacrificed.
- Doing an experiment in regards to the leeching problems; how much is leeching when we get “x” amount of rain, etc.

➤ Idaho

- Wrote an extension to the contracts until the end of March
- Trying to get all the contracts on the same phase
- Solicit exactly what the Districts want for chemical products
- Prior to having a contract – have a pre-bid meeting
- Boiler plate language can be addressed
- Talk about the terms and conditions
- Fuel surcharges

- Go to bid next spring

➤ Colorado

- Record winter last winter money and material wise
- Had problems getting material around Xmas time
- Increased storage
- Contract was written – has some tiers built in
- Improved the ordering process
- Adding inhibitor to some, not all
- Doing a lot of training; calibration, application rates
- \$70,000,000 spent last winter
- Re-writing our policy which has to go to the commission
- Snow & Ice will not be compromised
- Level of service is not dropping
- Sand shed policy in place – covering the sand on impermeable pads

2. Salt shortage in the Eastern States - Ron

- Will this affect the western states

Jason Bagley - NASC

Localized depending on which eastern region.

Go to the Salt Institute website for the details

Definite shortage in the Midwest and east

High bid quantities and capacity capability led to the shortage;

Freight cost to get it from the west to the east is prohibitive to ship; western states are unique because of this. Should be no shortage in the west

Transportation on rail – railroads have not been friendly on salt so this isn't an option at this time

Interest of serving the states better; the more storage the states have, the earlier in the season that the states can order the better, give the vendors as accurate a quantity as possible; more notification the better, especially any large increases

4. Brine Inhibitors – Ron

- Standardize specifications for this product

Know that we need to create a spec for the PNS QPL.

Moving forward

Pesticide residue is a concern because of the agriculture based inhibitors

Perhaps we need to start looking at radioactivity

4. PNS Web Site, Web Content, Edits, Changes, Pictures – Jay

Introduced it at the conference in May

Have a dedicated web person at WSDOT to keep this up to date

Research page on the web site - publishing all the quarterly reports that relate to the research

Have received positive comments on our website

Re-doing our brochure and plan on putting it on the web
Not doing vendor links on our site
Associate member information will be updated by Richele Parkhurst

5. Multi-component salt brine specification - Ron

Discussed during item #3

6. Other

PNS Future – still responding to the specs; be dynamic to the needs of the states and industry

Are we concerned with the public perception in regards to brine? Can we defend the program?

Munden – our complaints have dropped dramatically

WSODT & MDT are using inhibitor

Inhibited brine is “stickier” than non-inhibited

WSDOT – the brine that they are building this year is different and will have to wait and see

Idaho – Brent, concerned about the perception, concerned about what is happening along side the road; have not seen any results; no body can tell Brent what the salt brine is doing to the environment; no structure program to test soils and water; trying to be proactive to address any problems that are developing instead of waiting until it gets out of hand

Ron - Chloride loading is an issue;

WSDOT – it’s a matter of degree; in the east and Midwest states, they use a tremendous amount of salt; a lot more than we use; other states have accepted the chloride issues;

Munden – the salt brine program is effective; haven’t experienced any of the refreeze issue of over application of mag chloride; haven’t had the slickness issues with the salt brine program; quantity usage has gone up; no residue left on the roads; salt is working in the Coeur d’Alene District: don’t have snow floor on 4th of July Pass since using salt brine; creeks are monitored; not seeing the loading of sanding materials in the creeks; air quality in CDA is better than before, but that is due to eliminating aggregates; have seen the salt residue in the air and will effect the air quality in the CDA area; it is working, but we can do it better; should we put corrosion inhibitors in – maybe, but not the District’s policy at this time; seeing a savings in some things, have not run out of product since we started brining; the managed transition temperature is 12 – 15 degrees; then move to dry sand without salt; still using granular salt (150-300 lbs per lane mile); focusing on calibration of equipment; sand clean up has dropped dramatically

Monte – we have found that the inhibited brine is effective; the mixture this year is different; going to apply the same as we would mag/cal; don't see any correlation between the solid and the liquid; haven't seen a rise in usage unless it is a factor of the weather; the managed transition is now 15°; all products are inhibited and meet PNS standards;

Justun - seen a little reduction in the working range (15° for brine); inhibited brine is about \$.40 - \$.42 gallon; paying \$.65 - \$.80 gallon for mag; about equal when considering the additional salt brine requirement; getting better in our production rates as we progress; one year, the inhibitor was so expensive that we did not use it; inhibitor price has gone down, so we are using inhibitor again;

Since the transition temp is higher, switch to solids sooner; clean up expense could be more if using sand;