

**OPEN MEETING AGENDA TOPICS  
NOVEMBER 13 & 14, 2007  
IDAHO DEPT OF TRANSPORTATION CONFERENCE ROOM  
COUER D'ALENE, IDAHO**

**OLD BUSINESS**

**1. Review minutes – Diane**

Ok as printed

**2. Steel Coupon Issue Update– Greg Leist**

Tested 3 batches of metal; currently tagged a large batch of steel; will test in a couple of weeks; Greg will let Diane know where he is in regards to the results and what happens next

**3. State/Province Updates – What is happening in our neck of the woods?**

- **Washington;** budget shortfall of \$15 million; asked all regions to identify what area will suffer to fully fund the winter maintenance program; Currently planning for the 2010 Olympics; succession planning; recruiting and keeping people; building storage facilities; updated the Snow & Ice Plan – available on WSDOT's web site; doing an automated data collection trial program; recently went through the 2<sup>nd</sup> year of the contracts (80/120 process); starting to talk about future contract strategies;
- **Oregon;** not present
- **Montana;** using some calcium chloride; building storage facilities; 2<sup>nd</sup> year for Category 1; new contract with Tiger for calcium; doing the testing on the Elite; still testing the corrosion inhibitor for the salt brine;
- **British Columbia;** privatize maintenance; 28 contract areas; 10 year maintenance agreements; more contractors are moving to the solid salt and sat brine; starting pre-wetting operations in some areas; lots of work for the 2010 Olympics; working on a project where the Contractor designs and builds the project, then they maintain them for a period of 30 years
- **Idaho;** experimenting with the straight salt approach in two (2) areas; getting ready for the 2009 Special Olympics; keeping money in the budgets is getting difficult; currently have contracts for liquids and solids; have a new bridge south of CD, have an automated deicing system (potassium acetate) built into this bridge, use of chlorides on this bridge has been banned
- **Colorado;** not present

#### **4. QPL – Ron**

Looking at the new breakouts for products on the experimental list; looking at the non-chloride grouping (solids vs liquids)

The only product that has been added is Ice Begone 2 HF from Sears to Category 1.

ITD is still testing some other products that have been submitted.

##### New Categories being Considered

Category A-1; Corrosion Inhibitor for Sodium Chloride Brine

Category A-2; Corrosion Inhibitor for Sodium Chloride plus Calcium Chloride Brine

Category NCL-1; Corrosion Inhibited Non-Chloride Product

Category 9; Corrosion inhibited Liquid Sodium Chloride

Category 10; Corrosion Inhibited Liquid Sodium Chloride plus Calcium Chloride

When PNS member organizations make their own salt brine, then their salt brine product needs to be tested to the PNS standards.

#### **5. PNS Pooled Fund –Monty**

Western transportation Institute from MSU in Montana is the Contractor. The objectives of the research are to evaluate the longevity of corrosion inhibitors in storage and on the road and their cost effectiveness. The 2<sup>nd</sup> phase will compare the effectiveness of various deicing products in preventing snow and ice.

11-States, Ontario and 3-vendors (\$580,000); Washington, Oregon, Idaho, Montana, Utah, Colorado, North Dakota, Minnesota, Iowa, Indiana, Virginia, Ontario, America West Environmental, Tetra Technologies & Redmond Materials.

WTI and Lewistown Cold Weather Test Bed are providing funds for some of the infrastructure.

Pooled fund has bought tanks, pumps and covered storage buildings

Nov 1, 2007 start date

TAC Committee met in August – (2 day meeting); Dan Williams will be the liaison between WTI and the TAC Committee, He will make sure that they stay on task and that the protocols are followed; Materials to be tested: Freeze CI Plus; Geomelt C; Ice Slicer Elite; Salt Brine (GLT Inhibitor)

1<sup>st</sup> year conducted in the MSU lab – set the protocols, storage testing (should have some results next spring) some field testing done to determine how this will be done in Lewistown; will have RWIS

Steering Committee – Monte, Randy, Ron and Tom

Monte will gather all info from WTI and disseminate to the Steering and TAC committees

#### **6. 2008 Conference Update – Greg Hansen**

May 20, 21 & 22, 2008

Kennewick Convention Center (Tri-Cities)

Room for more equipment, more equipment staged  
Planning on about 400 attendees  
PNS meeting will be held the morning of the 1<sup>st</sup> day  
Red Lion, Marriott main hotels  
Having a snow rodeo  
Still looking for sponsors; sponsor vendors and equipment vendors are being offered separate training sessions if they want to provide them  
Information is on the web site

## 7. Update on Salt Brining

- **Oregon**; not present
- **Washington**; have two (2) areas in WA that are going to use an inhibited salt brine product (GLT is the inhibitor); trying “blends” with the salt brine; looking for one that meets the PNS standard (80% salt, 20% calcium solution, corrosion inhibitor); one area is using cheese whey filtered water to start their bring process (7%) solution
- **Montana**; expanding the brining operations: 3<sup>rd</sup> year in the White Fish (Kalispell) area; looking at doing a slat bring operation in Missoula and Helena; In the Missoula City limits, there is a hurdle getting it approved. There is a city ordinance that says that it needs to be a mag chloride product due to the dust abatement aspects of the product. Asking for a variance to this. May look at applying a mag product in the spring when the dust and PM10 issue is at its peak.
- **British Columbia**; Private contractor moving away from the mag and cal to the salt brine. Used primarily for pre-wetting the solid; Allegations that the mag was causing problems with power transmission lines- not proven, but contractors took it as a problem

Moving all salt to covered storage; constructed 150 new storage areas

- **Idaho**; District 1 went to 100% salt this year. Making all brine in CD and trucking it to other locations; 150# per lane mile to a high of 300# per lane mile; All salt under cover in storage sheds; application of 35 gallons per lane mile with a maximum of 65 gallons a lane mile; Don't have money to buy any more products this year
- **Colorado** – not present

## 8. WSDOT update on the concrete rebar study with WTI

To determine if corrosion inhibited products can provide any protection to our pavement and bridge infrastructure. Initial readings show that the inhibited products migrate into the concrete at a slower rate than the non-inhibited sodium chloride product. This study should conclude in June of 2008. Washington will provide an update at the conference in May.

## 9. Category 4 Products

Doing additional research with the Category 4 product that was having problems meeting the corrosion study. Been doing further research, nothing final yet, but should have the final results by the end of January.

## NEW BUSINESS

### 1. Ohio Peer Exchange – Monty, Ron & Randy

All were surprised at the different business and management practices that they encountered back East. They have a lot of salt usage; if the road is white, then we have succeeded. The environment has suffered due to the salt usage.

### 2. Web Site and Web Contents - Jay

PNS is going to update the web site. Want to know if there is anything that the vendors want to see on the web site.

- Links to vendor web site? No
- Post training opportunities provided by other vendors; not sure this is appropriate use of the site. Members will talk about this later today.
- On the member site, make it bigger, friendlier to use.
- Look at contacting ICBC and see if any reports/studies that they did can be obtained and posted to the web site
- Winter Maintenance articles
- Links to Clear Roads, Sycop, Auroa, etc

### 3. Other

- PNS and members need to look at various options as far as percent of active ingredient, corrosion inhibition, comparing the actual costs-not just material costs when making the decisions as to what we do.
- Why are the States making the decisions that they do? What influences their decisions?
- Will PNS try to “recommend” a solution or direction for all members to go?
- Knowing the eutectic curve of salt brine, do we have a back up plan?
  - What obligation do the vendors have if we get in a bind and order from them on short notice?
  - Montana has a managed transition and below that, we switch to solids; Whitefish is the most aggressive area for the brine
  - Idaho has a managed transition of 12 degrees where they switch to solids
- Steve Herzog provided information in regards to the Kalispell, Mt salt brine project. Steve explained the rationale for switching to salt brine from a mag chloride operation. Included a cost comparison between mag chloride and salt brine.
- Concrete research Study with South Dakota – about 80% completed; some of the findings are pretty clear; final report will be published late Jan/early Feb. Looked at the chemical effects of the chlorides on concrete paste;

Use of the silane and soloxin products greatly slow the infusion of the chlorides. Should look at preventive measures when building new bridges as a part of the contract.

- Price adjustments (for all products) – one of the things that has been discussed is the price adjustments where they don't meet corrosion or environmental concerns, and then the product becomes 100% penalty. Looking for corrosion in a product, if it doesn't meet the standards, should come up with a different way to look at the penalties as the product doesn't "fail" in its purpose. PNS and members need to take a look at the penalties and see where we need to be in regards to the specific product line.
  - Buying a material that is to meet certain specifications. When it doesn't meet specs, then we need to address the problem and what "cost" effect that this may have to the purchaser.
  
- Gradation – Steve Herzog – time capsule value of a salt like Ice Slicer. Ice Slicer has fine and coarse granules. Most salt is fine and pretty uniform. Looking for a longer acting salt product. Developing a spec where there is a retainage on the 3/8" screen.
  - Maybe go to Grade 1 instead of Grade 2, ASTM standard salt
  - This could be both good and bad:
    - Bad - If plowing shortly afterward, then you would be plowing off the larger particles. Larger particles would also tend to be "blown" off the road easier.
    - Good – Would have a longer period of time to "return" to a roadway due to the longer bring time for the larger particles. Almost a time release effect. Coarser material can be used as an abrasive as well as a deicer.
  - Ron will look into this and see what is available.