

PNS DEICER MEETING

MARCH 24, 25, 1999

Meeting attended by Diane Tordale, Dan Williams, Teresa Zemljak, Greg Munden, Cece Lutley, Graham Gilfillan, Dale Keep, Jack Manicke, Louie Albright, Tom Strandberg, Ron Wright, and Linda Slupe.

Minutes of the last meeting: Minutes were read and approved as written. It was recommend that we do not put detail notes on the WEB site. We will condense the minutes for the WEB site.

OLD BUSINESS:

HITEC

This report is headed for the printers. It is supposed to be out the 1st part of May. The executive summary will be available at the Snow and Ice conference in Duluth. This will be posted at an Internet Site. Dale will let us know where we will be able to access this information.

MOU

Clayton was going to put one together, but he has been promoted and will no longer be involved in PNS. The New Maintenance Engineer is Dave Jones. Ron will tell Dave that we welcome him and ask him if he would be willing to write the MOU.

MEMBERSHIP:

What was the determining factors for creating the PNS?

- Columbia River Basin similarity
- Common interest in improving the quality of the products
- Common interest in getting the best product at the best price
- Active representation and participation
- All entities agreed to use the contract developed by the consortium within their respective area

Alaska and California have expressed an interest in becoming members of PNS. We would welcome both of these states as Associate Members.

MEETING PARTICIPATION:

- Any interested party may attend the PNS meetings if room is available.
- We will put the agenda and dates of the PNS meetings on the PNS WEB site at least 2-weeks prior to the meeting

ICE BAN:

Can't determine how to measure the active ingredient. Can't tell how much we have. Maybe look at it on the protein basis. Steve Bytnar gave Ron some test procedures, but they were not complete. Need to be able to measure this when we go to bid. Put the proposed ICE BAN changes in the contract on the WEB with these changes clearly marked and a disclaimer that they are based on testing assumptions yet to be confirmed. Call these organic mixtures.

Linda and Ron will identify the "blanks" in the current specs and send them out to everyone. Graham has asked Ron to keep in touch with Tom Guthrie at Levelton Labs as he is doing the testing for BC.

NEW CATEGORIES:

Ron has tested Dow Chemical's product...Liquid Dow Plus...Category 2 Calcium Chloride. Diane will add this to the approved products list and Email all members with the newest version. Diane will date each product on the list as to when it was added to the list.

CMAK (50/50 blend of 25% CMA and 50% Potassium Acetate) and CF7 (50% Potassium Acetate with inhibitors); Have completed the environmental tests. Issue - can't determine what the patented molecule is. Can't calculate the percentage of product in the solution. Ron hasn't gotten all the required information to test and qualify the product. He received an incomplete qualification packet.

North American products...Ron hasn't received any product information and hasn't heard any more from them. At this point, they will have to send in new product and information.

Dow Chemical...super-salt...need to consider calcium chloride instead of mag chloride as an inhibitor in salt. Have one category for mag inhibited salt and have a) 10% mag, b) 20% mag or c) 30% mag.....do the same for the calcium inhibited salt.

Ron will review the categories and try to encapsulate them and add any new categories as needed.

Pre-Qualification Issue:

It was agreed that during any pre-qualification process, each manufacturer is allowed to submit 2 products per PNS category. Idaho will do the pre-qualification process this year. The bid samples will be submitted in May and the samples will be tested by late July early August.

As an organization, we encourage any vendor that wants to bid in any of the 5 PNS areas, to make sure that they are qualified to submit a bid in that area. Just because a vendor has a product on the approved products list does not mean that their product will be purchased or that they are allowed to submit bids in each of the 5 areas.

Deicer Slickness:

- Idaho Skid Test - old and new concrete and asphalt; minimum skid #30; in almost all cases, the mag was above the wet road readings

- BC Skid Test - hired an engineer to conduct the skid test; sprayed one lane and not the other lane; the lane not sprayed was slicker than the sprayed lane; the result was that mag was better than wet pavement
- Minnesota slickness issues - recommend in the fall that you only pre-treat ahead of the "bond" not ahead of the storm. Reduce the application rate at this time. Don't apply until 38 degrees and going down, use application rates of 10-15 gallons per lane mile....Dale will put the SICOP report on our WEB site

WEB PAGE INPUT:

- Have a revised specification document that indicates where the changes were made
- Member name, state and Email address
- Dale will get our WEB site up to date....ICBC will try to take it over
- Email answers..questions to PNS, this should be dispersed automatically to the group..ICBC will monitor the site at this time
- A statement will be put on the site that any question input to this site may not be answered until the next PNS meeting
- Track the hits to the site
- Links to all Departments....get these addresses to Dale
- Frequently Asked Questions Area
- CC all Web Site information to Dale and Mike Ellis (ellismi@wsdot.wa.gov)
- Pictures....Ron and Linda will get approx 6 pictures of lab activities to Dale
- Create a PNS logo..Dale has a rough draft of this that he will send to everyone

NEW BUSINESS

PNS Annual Snow Conference:

ICBC has volunteered to host the first one. ICBC suggests the date of May 2000 as a goal. Move this to a different PNS member site each year. Support BC this first time. If it is a success, then each state can then take the idea/concept to their respective state for their approval. This conference would be geared to the operators. The PNS group has authorized ICBC to use the PNS name to promote this conference. Graham will send Diane a brief description of the conference concept to include in the encapsulated minutes for the WEB site.

The Snow and Ice Conference will be in Kelowna, BC are May 16 and 17, 2000. It will be both a product and equipment show plus guest speakers on all parts of snow and ice control. Kelowna is on Okanogan Lake and is situated 45 minutes by air northeast of Vancouver and 4 hours by car. If you want more information on this conference, contact Ingrid Brakop at <ingrid.brakop@mail.icbc.com>

Levelton lab Toxicity Testing:

The Levelton lab is running tests on snow and ice control chemical products. These tests are encompassing all aspects of environmental concerns on these products. The resulting reports will be available and published upon completion.

New Product Protocol

When a vendor approaches us with a new product, send an Email to all PNS voting members to let them know what and from whom we received the product. Also specific if you can test the product or if you need help with the testing (i.e. can do

some tests, can't do any tests, etc). When testing is completed, all paper work will be sent out to each voting member. If required, the consortium will discuss the merits of the new product at their next meeting.

CONFIDENTIAL INFORMATION:

If a vendor requires any member of the PNS consortium to sign a confidentiality statement in regards to their product, the statement must give us the latitude to furnish that information to all PNS voting members. In turn, the PNS voting members agree to abide by the confidentiality statement.

Lab Report Discrepancies:

Testing procedures vary from lab to lab...One Lab's results show a penalty situation exists and the other Lab's results shows that they meet specs

Selenium Testing and % Mag Chloride; different methods used

- Titration method - Total Hardness; will read high
- Atomic Absorption method - isolates the actual test element
- ICP
- ICP-MS - will read high if the instrument is used wrong

The Selenium test procedure listed in the specifications will need to be changed. Ron will take care of this and update the information in the specification/testing document.

Check the specific gravity to verify the lab tests for % mag chloride.

1. specific gravity = 29% mag

1. specific gravity = 30% mag (these are for Shield LS)

Use this for an internal check on the specific gravity vs. % of Mag; if you get a failure on the % of mag, compare with the specific gravity for an indication of accuracy.

Ron recommends sending a specific gravity chart to the lab for a reference. This chart may help the lab verify their procedures. Have the lab run the specific gravity and compare it back to the % mag test results.

The group will use the AA or the ICP method for testing for Selenium. Ron will modify the testing protocol for the ICP method since the AA method is expensive and independent labs are not willing to use the AA method.

ASTM; changing the test methods. Ron and Linda will get the changes into the contract. Ron will ask for help from the other members to help verify the necessary changes.

Brine chemistry is different than water sample testing. Need to make the labs aware of this.

Heavy metals tests... ICP vs AA....different results..stay with the AA method at this time and will investigate the variances of cadmium and copper. After the research is completed, it may mean that PNS will change the test methods.

Testing on aluminum and other metals... are we going to run any tests on a specific aluminum, copper wiring, etc? Do we have any test data on other metals besides steel? PNS needs to continually break new ground or go over old ground as necessary and take the appropriate steps at that time.

Dale has test data from testing aluminum that showed that aluminum was not an appropriate for a testing material for the corrosion test. The test showed aluminum susceptible to chlorides but weight loss so relatively small that four decimals were required to determine the relationships loss. The higher the mag concentration, the more weight loss. Dale will get these results to Greg.

ICBC COST BENEFIT ANALYSIS:

The analysis showed that there was a significant difference between the 96/97 season and the 10-year prior control group anti-icing. Represents \$1.4 million savings and 73% reduction in accidents on treated roads.

Vendor Representation:

Agendas will be posted on the PNS WEB site a minimum of 2 weeks prior to the meeting. Vendors may attend and participate in the meeting for any part that does not concern proprietary information. The vendor participation will be limited to the space available. Vendors having items that they want discussed must contact a PNS member to get it added to the agenda.

Bid Document Comments:

- In Bid Process, Part D...change the wording of waving the field testing from "inhibited mag chloride"...make it generic; delete the statement. Read the contract and take out any specific references to mag and make it generic.
- Freeze point chart...(phase curve) take the name off and put "Vendor's Product" at the top, change some of the numbers and make the exhibit generic. Cover this with a statement that explains what information is to be on the chart and the exhibit is the format that we want the information provided to us.
- Put a revision date on the actual document for reference.

atta-boy!!!

The work of the PNS is widely known and respected. Minnesota is going to duplicate the PNS efforts with states in their area.

Great Job Everyone!!!