

2011 Tree Marking Paint Committee Meeting

June 14 – 16, 2011
Missoula, MT

Attendees

- Dick Fitzgerald, WO-FM
- Dave Haston, SDTDC
- Ed Messerlie, SDTDC
- Tom Maffei, R1
- Kim Newbauer, R3
- Matt Berry, R5
- Mary Yonce, R8
- Randy Jost, R9
- Ken Dinsmore, R10
- Bill Hensley, BLM
- Steve Niles, BLM
- Tim Radtke, DOI Health and Safety
- Rich Shreffler, R1 LEI
- Randy Terrill, NCP Coatings
- Sherman Drew, NCP Coatings
- John Thompson, LHB
- Dave Robson, LHB
- Angelo Vangel, LHB

Introduction

Dave Haston of the San Dimas Technology and Development Center (SDTDC) started the meeting with a general welcome and requested an introduction of those attending. Bill Hensley and Tom Maffei were thanked for coordinating the field trip.

The NFFE tree marking paint (TMP) committee representative, Teresa Streuli, was unable to attend. Ken Dinsmore represented the union per a request from Mark Davis, President, NFFE Forest Service Council. Rich Shreffler represented WO-LE&I at the meeting.

WO FM Update – Dick Fitzgerald provided background information on the history of tree marking paint, including the evolution from marking trees with a hatchet or branding axe to designate cut trees. The FS slowly transitioned to using off-the-shelf paints, not necessarily from tree marking paint companies. The Forest Service eventually transitioned to purchasing TMP through the General Services Administration (GSA). The FS formed the national TMP paint committee to address health and safety concerns, the program has been managed through the national technology and development program, initially at the Missoula Technology and Development Center and then by SDTDC. Several sites around the country were set up to provide a protocol for testing and evaluating paint performance.

At one time there were several companies supplying TMP to the FS. However, all companies except one did not feel that water-based paints were capable of being applied at temperatures below 32°F. Ultimately a water-cleanup paint was formulated by NCP Coatings in the late 90's which addressed both the paint formulation and also solvents that were being used to clean paint guns. Employee exposure

testing was performed by the National Institute for Occupational Safety and Health (NIOSH) on both the old and new paint formulations, subsequently it was mandated that markers would only use TMP that was demonstrated to result in employee exposures that were below occupational exposure limits.

Another issue has been the implementation of a national TMP color scheme. The FS has developed this national scheme which has some issues with the cost of some colors. Some issues with color schemes still exist. Mississippi swapped colors between sales with the same contractor who was cutting leave trees. This led to problems with cutting the wrong trees. This points up the need to be consistent with the color scheme on sales.

The FS originally purchased through GSA, directly from the paint supplier. Subsequently, LHB Industries was successful in getting TMP added to the mandatory JWOD procurement list. NCP Coatings still manufactures the paint but it is now supplied through LHB. This new supply has worked well over the years. The FS has contracted directly with LHB since 2009.

The current issues concerning paint are related to fading and the cost of paint. The primary objective of TMP is employee safety and health – as a result ingredients that would normally reduce fading have been eliminated.

National budget issues have caused Congress to look more closely at discretionary funding. On timber sales 25% of receipts go to counties. Stewardship contracts do not now contribute to the 25% fund. The volume and value of timber sales has gone down while the volume under stewardship contracts has gone up. Stewardship contracts allow the trading of goods (timber) for services (resource work). The monies that are used for this service work has not been scored previously by Congress. Scoring is a method that allows Congress to predict future spending.

Mills continue to close throughout the country and in some areas there are few mills left. In the far West private logs have been at a premium because of export prices and some mills that use both public and private timber have had a log shortage.

The SBA timber sale program is designed for sawmills. The program is to provide small mills a historic share of the timber sale market. This share is evaluated every 5 years through a recomputation process that evaluates purchases during that 5 year period. If during a 6 month period, small business mills are not able to buy their share then the SBA program is “triggered” for the next 6 month period and sales are set aside for small business in an attempt to allow the small business mills to purchase timber sales. On set aside sales, small business can sell no more than 30% of the sawlog volume to large business. Independent loggers are considered small business non-manufacturers. They are eligible to purchase set aside sales and have to live with the same rules as the small business mill. These loggers are often the ones that have been impacted the most when the small business mill that they have been delivering logs to shuts down and they have to haul large distances to another small business mill sometimes passing right by a large business.

Company Presentations

NCP Coatings – Randy Terrill

Randy Terrill presented an overview of NCP including paint production, paint availability, processing, testing, development, and their continued dedication to meeting the needs of their customers.

LHB Industries – Dave Robson

Delivery lead times that exceed 30 days has been a big issue because purchases must be reconciled within that time frame and the purchase cannot be reconciled until after delivery. The current LHB system does not have a way of storing credit card information and retaining card information is a security issue. LHB will be implementing a new system that is compatible with the existing ordering system and will allow credit cards to be charged at the time of shipment. This system should be implemented in early 2012.

Due to age on delivery requirements, LHB is unable to stock slow moving items and determines how much paint they have on hand. Popular TMP products are usually kept in stock but lower volume products must sometimes be manufactured when they are ordered so that the age on delivery requirements are met.

A notification of shipment is sent to the person who ordered the paint. The “contact person” is notified as well only if the email (for the contact) is entered by the person placing the order. Otherwise only the person ordering the paint will be notified.

How long do batch retains need to be kept at LHB? NCP keeps (and will continue to keep) lot samples indefinitely. LHB proposed keeping lot samples of type A, B and C for three years and type D for seven years. The group tentatively agreed that this was acceptable.

LHB/Law Enforcement Issues

The most routine problem is paint storage and accountability.

Dave Haston reviewed the recommended law enforcement investigation procedure. The procedure can be found on the members-only portion of the TMP website. Rich Shreffler recommended that the procedure be distributed more widely to law enforcement. **Action item:** work with LE&I committee rep (was Mary King) to determine to best way to disseminate to LEI (possibly add information to LE&I website).

The last security audits of LHB and NCP were performed in 2006. **Action item:** contact new LE&I committee rep (vice Mary King) to coordinate new inspections.

Acquisitions Management

Kelly Koepp was unable to attend the meeting.

Credit Card and Activity Address Code (AAC) list – once you are logged in to the LHB site you cannot change the ship-to address. This is a security measure that is built into the system to prevent paint from being shipped to an unauthorized address.

Make sure the people in your region are aware of who their paint rep is.

BLM would like to add new AAC's but so far have been unsuccessful. AAC's cannot be made up. The BLM used to work through Judy Reck. Judy was located in the National Operations Center at the Federal Center in Denver. Judy retired and apparently the BLM has migrated away from use of AAC's. Her replacement is not familiar with the AAC system and was not able to find any of Judy's information pertaining to AAC's. When Bill Hensley inquired at the MT State Office he was basically given the same

feedback on use of AAC – that they don't use it anymore. The best Bill could come up with at this point is a BOAC (Billing Office Address Code) which is used by GSA to track the location of GSA Vehicles. This too, may lead to a dead end as BLM is moving towards using fewer GSA vehicles due to costs and more to Interior-purchased vehicles. Bottom line: for the BLM offices currently in the system that have an AAC, they should have no problem. If an office, not in the system, has a forester that wants to order paint for that office, the BLM will have a problem getting an AAC for that office. We need to look for options to AAC's.

Reminders: Forest Service cardholder and AAC changes need to be submitted to Kelly. All regional reps have access to the cardholder and AAC lists in the TMP ordering system.

Ordering System and Shipping Issues:

There was a question regarding packing lists. Some shipments may consist of more than one lot for a given product. It would be helpful to have clearer information about the existence of multiple lots in a shipment.

Regarding the advanced delivery notification - the 24 hour notice is still not being provided on some shipments. In these instances Dave Robson needs to be contacted immediately. If notification has not been given and an authorized signer is not available the delivery can be rejected. Although this practice (rejecting the shipment) shouldn't necessarily be encouraged, it might be an effective way to reinforce the need for advanced notification. District personnel need to know who is (and is not) authorized to sign for a paint shipment (receptionists should not be signing for TMP deliveries). **All delivery issues need to be promptly reported to LHB Industries.** The LHB contact information is listed on the TMP website, under "Ordering & Shipping."

Accomplishments

The specification revision was completed and released in April, 2011. In addition to having NFFE participation throughout the revision process, the union was formally notified of the revision as required by the 1999 settlement agreement. **Action Item:** Get confirmation from the union president that they have received the new specification.

The 2400-400 (water cleanup) and 2400-401 (rain resistant) specifications have been combined into one specification, released as 2400-400a. **Action items:** 1) Dave to work with contracting officer to incorporate the specification change into the contract (complete 9/2011); 2) post the new specification on the intranet site (complete 9/2011); 3) update the qualified products list and 4) get confirmation from the union that they have received the new specification.

As required in the new specification, employee exposure testing will be performed on any new paints. At this point the testing will be performed by Federal Occupational Health. We have an agreement in place with FOH to perform the testing.

There was a suggestion to print the specification and revision to the paint can label. **Action item:** LHB.

Hybrid UV Testing

Dave Haston reported on the laboratory testing performed on bark samples with the prototype hybrid formulation. The hybrid paint formulation was developed in order to address UV fading issues with Type A (water clean-up) paint, primarily orange. Both fluorescent (QUV) and Xenon arc testing was performed. The QUV test breaks-down polymers, whereas the Xenon arc test breaks-down pigment.

Previous testing on plywood samples has not always duplicated fading in the field, so testing was done on actual bark samples. The recent testing did replicate some of the fading issues that have occurred on orange Type A paint. Since we are experiencing fading issues on hybrid paint on bark samples in the laboratory, the committee decided that further testing and evaluation is needed before proceeding with hybrid paint.

Additional bark samples will be collected and additional testing will be performed. Side-by-side testing will be performed with bark samples, MDO plywood and a tin plate. The purpose of using the tin plate is to remove any contribution of the wood on the fade resistance. Hardwood and ponderosa bark samples will be tested. 3x6 inch bark samples work the best in the test chambers. Consider including some aspen and/or birch from the lake states in these tests. **Action item:** Regional reps to provide the following bark samples to SDTDC: paper birch, aspen, elm, sweet gum, ponderosa pine, and loblolly pine.

Test Site Status Reports

Region 3 (Kim Newbauer)

2003 applications: the rain resistant all worked well and looked good and the side of tree (UV exposure) doesn't matter.

2005 rain resistant application: had more fade than the '03 samples. Mostly the south side fading, this could be explained by UV. Tracer is good. Some of the south facing stumps were slow to react to the tracer test kit, but did react. Pink and orange water cleanup are showing considerable fading, especially the pink. Some pink applications are ok from a contract standpoint at this time, but most are fading too much.

2008 application: butterscotch and fire orange, possible fade, could be due to to the earth tone when it dries.

2008 hybrids: not much fade, some fading on blue and yellow on the south side of stumps. Tracer was good on all except the pink in some locations was slow.

Production test with hybrid paint: was applied last October.

Region 5 (Matt Berry)

The UV test site is located at Frenchman Reservoir on the Plumas NF.

Most colors were good, except fire orange and orange and blue water borne, response was light. South facing water borne may not be acceptable in another year.

Region 6 (Steve Niles)

The Willamette site is no longer active due to the age of the paint. All new paint is being applied at the Mt Hood site which currently only has hybrid paint. Fading is starting to occur at 2 ½ years but is still acceptable, tracer was fine. At this point it doesn't look like it will last eight years. Some of the spots may have been under snow for a period of time. **Action item:** Rain resistant and waterborne paint need to be added at this test site (Steve Niles and Dale Reinhart).

Region 8 (Mary Yonce)

In general tracer does not seem to wear well on the hardwood, not a problem on the pine.

Using white on oak does not work because of mottling of the bark.

Paint type A applied in 2006: The tracer reacted slowly on hardwood, great on pine.

Paint type B (2006): Tracer would not react on the pine or hardwood. Color is great.

Paint type C (2006): Everything worked well. Some fading occurring on the pine with white and yellow.

Paint type D (2006): Doing fairly well, some problems with tracer on yellow on oak, colors/fading are fine.

Hybrid: tracer element on oak trees does not work. Colors are wearing well. Pine tracer works okay, a little slow, but works.

Mildew resistant test paint was doing fine. Some moss was growing, otherwise fine.

Region 9 (Randy Jost)

Jingle Lake Test Site results: Generally speaking, the type D and C paints holding up the best in the Upper Peninsula of Michigan. Type B was rated the worst. Paints at test site applied in 11/06/06 were reviewed on 6/7/11 or 4 years and 7 months in the field.

Overall test site performance from best to worst by type:

#1) Type D: all marks and colors on all species satisfactory for both tracer and color fade. Sugar maple stump marks look worst. White and Yellow Birch with orange, yellow and white paint show a mildew-like darkening (biological stain?) coming through paint from underneath.

#2) Type C: all marks and colors on all species satisfactory for both tracer and color fade except white. White paint is unsatisfactory for both tracer and color fade. Bole marks all okay but stumps marks beginning to erode on lower half. Most birch and sugar maple showing mildew-like darkening (biological stain?) coming through paint from underneath.

#3) Hybrid: all marks and colors on all species still satisfactory for both tracer and color fade but starting to show age. Orange is holding the best but tracer tests on pink, yellow and blue are nearly unsatisfactory. Bole marks better than stumps marks which are really eroding on lower half. Birch and sugar maple are the worst. This paint was applied under marginal conditions.

#4) Type A: blue, orange and black marks and colors on all species satisfactory for both tracer and color fade. Yellow, pink, green and white mostly unsatisfactory for both tracer and color fade. Bole marks badly eroded. Stump marks gone or eroding badly.

#5) Type B: only placed on maple with blue and orange colors but unsatisfactory for both tracer and color fade. Except for south aspect, mildew-like (biological stain?) darkening coming through paint from underneath is all that remains. Color is barely recognizable.

Field Results: Average timber sale duration lasts 4-5 years. Of these, R9 is remarking about 1 out of every 5 sales due to marginal paint performance.

Health and Safety

No reports or concerns have been reported in the last year. A reporting form is available on the TMP website for reporting 1) health and safety, or 2) performance problems.

JHA

Region 10 submitted a request to revise the TMP job hazard analysis (JHA) to update the aircraft hazardous materials transportation requirements. There were no objections to the proposed wording changes.

The group reviewed the rest of the JHA. Suggestions were made for clarifying the storage requirements. Other updates were proposed and will be sent out for review.

Equipment

Region 8 would like to look into an electronic paint inventory system. A technology and development project proposal was submitted by the region.

SDTDC previously completed a project that tested the existing paint Excel spreadsheet on an Allegro MX Field PC. **Action Item:** put project information on the SDTDC FM website (Dave Haston).

There was a discussion about the use of pressurized handheld paint guns. They have been tested before and are not a good solution.

Paint gun cleanup and storage: BLM cannot get to the website to see the information. They are looking for solutions for keeping Trecoer guns clean and functioning.

Ken requested that the website have information on cleaning products. LHB was asked if they would be willing to stock paint gun cleaning products so we could order directly from them.

Other:

Tim Radtke will be added to the TMP committee, representing DOI Health and Safety. Tim has been a valuable contributor, especially throughout the specification revision process. It will be an asset to have a certified industrial hygienist on the committee. **Action Item:** Dave to add Tim to the roster (complete).

Next Meeting

There was discussion regarding the need for face-to-face meetings in the future. Several reasons were cited for continuing annual meetings, including the issue of holding day-long meetings over four time zones, the interaction with NCP Coatings and LHB Industries, ongoing hybrid paint development and testing, and so on. The committee recommended that future meetings be co-located in the vicinity of test sites so that the full committee can review the long term performance of the paint. Accordingly, the proposed location for the 2012 meeting is Flagstaff Arizona where we will visit the Region 3 test site.

The meeting is tentatively scheduled for the week of May 14, 2012.