

# Perma-Chink Systems News

## Spring Cleaning

### The Log Home Care and Maintenance Authority

#### Happy St. Patrick's Day!



May you always have

Walls for the winds,  
A roof for the rain,  
Tea beside the fire,  
Laughter to cheer you,  
Those you love near you,  
And all your heart might desire!

#### Happy Anniversary!

Steels Industrial Products, the largest Perma-Chink Systems distributor in Western Canada, is celebrating their **50th anniversary** and continues to provide quality products and services to the construction industry. You can learn more about Steels at [www.steels.com](http://www.steels.com).

#### The best is yet to come...

Get ready for the most exciting news from Perma-Chink Systems in our Summer issue. If you know someone who has a log home, make sure they subscribe to the next issue of the Perma-Chink System's newsletter.

#### In today's issue:

The Right Thing to Do .....	1, 2
Home Inspection .....	3, 4, 5
Spring Cleaning .....	5, 6
Sauder Village .....	7
Announcements .....	8

[www.permachink.com](http://www.permachink.com)

## The Right Thing to Do

### ■ Perma-Chink Systems and the Environment

By Terry Hofrichter and Vince Palmere

Since our inception over 20 years ago we at Perma-Chink Systems have always been serious about our responsibility to minimize impact on and to improve the environment. Our very first product and name-sake, Perma-Chink Log Home Chinking, was developed to replace mortar chinking. Mortar chinking will not bond to log surfaces and has a tendency to crack. Both of these characteristics lead to air leakage and increase heating and cooling energy consumption. Since then we have introduced many more energy saving products while continuing to be at the forefront of environmental responsibility.

Environmental impact is more than just conservation of energy. The impact of household products on the air that we breathe is another important aspect of our environmental conscience.

In the 1980s when we began to manufacture our line of stains, common thinking was that oil-based stains were the way to go. They had been around for decades and their formula-

tion technology was well established and easy to reproduce. However, commonly used oil-based stain formulas contained petroleum solvents and some highly toxic fungicide additives. Even then it was known that solvents and these additives were not healthy to breathe and contribute to indoor and outdoor air pollution.

So we took it upon ourselves to formulate a water-borne line of semi-transparent stains. Water-based technology for transparent stains was in its infancy, so we were developing systems that had not been tried before. We faced a number of challenges along the way but we kept at it because we knew that **it was the right thing to do.**

*(Continue on page 2)*



## ■ *Perma-Chink Systems and the Environment*

*(Continued from page 1)*

These latex based finishes had much lower content of VOC's (**Volatile Organic Compound**) and newer high technology preservatives that were not based on toxic heavy metals. The result is LIFELINE, the stain that people with chemical sensitivities consistently request. LIFELINE stains and topcoats are now the front runners in water-based semi-transparent stain technology.

High quality water-based latex manufacturers have developed latex resins that surpass the performance of oil-based resins in durability, ease of application, mold & mildew resistance and appearance. We have worked closely with those manufacturers to improve that performance and incorporated it into our exterior and interior stain formulations.

There are still many oil-based systems available and state and national environmental authorities are beginning to see the wisdom in continuing to reduce the amount of volatile organic compounds (VOC) released into the atmosphere. If all goes according to plan, it is conceivable that within five or ten years, oil-based stains will be a thing of the past.

**Doing the right thing many years ago has enabled us to remain ahead of the competition when it comes to stain appearance, ease of application and durability; proving that environmental responsibility pays off in more than one way.**

Another achievement that Perma-Chink Systems has made in removing toxic products from our environment was to introduce borate wood preservatives to the log home industry.

For those unfamiliar with borates, they are a mixture of borax and boric acid, the same compounds found in eye wash solutions and laundry additives. Although they are quite low in toxicity to humans and animals, they are quite effective in eliminating and preventing insect and decay infestations.

Before 1989 the only products available to prevent infestations of wood boring beetles, termites and decay in log homes were highly toxic, carcinogenic and corrosive. Perma-Chink Systems changed that by developing the first usable borate system that could be applied in the field. Initially developed for log homes, this technology spread to frame construction industry.

Today there are literally millions of log and traditionally built homes protected with the borate technology invented by Perma-Chink Systems.

### **Is that all?**

No, we at Perma-Chink Systems are committed to continuing our development of new and environmentally friendly products. This past year we introduced two new products that fall into this category: S-100 Finish Remover and Log Wash. Both products reduce the amount of harsh chemicals released into the environment, when compared to the products that they replace. At the same time, they actually increase the performance of their designed functions.

All of us at Perma-Chink Systems are dedicated to protecting our environment and our dedication is evident in our products.



### **By the way, did you know**

that the way that VOC is measured and calculated for oil solvent based stains is in effect different than how they are measured for waterborne finishes? The VOC calculation is based upon the total weight of VOC compounds in the formulation and results in a rating of grams/liter.

However, there are exceptions in the calculation. For strictly oil-based finishes, the total volume is used in the calculation. For water-based finishes, the volume of water is removed from the calculation before the calculation is made. If consistent and rational logic was applied to VOC calculations, the VOC content of waterborne formulations would be rated at approximately 1/10 of their solvent-borne counterparts. With the current set of rules, VOC calculations result in roughly the same result between the two different types of finishes!

It gets even worse. The calculations include provisions for a list of "exempted solvents" such as methylene chloride, acetone and a list of other toxic and carcinogenic compounds. Lobbyists are very effective at their jobs! This means that you may add as much acetone, methylene chloride, methyl acetate and volatile methyl siloxanes to your oil based stain as you wish, without any impact to the VOC rating.

## Home Inspection

### ■ What to Look For?

By Sean Gahan - Senior Chemist

Log homes are special and require a little different treatment than a traditional stick built home. It's not that they need more care, just different care. One of the keys to keeping a log home in good condition is to take some time at a minimum of once a year (i.e. Spring) and inspect the exterior of your home for early signs of problems. Remember that a bit of maintenance and small, inexpensive repairs now can prevent extensive and expensive repairs later on. Before we start discussing the inspection here are a few tips:

- 1 Make a diagram of your home that you can carry with you while you inspect. It does not have to be fancy, just a simple plan that you can use to note where something needs to be done.
- 2 If you have a digital camera take it with you during your inspection. It's amazing how something you see will disappear when you go back to look for it.
- 3 Develop a checklist of things to look for that is relevant to your home. It's easy to forget what to look for by the time you get to the third or fourth wall or in years to come.

### Exterior Inspection

#### Part 1: Overall Evaluation

Start at one corner of the home and be sure to go all the way around. Inspect each wall individually, don't try to inspect too much at a time. Begin by standing

back, away from the home and look for some of the more obvious problems such as:

- Filled gutters and blocked downspouts. If you are not sure about them, use a garden hose to see that they are in good working order.
- Look at the dormers and upper story windows for signs of water damage. If you have a problem seeing that far, use low power binoculars to inspect the higher areas.
- If you have a sprinkler system, turn it on to make sure that no water is hitting the log walls.
- Landscape plants and shrubs should be no closer than 18 inches to any log wall. If necessary, trim them back.



- Move any piles of firewood at least two feet away from the home and never store firewood on the porch.
- Look for any wood that is in contact with the ground, even if it's pressure treated. For protection against termites and rot, all wood should be at least 12 to 18 inches away from soil.

■ When you stand back from a wall you can better see general patterns of wear and fading of your finish, especially on the south and west walls.

Now is as good time as ever to discuss what you can expect from a stain. First and foremost, nothing lasts forever,

especially when it is constantly subjected to wind, rain and sunlight. Wind and rain actually wear the finish off the wood and sunlight breaks down the chemical components of the finish responsible for water repellency.

Ultraviolet (UV) light inhibitors are sacrificial which means they are used up by repeated exposure to sunlight and without this UV protection the wood begins to gray due to oxidation of the surface.

Stains containing colored pigments last longer than clear finishes since the pigments absorb the UV rays, thus protecting the wood. Typically the more pigment there is in a stain, the longer the protection lasts. In any case, all stains eventually wear out and must be replaced.

How long a stain lasts depends on so many factors that it is impossible to predict. The same stain that lasts ten years under a protected porch may wear away in two to three years on a log end that sticks out from a south wall on a bare windy hill. In general, darker colored stains last longer than light colored ones but that's not always the case since some light colors stains such as our Seagull (LIFELINE Exterior-152), Butternut (LIFELINE Exterior-154) and Pickled White (LIFELINE Exterior-150) contain loads of whitish pigments that help block the sun from damaging the wood.

If you catch the wall at a point where the stain is just beginning to fade, all that may be necessary is a good, thorough cleaning followed by a light stain touch-up and a clear topcoat application. On the other hand, if you ignore the fading until the wood is mostly gray, you'll have to remove whatever finish is left, take the logs down to bare wood and start all over again.

*(Continue on page 4)*



## ■ What to Look For?

(Continued from page 3)

### Part 2: Close-up Evaluation

Now that you have inspected the wall from a distance it's time to get up close to see what's going on. Has dust, dirt or pollen settled on the upward facing portion of the logs? Actually it's a good idea to do a quick wash with some cleaner (i.e. **Log Wash**) and a garden hose before you start your inspection. This will allow a better inspection of the finish and show areas that are no longer water repellent. There is a misconception when it comes to water repellency.

The finish system does not need to bead water like the wax application on your automobile to be classified as a water repellent. The definition of a water repellent is something that drives away water or prevents the substrate (i.e. wood) from becoming wet. Typically, wood will darken when it becomes wet. Therefore, look for signs of wood darkening as an indicator for a loss in water repellency.

■ Look closely at the finish. Round logs tend to weather more on the upper half than the lower half since it's this area that's most exposed to the sun and rain.



■ Are there any new upward facing checks that have opened up since your last inspection? If so, use **Backer Rod**

and **Check-Mate** to seal them. It's also a good idea to pour a little diluted **Shell-Guard** or **Armor Guard** dust in the check before you seal it to kill any rot fungus that may have started to grow.

■ Look for signs of algae, mold or mildew. If there are green splotches, it's algae. Small dark spots on the surface of the coating are typically molds. They may be on top of the stain or occasionally between the stain and the wood. If they are on the surface, a weak bleach solution (1 part bleach:3 parts water) will remove them. You can test with a cotton swab in a small area. When they are under the stain it may be necessary to remove the finish in order to get at them.



■ As you walk along looking at your logs take along a small hammer and lightly tap the logs every foot or so. If a log sounds hollow or you get a dull thud you may have a pocket of rot that needs to be repaired. Use a thin screwdriver to probe the area. If the wood is soft, dig it out, squirt in some diluted **Shell-Guard** or dust with **Armor Guard**, and fill the void with **M-Balm** and **E-Wood**.

■ While you are inspecting the logs you should be looking for signs of insect infestations. A few small beetle holes here and there are no cause for alarm. Most of the holes will probably be old and empty. If you are not sure,

stick a strip of masking tape over the holes and check it in a week or so. If the infestation is active, holes will appear in the masking tape. It takes many years for these beetles to do much damage. Just make a note of it and when it comes time to completely refinish the home be sure to treat it with **Shell-Guard** before you apply a new coat of stain (Note: **Shell-Guard** should be applied to bare wood only).

■ Window and door frames are the source of many water related problems. Check to see if the sealant is adhering to the adjoining surfaces. If it's not, pull it out and re-seal with **Perma-Chink**, **Energy Seal** or **QSL**.

**Never use a silicone-based caulk!  
It won't adhere well to wood!**

■ Give special attention to all logs ends, especially if they extend out beyond roof overhangs. The ends really absorb water and that's where a lot of rot problems start. Consider sanding the butt ends, putting on a fresh coat of stain, and sealing them with **Log End Seal**. Log ends that stick out in the weather really take a beating and need a little extra care to keep them in good shape



Log End Seal goes on white, then turns clear as it dries!

(Continue on page 5)

(Continued from page 4)



## Spring Cleaning

### ■ Exterior Cleaning with Log Wash

By Vince Palmere

That's about it for the exterior inspection. You should also do a good interior inspection at least once a year. Most interior problems result from log movement so most attention should be devoted to joints, especially in the corners and around window and door frames. (See before and after pictures below)



If you find air leaks, see daylight coming in, or if water comes in while washing your home, you'll need to seal with **Energy Seal**.

Every home has its own set of special characteristics that need to be routinely checked. Chink style homes require a different inspection procedure than a log on log style and squared logs will age differently than round ones.

We've tried to give you a general outline of some of the things to look for and what to do about them. You should also talk to your manufacturer or local log home dealer for additional guidance. And be sure to read our **Caring For Your Dream Home** and **Log Home Sealant Application Guide** for more information.

**W**arm weather will soon be upon us, so now is the time to start thinking about all of those around-the-house jobs you have been putting off during the winter months. One of the first and most difficult jobs is to clean out your gutters! Clogged gutters are responsible for more water and decay damage than any other single factor. In addition, debris in gutters provide a breeding ground for a whole range of insect pests including centipedes, carpenter ants and even termites. And if the gutters are constantly spilling dirty water over the walls of your home, you will never see that beautiful, clean finish you worked so hard to apply.

So, you've cleaned your gutters, what's next? Let's move to the foundation. During the winter, leaves, pine needles and twigs have probably accumulated against the foundation wall, or even worse, against the logs. Plus, some of that stuff you pulled out of the gutters may have fallen down. It's time to pick it all up and clean it out. While you're at it trim back any plants or shrubs that are within two feet of your foundation or log wall. It is very important to allow air to circulate in this zone. In addition to keeping the walls dry it reduces the number of critters that will get inside.

Now let's look at your log walls. Over the winter they probably collected more than their share of dust, dirt, pollen, etc. Your once beautiful

log walls are looking dingy and dull. Assuming the finish is in good shape, what do you have to do to clean them up and restore their luster? Actually, we've made the job easier and more effective than it used to be.

In the past we, along with others in the industry, recommended using various combinations of detergent, bleach, trisodium phosphate (TSP), or other household cleaning products. Most kind of worked but never restored the finish to what it once was. During the past year we discovered why. Just about every household cleaning product relies on its high pH or alkalinity for cleaning power.

We found that high pH cleaning products actually soften a stain or topcoat during the cleaning process. So instead of washing the dirt off, you end up pushing the dirt **into** the finish. In addition, the softened film results in blushing and even finish removal when the surface is scrubbed while exposed to the cleaner.

What's the answer? **Log Wash**, the first and only product specifically designed for maintenance washing of finished log walls. Log Wash is formulated to do a great job removing dirt, dust, pollen, mold and mildew but does not soften a finish or topcoat, thus preventing dirt from becoming imbedded into the finish. Using Log Wash you end up with a clean surface and a strong finish.

(Continue on page 5)

## ■ Exterior Cleaning with Log Wash

*(Continued from page 5)*

**Log Wash** comes as a concentrated liquid that is diluted with water for use. The dilution rate is one (1) cup of Log Wash to one (1) gallon of clean water.

Each gallon of diluted Log Wash solution cleans approximately 150 to 200 square feet of wood surface area, so a gallon of concentrate makes enough solution to clean about 2400 to 3400 square feet of log surface area, enough to do most log homes.

Along with the Log Wash what tools will you need? Not many. A pump up garden sprayer, a long handled, soft bristle brush and a garden hose equipped with a spray nozzle. We do not recommend using a pressure washer for routine maintenance cleaning. It's too easy to remove some of the finish, especially if the finish is a few years old.

Remember, the object of a maintenance wash is to **gently** remove the dirt without harming the finish. A garden hose with some light scrubbing works best.

To a gallon of water (warm water, not hot, works better than cold water but is not necessary) in a bucket add one cup of Log Wash, gently stir it, then pour the mixed solution into your pump-up sprayer. The Log Wash solution may also be applied with a mop if a garden sprayer is not available but it will be a messier job.

Plan on cleaning small areas at a time since Log Wash needs to stay wet in order to do its job. Wet down the surface of the wall you want to clean with water, then spray or apply the Log Wash solution onto the wall and leave it there

for 5 to 10 minutes. A gentle scrubbing with the soft bristled brush will help remove the dirt and grime. Then rinse the wall down with a garden hose.

**Remember, wash from the bottom up, rinse from the top down.**

That's all there is to it. Periodically cleaning your exterior finish is an important step in maintaining the appearance and durability of your stain but you need to use products like Log Wash that are specifically designed for that purpose.



The exterior surfaces of your home are a settling ground for dust, pollen and airborne contaminants that dull the surface and encourage mold growth. A light cleaning once or twice a year with Log Wash will keep your home looking beautiful and helps prolong the life of your exterior finish.

## Welcome!



Timeless Wood Care Products, an exclusive distributor for Perma-Chink Systems in Michigan,

welcomes aboard new Inside Sales Manager **Mike Brookstra**. Mike has several years of sales experience and is an avid sportsman. Welcome Mike!

## Congratulations!

To the Fewster Family from Canadian Log Home Supply on the birth of their baby boy Mason MacKinnon. Mason was born on February 9, 2005 and is already learning about log home maintenance.



## New Store

A new Perma-Chink Systems store is open for business in Sevierville, Tennessee. Please check our website for the Grand Opening celebration date.



**If you would like a referral to an experienced contractor to perform an inspection or to help you with your log home project, contact your nearest Perma-Chink Systems, Inc. location.**



## Company Stores

### Washington/Western Division

Redmond, WA 98052  
(425) 885-6050  
1-800-548-1231

### Tennessee/Eastern Division

Knoxville, TN 37914  
(865) 524-7343  
1-800-548-3554

### Tennessee New Store

Sevierville, TN 37862  
(865) 774-3307

### Minnesota Branch

Rice, MN 56367  
(320) 393-3088  
1-877-244-6548

### Colorado Branch

Rifle, CO 81650  
(970) 625-1966  
1-800-433-8781

### Montana Branch

Stevensville, MT 59870  
(406) 642-3544  
1-800-479-7090

[www.permachink.com](http://www.permachink.com)

## Stocking Distributors

**Canadian Log Home Supply,  
Central & Eastern Canada**  
1-800-746-7773  
[www.canadianloghomesupply.com](http://www.canadianloghomesupply.com)

**Hess Log Home Supplies,  
Pennsylvania**  
1-800-257-4864  
[www.hessloghomesupplies.com](http://www.hessloghomesupplies.com)

**Log Home Center,  
Indiana**  
1-800-773-6223  
[www.loghomecenter.com](http://www.loghomecenter.com)

**Steels Industrial Products, Ltd.,  
B.C., Western Canada**  
1-877-846-7502  
[www.steels.com](http://www.steels.com)

**Timeless Wood Care Products,  
Michigan**  
1-800-564-2987  
[www.timelesswoodcare.com](http://www.timelesswoodcare.com)

# Sauder Village - Where Tradition Sometimes Relies on Technology

By Ken Bateson

In the far Northwest corner of Ohio, just north of the town of Archbold is Sauder Village. Their mission statement reads, "As a destination of choice, Sauder Village offers guests experiences rich in history, hospitality, creativity and fun." Take my word for it, that's what they deliver. After a recent business trip, I had the opportunity to experience first hand what they promise. What a day! The only thing I can add is the wholesomeness of the total presentation. They have done a magnificent job of preserving and presenting what it must have been like living everyday life in the pioneer times.

Starting with one cabin and eighty acres in 1976, the property has grown to 180 acres and over 50 structures. Nearly 20 of those structures are old authentic log buildings. When the property was first developed, masonry chinking was used between the logs. Within a short period of time they learned that a more durable material was needed. Sauder sought out and found Perma-Chink nearly twenty years ago. That was the solution to the problem of crumbling and leaking chinking. Since that time, they have replaced all the old masonry chinking with Perma-Chink and use it exclusively on each log structure as they are added to the village. To date, there have been zero defects in any of the applications. That is quite an accomplishment! In an environment rich with tradition, it is a pleasure to see how today's technology from Perma-Chink has provided a modern solution to protecting our past heritage.

Sauder Village is set up as a private but non-profit organization. The grounds are laid out to display:

- Historic residences
- Historic trades & craft shops
- Community life
- Museum
- Visitor services



Lodging can be arranged nearby on the grounds via campground or the Heritage Inn. Check the website [www.saudervillage.org](http://www.saudervillage.org) for dates, rates, hours, special events and a virtual tour around the grounds.

Who knows, maybe one day soon, chinking application will be demonstrated by buckskin clad craftsman protecting our national heritage with modern day Perma-Chink.



17635 NE 67th Ct.  
 Redmond, WA 98052  
[www.permachink.com](http://www.permachink.com)

PRSR STD  
 US POSTAGE  
**PAID**  
 EUGENE OR  
 PERMIT NO 381

Spring, 2005

8

Issue #1

# The Log Home Care and Maintenance Authority

## Don't Miss Out FREE

### Application Workshops/Seminars

## Spring 2005:



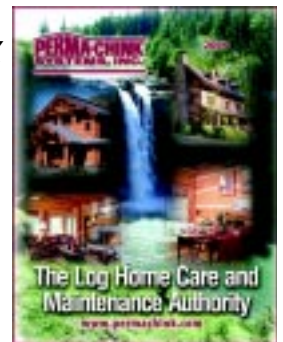
- |           |                          |
|-----------|--------------------------|
| March 15  | - Moss, Tennessee        |
| April 2   | - Sevierville, Tennessee |
| April 2   | - Stevensville, Montana  |
| April 16  | - Surrey, BC Canada      |
| April 16  | - New Salisbury, Indiana |
| April 23  | - Redmond, Washington    |
| April 23  | - Rice, Minnesota        |
| April 30  | - Rifle, Colorado        |
| April 30  | - Austin, Texas          |
| May 21    | - Noblesville, Indiana   |
| May 21-22 | - Albany, Vermont        |

Member of:



*Please contact Perma-Chink Systems for more info.*

**Perma-Chink  
Systems  
Free  
Product  
Catalog**



order on line at:

[www.permachink.com](http://www.permachink.com)

### Come See Us at these Log Home Shows

- |                |                            |
|----------------|----------------------------|
| March 18-20    | CO Springs, Colorado       |
| March 18-20    | Orlando, Florida           |
| April 1 - 3    | Charleston, WV (home show) |
| April 8-10     | Abbotsford, BC Canada      |
| April 8-10     | Minneapolis, MN            |
| April 22-24    | Birmingham, AL             |
| April 29-May 1 | Detroit, MI                |

**Free samples of many of our products are available upon request. Call your nearest Perma-Chink Systems Store.**