IT'S TIME TO STOP USING ASBESTOS. AND NOBODY HAS BEEN MORE AWARE OF IT THAN GARLOCK.

313-400-14

PLAINTIFF'S EXHIBIT GAR-54
PENGAD-Bayonne, N. J.

A TIME FOR REAL ANSWERS.

Will asbestos-free products cost more in the long run?

QA

No. The reason is that problems typically associated with asbestos sealing, such as frequent adjustments and equipment repairs, excessive downtime and product loss, all make asbestos-free products far less costly in the long run.

I realize leakage costs my company money, but what comparisons can you make?

QA

Using asbestos in pumps, acceptable leakage rates run about 60 drops/minute and under ideal conditions the best was 35 drops/minute. Our asbestos-free packing can work successfully at 8-10 drops per minute. And whenever Garlock asbestos-free gasketing is tested in identical applications, it seals 10 times better than premium grade asbestos.

Control valves are critical to my operation. What's the advantage of asbestos-free?

QA

Asbestos has all the lubrication properties of a rock. The high friction that results along with the compression required to seal often overloads the valve stem—causing a costly binding or overworking of the actuator. Garlock valve packings not only seal with the lowest possible emission (0 to 600 ppm), but do so at the lowest actuation torque. So you have the best of both worlds.

Garlock®

Mechanical Packing Division

Coltec Industries

1666 Division Street, Palmyra, NY 14522

TIME IS RUNNING OUT.



Time is running out for asbestos. This time it's for good.

And it's not by choice alone that industry is losing asbestos. This time, asbestos products are being mandated out of existence by federal regulations.

The manufacturing deadline for most asbestos sealing products is *August 25, 1993.* (For distribution, the deadline is August 25, 1994.)

Beginning in the early 1960's, Garlock extended its R&D programs to include the search for better performing materials.





Then in the 1970's, Garlock began introducing a series of cost-effective and highly successful *asbestos-free* sealing products. Familiar gasketing products like *Gylon*® and *Blue-Gard*®, and *Styles 98* and *1298* in braided packing.

We became the leader in high quality, *asbestos-free* gasketing and packing materials for process industry equipment. No competitor comes close to matching the depth of these product lines or their customer acceptance.

That's because we started our R&D program for *asbestos-free* at a time when asbestos materials were being widely used in many industries. And long before federal regulations were being considered, Garlock was up and running with proven *asbestos-free* products.

Developing this new generation of *asbestos-free* products required new sophisticated testing capabilities to give customers comprehensive performance data. The Garlock functional test lab, which tests by domestic and international standards, is unequalled by any competitor.

And Garlock has its own textile plant, where state-of-the-art equipment is used in manufacturing operations. It is this kind of advanced technology—whether in testing, manufacturing or R&D—that gives Garlock a strong advantage over competitors in the *asbestos-free* market.

Our competitors have arrived too late to achieve the *asbestos-free* solutions that are needed in the next few years.

So while time may be running out for some gasketing and packing manufacturers, don't let it run out for you. Call Garlock today at 800-448-6688, 800-622-2366 (NY), or 315 597-4811. You can talk directly to one of our applications engineers for answers to questions you may have about *asbestos-free* sealing products or your particular sealing problems and needs.



Or write, Garlock, Mechanical Packing Division, 1666 Division Street, Palmyra, NY 14522.

Garlock™

Mechanical Packing Division

Coltec Industries

Proven Products Today for an Asbestos-Free Tomorrow

A TIME FOR REAL ANSWERS.

I've read that asbestos-free products are more resilient. What does that mean and why is it important?

Q **A** Asbestos is a mineral fiber and very dense by nature. When installed and compressed initially to seal, the asbestos will take a set. Which means it doesn't have any resiliency or ability to "bounce back." Garlock's asbestos-free sealing products are more resilient. Garlock packings support a gland-load resulting in less frequent adjustments to control leakage; and our gasketing products have 25% more recovery to compensate for greater pipe movement.

Are asbestos-free sealing products any easier to remove?

Q **A** Because Garlock asbestos-free gasketing and packing will not harden like asbestos, removal generally is much easier. Asbestos packing is particularly difficult to remove. Its removal can actually damage equipment like shafts, sleeves, and valve stems. In addition, the cost in down-time often runs in excess of $75 per hour.

Is there one asbestos-free product to replace asbestos?

Q **A** The more diverse your applications, the greater the chance more than one product will be needed. However, with Garlock's experience in asbestos-free applications, inventory can be held to a minimum. For example, one premium Garlock packing like *Style 98* will service the full pH range except for strong oxidizers, while *Gylon*® gasketing will handle the full pH range and temperatures up to 500°F.

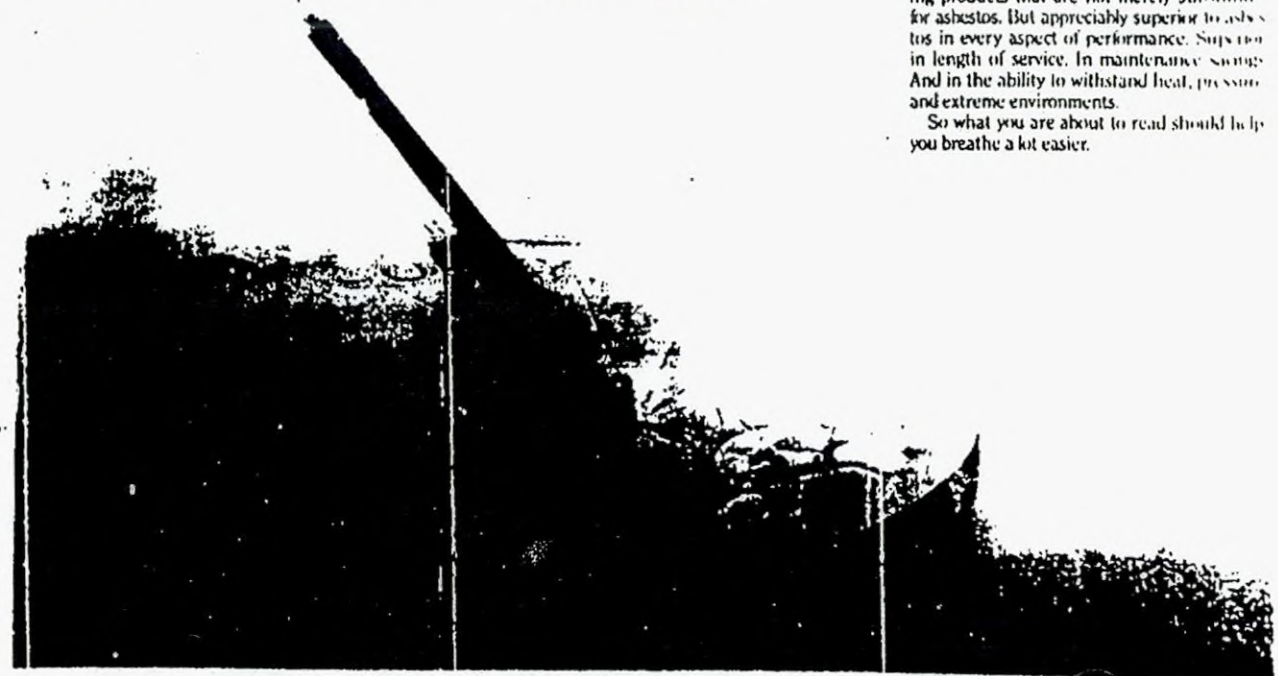
Garlock®
Mechanical Packing Division
Coltec Industries

PLAINTIFF'S EXHIBIT 6154

1666 Division Street, Palmyra, NY 14522

TIME TO CLEAR THE AIR.

WITH TIMELY ASBESTOS-FREE SOLUTIONS TO AGE-OLD SEALING PROBLEMS.



Recent discussions in trade publications and elsewhere have challenged the worthiness of *asbestos-free* sealing products as successors to tried and true asbestos.

Garlock would like to clear the air.

First, because like it or not according to the EPA regulations, after August 25 [illegible] American industry will use only *asbestos-free* sealing products in most applications.

And secondly, because Garlock already has over 25 years experience innovating and perfecting *asbestos-free* gasketing and packing products that are not merely substitutes for asbestos. But appreciably superior to asbestos in every aspect of performance. Superior in length of service. In maintenance savings. And in the ability to withstand heat, pressure and extreme environments.

So what you are about to read should help you breathe a lot easier.

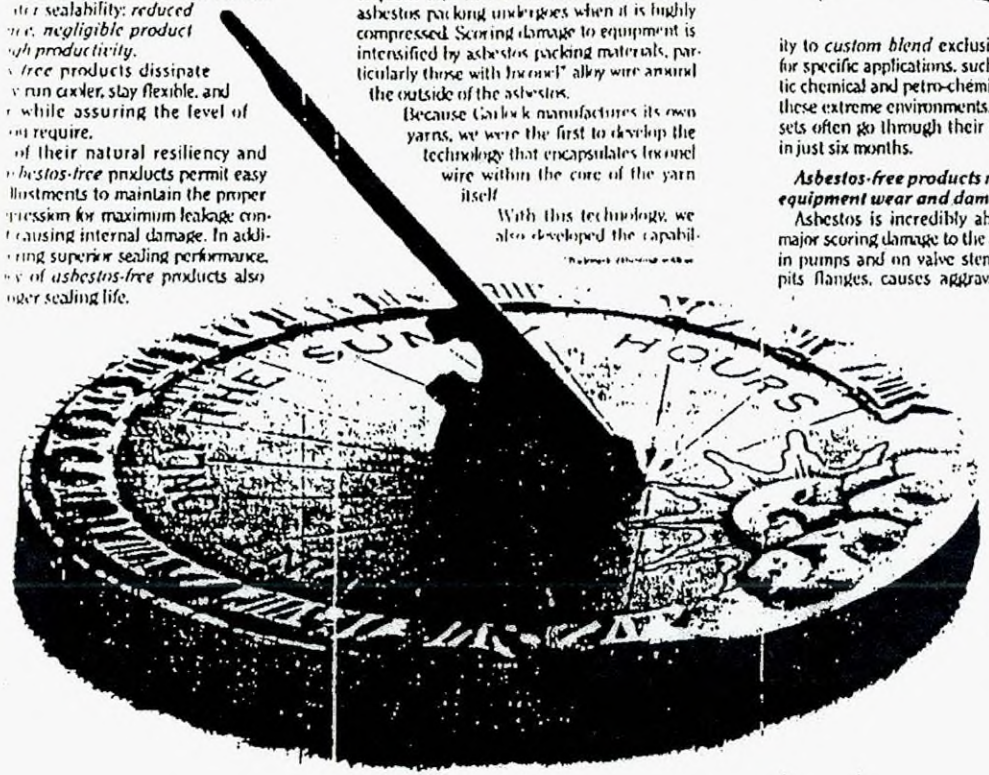
...ee products seal better.

...of any long-term sealability is abso... worst failing asbestos could have. ...s had it.

...Garlock *asbestos-free* gasketing ...d products deliver *superior seal-* ...tually every application. In every ...ding your company with the ben- ...ter sealability: *reduced* ...ce, *negligible product* ...gh productivity.

...*free* products dissipate ...r run cooler, stay flexible, and ... while assuring the level of ...ol require.

...of their natural resiliency and ...*bestos-free* products permit easy ...llustments to maintain the proper ...pression for maximum leakage con- ...causing internal damage. In addi- ...ring superior sealing performance, ...s of *asbestos-free* products also ...nger sealing life.



Asbestos-free products are versatile.

For handling high pressures and extreme environments, *Garlock's asbestos-free* gaskets and packings have no equal. Both offer excellent resiliency and recovery. Without the loss in sealability caused by the creep relaxation of asbestos gaskets. Or the hardening and consequent loss in volume and sealability that asbestos packing undergoes when it is highly compressed. Scoring damage to equipment is intensified by asbestos packing materials, particularly those with Inconel® alloy wire around the outside of the asbestos.

Because Garlock manufactures its own yarns, we were the first to develop the technology that encapsulates Inconel wire within the core of the yarn itself.

With this technology, we also developed the capabil-



ity to *custom blend* exclusive packing yarns for specific applications, such as those in caustic chemical and petro-chemical processing. In these extreme environments, asbestos packing sets often go through their entire service life in just six months.

Asbestos-free products minimize equipment wear and damage.

Asbestos is incredibly abrasive. It causes major scoring damage to the shafts and sleeves in pumps and on valve stems. In addition, it pits flanges, causes aggravation-for maintenance people, and often increases the cost of renewal many times over that of *asbestos-free* products.

Case studies have shown that you can depend on our *asbestos-free* gasketing and packing materials to help your equipment last considerably longer than it has in the past with asbestos.

Because *Garlock asbestos-free* products are considerably less abrasive, more resilient, and they don't trap heat, problems associated with asbestos are virtually non-existent. And making problems disappear is an excellent way to *clear the air.*

With Garlock's experience in *asbestos-free* applications engineering, you can improve productivity and minimize your inventory.

Undoubtedly questions will remain concerning your conversion to *asbestos-free* products. We suggest you talk directly to one of our applications engineers for answers to any questions you may have about your particular sealing problems and needs. Just call 800-448-6688, 800-622-2366 (NY), or 315-597-4811. *Call and we will help you clear the air.*



Or write, Garlock Mechanical Packing Division, 1666 Division Street, Palmyra, NY 14522.

Garlock
Mechanical Packing Division

Coltec Industries

Proven Products Today for an Asbestos-free Tomorrow