

WHERE SCIENCE MEETS THE ROAD

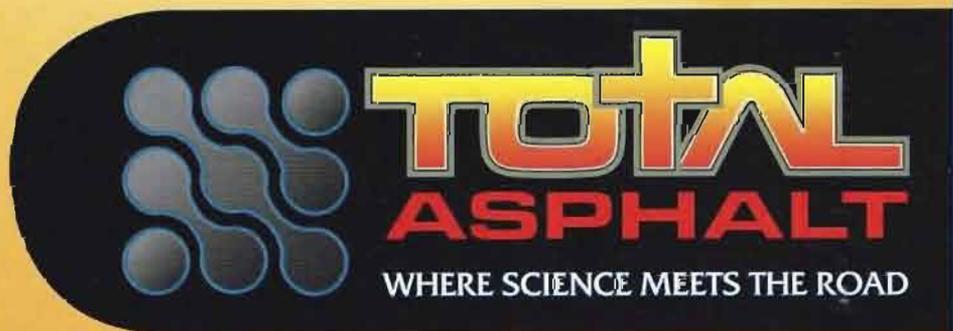
Where Science Meets the Road

YOUR PAVEMENT

PAVEMENT PRESERVATION

PAVERX®

ENVIRONMENTAL SUSTAINABILITY



Consulting • Pavement Solutions



MIKE LEAMAN, PRESIDENT

As the professional responsible for your organization's pavement assets, you have a challenging task. You are required to:

- extend the life of your pavement inventory
- utilize the most cost-effective method with the highest ROI
- retain your property's curb appeal
- preserve your pavement's structural integrity

In an economy of leaner budgets with increasing petroleum-based asphalt costs, this is not an easy task... unless you have the right partner with the right tools.

TOTAL ASPHALT's pavement professionals can assess your pavement inventory and create a plan for a longer-life solution. **TOTAL ASPHALT's** goal is to help you protect and preserve this valuable asset. How do we do it? **Science and Expertise.**

Recognized by the Federal Highway Administration and Federal Aviation Administration, our pavement restoration process is more than just a cosmetic remedy. Our product penetrates into your pavement, strengthens it, extends its life, and restores your existing asphalt to its original rich black appearance. This is our **Science.**

We would love the opportunity to evaluate your pavement and help you find a cost-effective solution. Our job is to make you and your pavement look good for years to come by realizing the extraordinary value of preservation. This is our **Expertise.**

TOTAL ASPHALT's team, technology, and tools are where **Science Meets the Road.**

Mike Leaman

Mike Leaman, President

WHERE SCIENCE MEETS THE ROAD



GALLERIA MALL, YORK PA

Pavement Professionals Since 1992

- Largest commercial pavement preservation manager in the Mid-Atlantic region.
- Recognized leader in pavement treatment technology.
- We have evaluated and treated more than 550 million sq ft of pavement.
- We're the Pavement Preservation Specialist of choice for military, institutional, retail, and commercial property management.

TOTAL Approach

- TOTAL ASPHALT is deeply immersed in the science of pavement – from its compositional and engineering elements, to the aesthetics of its curb appeal.
- Our integrated approach includes an exclusive version of the time-tested pavement indexing system followed by the Army Corps of Engineers.

TOTAL Message

- Conclusive history shows that a properly formulated asphalt rejuvenator is a proven method to extend pavement life at a low cost.
- Effective asset management of your pavement provides a significant reduction in the use of financial and human resources:
 - Every \$1 spent on pavement preservation saves \$6-\$10 on future repairs and replacement.¹
- Pavement preservation is an important step in environmental sustainability. Extending your pavement's life reduces the use of petroleum-based asphalt, generates less greenhouse gases, and reduces your carbon footprint.

"Your belief and confidence in pavement preservation and your technology has allowed us to believe we can protect and preserve our pavement assets for many years to come."

- DAVE FAIRBANK
 DIRECTOR FACILITY MAINTENANCE
 MERRITT PROPERTIES LLC
 BALTIMORE MD

YOUR PAVEMENT

PAVEMENT PRESERVATION

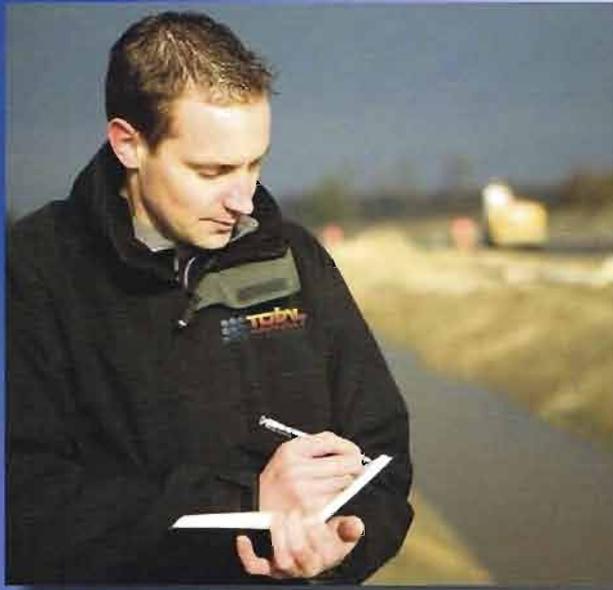
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¹ "Pavement Preservation: Techniques For Making Roads Last" By Tom Kuennen, Federal Highway Administration

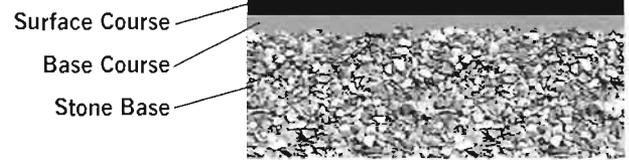


YOUR PAVEMENT



Paved surfaces are generally created by laying three courses of materials – stone base, base course of asphalt, and the surface course. The asphalt is made of sand, stone, and asphalt binder. The binder is the critical black “glue” that keeps your pavement strong and flexible under the stresses of the environment and traffic.

CROSS SECTION OF PAVEMENT



Pavement distresses occur because the asphalt binder hardens. This causes a decrease in the binder's ability to hold aggregate particles together (raveling) and the asphalt becomes unable to withstand the effects of thermal or moisture stresses (cracking).

When these distresses become severe enough, they can cause a decrease in pavement serviceability which will reduce the life of the pavement.²

Traffic and time account for only 10 percent of pavement deterioration. It is the environmental impact of sun, air, and water that creates about 90 percent of asphalt aging and damage.

When environmental conditions weaken your pavement, it is susceptible to surface and structural damage.

² Department of Air Force: Engineering Technical Letter Rejuvenation of Hot-Mix Asphalt (HMA) Pavements

Assessing Your Pavement

So how do you know the condition of your pavement? The pavement preservation specialists at Total Asphalt have surveyed more than 500 million square feet of asphalt – field experience that’s invaluable to our clients.

Total Asphalt also uses an exclusive version of the U.S. Army Corps of Engineers’ Pavement Condition Index (PCI) to effectively define your pavement’s condition and establish the basis of a pavement preservation plan.

These steps are critical for the foundation of a sound pavement management plan focused on preservation not reconstruction.

PCI	Rating
100	EXCELLENT
85	VERY GOOD
70	GOOD
55	FAIR
40	POOR
25	VERY POOR
10	FAILED
0	

Army Corps of Engineers
PCI scale and condition rating

WELLS FARGO CORPORATE OFFICE, FREDERICK MD



YOUR PAVEMENT

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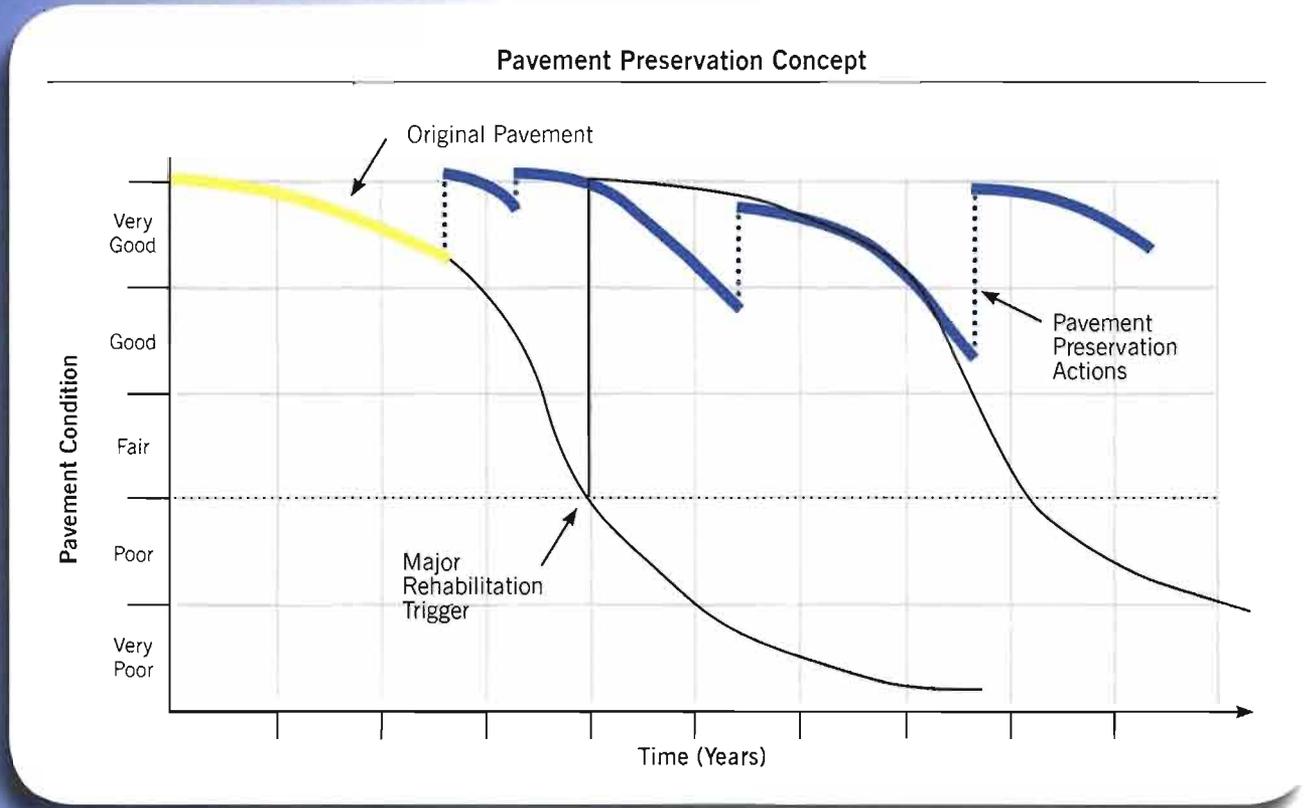
ENVIRONMENTAL SUSTAINABILITY



The Preservation Model

More than 50 years ago, science provided another approach to pavement management – preservation. Unlike the steady decline of untreated pavement to its inevitable replacement, the Pavement Preservation Concept looked to extend the useful life of pavement using new technologies to rejuvenate instead of repaving.

The National Center for Pavement Preservation (NCP) and The Road Information Program (TRIP) developed this model to demonstrate the Pavement Preservation Concept:



“By adopting a preservation model that proactively corrects minor deficiencies early, pavement life can be substantially extended at comparatively low cost.”³

³ “At the Crossroads, Preserving Our Highway Investment”, National Center for Pavement Preservation (NCP) and The Road Information Program (TRIP)

PAVEMENT PRESERVATION

Managing Your Pavement Assets

Pavement preservation is more than a collective set of maintenance techniques and smart technology. An effective pavement preservation program is an ongoing process of:

- assessment
- analysis
- reporting
- planning
- budgeting
- maintenance

Total Asphalt can manage each element of the process for you, and deliver results that retain the highest ROI and the greatest longevity for your pavement.

Components of Pavement Preservation



PARTNERING WITH A TOTAL ASPHALT PAVEMENT PRESERVATION SPECIALIST BRINGS THIS LEVEL OF EXPERTISE TO YOUR TEAM.

Capital Retention

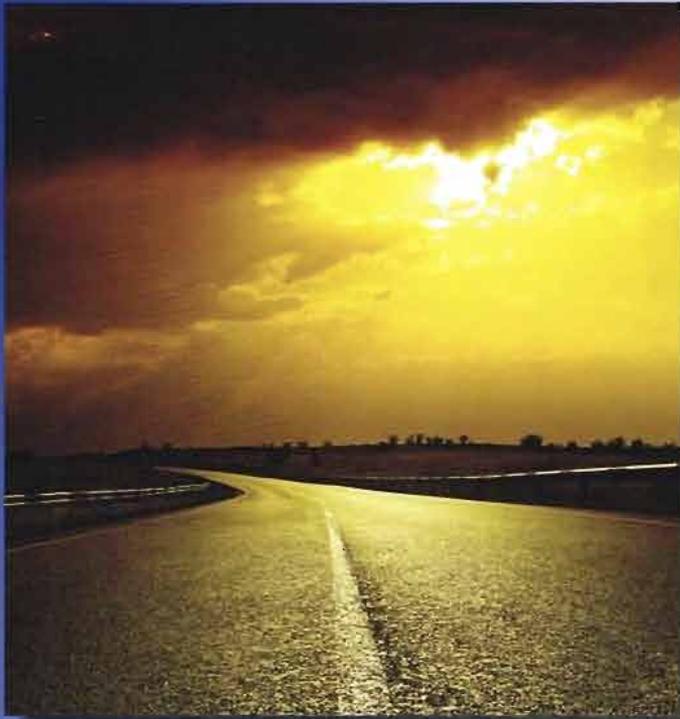
Pavement inventory is the second most critical physical asset that impacts your organization's capital reserve dollars.

Without considering pavement preservation, property managers, facility managers, and facility engineers may overpay to maintain their pavement assets. A timely preservation program can achieve the same pavement results at a fraction of the cost.

With our expertise and science, Total Asphalt almost always changes the number dramatically, leaving our clients with an increase in their capital reserves.



PAVERX®

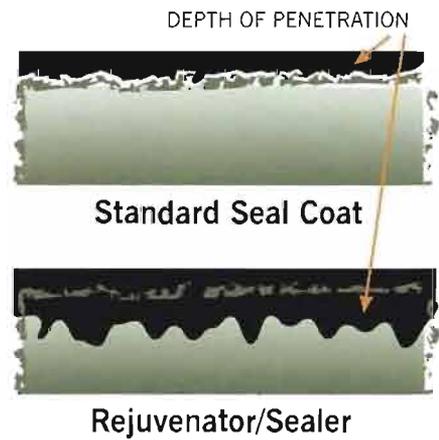


Total Asphalt is a Master Distributor of Paverx® — the most advanced asphalt rejuvenator on the market.

TOTAL ASPHALT's flagship product, Paverx®, is not like any other Rejuvenator/Sealer. It all comes down to science.

Using Gas Chromatography and Infrared Spectrometry, Paverx® was formulated to create the best match of closed-ring compounds that ignite the rejuvenation process.

This unique concentration of rejuvenating oils stops the oxidation process and changes the molecular composition of the asphalt binder. This new "Super Binder" stops top-down cracking and heals hairline spider fractures.



This level of rejuvenation is possible because Paverx®, unlike seal coats, is designed to penetrate the surface of asphalt. Once it has penetrated, Paverx® dramatically reduces the viscosity in the top one-half inch of asphalt while significantly increasing flexibility.

Paverx's durability is superior. During thermal cycles, it contracts and expands at the same rate as the asphalt. In comparison, seal coats simply lie on the surface. They undergo a markedly different expansion and contraction rate from the asphalt. This eventually leads to cracking, pinholing, and delamination. Paverx® does not suffer from these problems; it becomes an integral part of the asphalt.

We Guarantee It

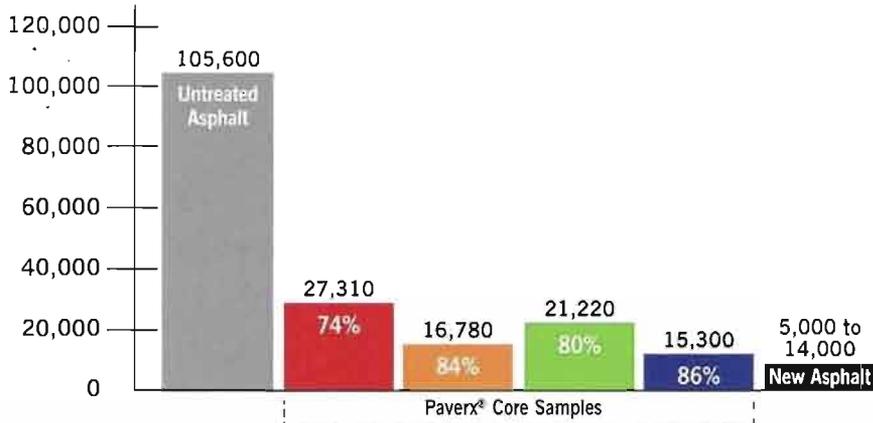
Total Asphalt's industry-leading performance warranty gives you five years of confidence in your Paverx® application.

VISCOSITY REDUCTION

Huntsville International Airport, AL

ASTM D2171

Absolute Viscosity
(centipoises)



AS PAVEMENT AGES, VISCOSITY LEVELS INCREASE WHICH CREATES A BRITTLE SURFACE. WHEN TREATED WITH PAVEX®, THE VISCOSITY LEVELS OF AGED PAVEMENT CAN REDUCE TO NEAR NEWLY PLACED ASPHALT.

FAA Recognized

The unique ability of Paverx® to rejuvenate asphalt is recognized by the Federal Aviation Administration (FAA). It considers Paverx® a restorative product, not merely a maintenance product. Consequently, it qualifies for Airport Improvement Program (AIP) funds as defined in FAA Engineering Brief No. 44. Under the AIP, the FAA pays up to ninety percent (90%) of the cost of applying rejuvenator. An additional five percent (5%) is paid by those states that contribute to AIP projects.

Precision Application

In addition to our rejuvenating/sealing products, TOTAL ASPHALT has the right equipment to apply it. Our latest investment adds an innovative application tool which means less down-time for you.

Our high-output precision spray apparatus is the first of its kind in the pavement preservation industry. This breakthrough application device is the right tool to cover large amounts of pavement in a shorter amount of time.

The 1,350 gallon tanker truck can maintain application rates within two one-thousandths of a gallon per square yard. We can treat a 10,000 x 200 foot facility in less than 12 hours.

For smaller projects, we utilize our standard application fleet.



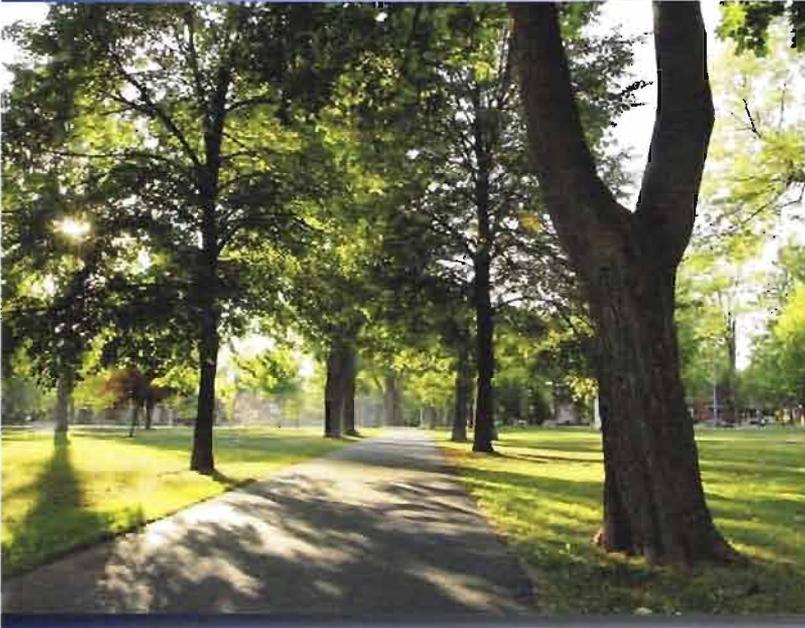


Pavement preservation is more than asset management, cost savings, and curb appeal. Extending the life of your pavement assets can:

- Greatly reduce carbon emissions created in the asphalt production and paving processes.
- Dramatically reduce aggregate resource depletion from petroleum-rich asphalt products.

As your pavement preservation partner, TOTAL ASPHALT can help you calculate your organization's environmental impact – important data for your leadership, customers, and other stakeholders.

TOTAL ASPHALT cares about the environment and our impact on it, too.



Your pavement preservation program can have a positive impact on the environment as well.

“Environmental sustainability is important to TOTAL ASPHALT. That is why we support pavement preservation. We conduct all of our projects using best practices for the most environmentally responsible action plans, tactics, and products.”

- MIKE LEAMAN, PRESIDENT

ENVIRONMENTAL SUSTAINABILITY

Evaluation

Paverx® has been independently evaluated by Balch & Bingham LLP – a leading authority on environmental issues – on how Paverx® stands up to EPA regulations. When applied using manufacturer's specifications, their findings revealed:

- “would not cause violations under normal conditions and under the current policies”
- “the concentration of chemicals in Paverx are much too low to trigger regulation under laws administered by the EPA”
- “Paverx will not escape into the surrounding waters, storm drains, or sewer systems and will therefore not cause violations to the Clean Water Act”

Request the full four-page summary from your TOTAL ASPHALT Pavement Professional.

David Rigbee, President/CEO - Chemtek/AeroGroup
February 13, 2012
Page 2



MEMORANDUM

TO: David Rigbee, President/CEO - Chemtek/AeroGroup

FROM: Richard Edward Glaze, Jr. *REG*

DATE: February 13, 2012

RE: Regulation of Paverx Pavement Protectant and Rejuvenator by EPA

Introduction. This memorandum evaluates whether Paverx Pavement Protectant and Rejuvenator, if applied in accordance with manufacturer recommendations, is regulated by environmental laws administered by the United States Environmental Protection Agency (EPA). In conducting the evaluation, we considered only whether the application of the product under routine conditions, in accordance with the manufacturer's specifications, would cause violations of the Federal environmental laws that would most likely apply to a chemical-based construction product like Paverx. We examined the Federal Water Pollution Control Act, 33 U.S.C. § 1251, et seq. (Clean Water Act or CWA); the Clean Air Act, 42 U.S.C. § 7401, et seq. (CAA); the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq. (RCRA); the release reporting requirements of the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 6903(a) (CERCLA); and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11004(a) (EPCRA). We express no opinion on state environmental laws, which vary from state to state. In conducting this application, we reviewed the specifications for the Paverx product, the procedures for its application, and laboratory data showing concentrations of potentially hazardous constituents. We have not made an independent determination as to the accuracy of the manufacturer's specifications or the laboratory data, although we have not seen any evidence that they are inaccurate. Based on our review, and under the circumstances and subject to the caveats set forth below, it is our opinion that the application of Paverx in accordance with the manufacturer's specifications would not cause violations of the aforementioned statutes under normal conditions and under the current policies for the enforcement and application of the statutes by EPA. A discussion of the relevant legal requirements and the rationale for our opinions are set forth below.

...nd protect surfaces paved
...if applied using an
...computer controlled
...based product and, as
...ly found in paving
...in Paverx, as applied,
...ministered by EPA.

...ontrol Act, commonly
...and injurious
...those related to
...fying monitoring data
...prohibited discharges of
...of the CWA to
...ctional waters via a
...waters include most
...standards for the
...CWA requires an
...of the product
...the product or its
...in discharges into
...according to the
...ing waters, storm
...of the CWA.

...ing status of CERCLA
...quantity" of a
...immediately." 42
...ment" is defined under
...subsurface strata, or
...A is "any spill,
...eeping,
...C. § 9601(22). The list
...is not being "released
.../solvent is applied
...water, land surface or
...and hardens into a
...rejuvenation and
...ground, without
...ground, air or water it not

Chemtek/AeroGroup

...under CERCLA. Analytical testing has shown that the
...one time do not contain sufficient amounts of
...quantities" of hazardous substances even if they
...a "release into the environment." It is our opinion that
...does not constitute a reportable release under CERCLA.

...ederal level, hazardous wastes are regulated under
...regulated, a material must first be determined to be a
...material must have been discarded. 40 C.F.R.
...being discarded and is therefore not a waste.
...even if disposed of, Paverx would not be a waste.
...contains sufficient concentrations of chemicals, or
...cause it to be considered "hazardous" under RCRA.

...Air Act is a statute that applies to numerous
...CAA is directed at geographically - oriented
...not regulated unless they emit sufficient
...the CAA does regulate "mobile sources," the
...primarily to modes of transportation that
...and would not apply to the application
...It is our opinion that the minor air emissions
...in accordance with the manufacturer's specifications,
...application of the provisions of the Federal

...the primary federal environmental laws
...agencies that have been authorized to
...regulatory environmental laws, the scope
...additional obligations on users of
...regulate state laws, which are not within the

...formulated, is applied to
...recommendations,
...the material onto bare earth,
...cause violations of
...Act, Resource Conservation
...the Comprehensive
...and the Emergency Planning

ENVIRONMENTAL SUSTAINABILITY

*"It was good to discover
there is a better way to
preserve the life expectancy
of our paved surfaces.
We have been satisfied with
the results and professional
approach of your team.
We look forward to
continuing this process."*

- JEFFREY J. WILLIAMS
DIRECTOR OF ENVIRONMENTAL SERVICES
BRETHREN VILLAGE, LANCASTER PA



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