THE MOST SUCCESSFUL TRULY GREEN, SCHOOL FLOOR CARE PROGRAM IN THE COUNTRY.

School Program

Ultra Chem Labs Floor Care

INTRODUCING

Dr. John Shieh

Founder and Director of Technical Services

John Shieh is the Director of Technical Services and attends to the supervision of research and development for Ultra Chem Labs in Pomona, California. He has worked extensively in the field as a forensic scientist, chemical specialist and educator for evironmental sustainability.

John Shieh is the founder of Ultra Chem Labs and for over 30 years, he has worked hand in hand with thousands of individuals and organizations specifically on implementing the Ultra School Program on a successful national and international level. John Shieh has also worked with North American environmental regulatory agency, TerraChoice (EcoLogo), in writing the Environmental Chemical Standards set for North American green chemical products. Presently, John Shieh is working closely with Ultra Chem Labs' research and development team to provide the most dynamic, superior technology and education material required for today's most environmentally stringent public school systems.


Office DEPOT

Albemarle, Va. Schools

Our Purpose

Ultra Chem Labs is dedicated to creating a safe, environmentally-conscious, and prosperous future for our children. This can be done by removing the circulation of conventional products that contain known carcinogens like styrene. By working together with Ultra Chem Labs, administrators can make a positive impact for their schools as well as their communities. In turn, true pride can be taken in making positive changes for the future of our generation and in reducing the carbon footprints left from past conventional methods.

This program was designed for one underlying purpose: to make a positive impact on environmental source reduction which in turn will drastically reduce the amount of harsh conventional products that are being exposed to our children, staff members and administrators on a daily basis.

The Ultra Chem Labs School Program allows school administrators to first calculate square footage to gallons of chemicals and dollars in a clear and quantifiable manner. This calculation will then allow for a breakdown on how much Ultra Chem Labs product needs to be used in order to completely strip, recoat, and maintain the brilliancy of the floors each year. Once a school has implemented the Ultra Chem Labs School Program, the labor, chemical, energy and time savings will become very prevalent - even eliminating the need to strip. Moreover, the presence of leftover, unused, toxic, environmentally-harmful chemicals will be drastically reduced.

It is time to make a difference by implementing the Ultra Chem Labs School Program.

The Conventional

Styrene

Conventional floor finish contains a toxic chemical known as polystyrene, which was traditionally used to adhere floor finish to a floor. Unfortunately, it is a formula which not only incurs high labor and chemical costs, but is a dangerous pollutant to our environment. The primary concern about polystyrene is that it contains styrene, a carcinogen that has acute and long term chronic health effects. Furthermore, this conventional formula does not have the adequate strength or durability to support new types of building structures and flooring, along with the soils and airborne contaminates that have emerged since it was developed over 50 years ago. This conventional method requires constant reapplication at least every three years, which results in over-stripping and consequently reducing the durability of the floor finish.

Based on the source reduction calculator, a conventional school dumps approximately **700 pounds** of sludge into the environment every year.

Non-Styrene Polymer Technology

Ultra Chem Labs' Non-Styrene Polymer eliminates the need for polystyrene. This advanced non-styrene formula builds a protective coating over the flooring and fully supports all old and newly-developed substrates. This polymer is balanced, tough, and flexible so that the floor never loses any of the finish applied; superior durability allows for simple maintenance and cleaning. Non-Styrene Polymer Technology is environmentally-friendly and does not contain harsh or toxic chemicals. In addition, it contains UV blockers, which prevent discoloration. Non-Styrene Polymer Technology is utilized in Ultra Chem Labs' Floor Care Division's floor finish products.

Reducing Your Carbon Footprint

Source Reduction Calculator

$$(\text{Sq Ft.}) \times (\text{Number of coats}) = \frac{\text{Sq Ft. finish to be stripped}}{\text{2000 feet per gallon}} = (\text{Number of gallons used})$$

$$(\text{Number of gallons used}) \times \text{11.3 pounds per gallon of sludge} = \frac{\text{pounds}}{2000} = (\text{Number of tons})$$

CONVENTIONAL ELEMENTARY SCHOOL SQUARE FOOT SIZE 48150 sq ft.

AVERAGE AMOUNT OF COATS OF FLOOR FINISH PER SCHOOL 5 coats

TOTAL AMOUNT OF SLUDGE GENERATED FROM ONE AVERAGE ELEMENTARY SCHOOL 0.7 tons

0.7 TONS OF SLUDGE X (NUMBER OF SCHOOLS IN YOUR DISTRICT) =
Amount of Sludge dumped into the environment

These numbers have been acquired from national averages of school system facilities.

11.3 pounds of sludge represents the average weight of stripper and old floor finish removed from the floor, and put into a gallon container. This sludge contains many chemical components that are not biodegradable, including VOC's, styrene, urethanes, caustics, zinc and numerous other hazardous chemicals. The above formulation will help you understand your impact on the environment when discarding in drop sinks, parking lots, storm drains and the grass.

Savings

With the Ultra Chem Labs' Non-Styrenated Polymer, the number of times your facility will need to be stripped will reduce from an average of twice a year to once every three years. This will not only dramatically decrease your annual chemical cost by 60-70%, but will also decrease costs in labor, time, and effort by 45-55%. The savings in facility expenses can be substantial. And it is important for Ultra Chem Labs to provide these savings while sustaining a "truly green" facility for your children, staff, and members of your facility for years to come.

Based on a 48,150 sq ft elementary school	FIRST YEAR	Based on a 48,150 sq ft elementary school	SECOND YEAR and BEYOND
Stripping Costs	60 gallons	Stripping Chemicals	0 gallons
Floor Finish Cost	120 gallons	3 Coats of finish	48 gallons
Neutralize	1 gallons	Re-coat chemical prep	2 gallons
Daily Floor Cleaner	12 gallons	Daily Floor Cleaner	12 gallons
Total	193 gallons	**Total**	62 gallons

Kingsport Tennessee School

Total Annual Chemical Savings

67%

THESE FLOORS HAVE NOT BEEN STRIPPED FOR OVER 12 YEARS

Archie Bowen of Calvert County Schools, Maryland is standing on the floors of Windy Hill MS Chesapeake.

Calvert County
THE STORY

In 1998, Ultra Chem Labs met with then Calvert County Facility Director, Dr. Jim Marlett, to discuss the floor care needs of his county's schools. Having been a math teacher prior to becoming an administrator, he saw the potential of the Ultra Chem Labs School Program regarding man hours and chemical costs.

As a trial, Dr. Marlett committed one school for one year, to put the finish down and train his custodians on maintenance and top scrubbing techniques. In 1999, Dr. John Shieh flew in from Vancouver for a two day meeting with Dr. Marlett. From that meeting, a business model was put into place for Calvert County's 26 schools over the next three years. Their objective was three-fold: to have a Green Certified floor program, to address Volatile Organic Compounds (VOCs) in buildings, and to address chemical source reduction by eliminating the stripping process. What was put into place was a manageable and measurable program that included training seminars, hands-on training, and constant reporting.

At the end of that trial year, having succesfully implemented the recommended floor program, chemical costs were cut by 60% and man hours were cut by 50%! The custodians of the school could not believe the durability of the Ultra finish and were astounded by the fact that no stripping was needed going into the second year. By eliminating the stripping process, 229.84 tons of sludge (to date) was prevented from going back into the environment.

The partnership between Ultra Chem Labs and Calvert County Schools set the stage for the next 300 - and counting - public school systems on this program today.

Dr. Marlett has since retired and succeeded by Archie Bowen (photograph), who in 1999, managed the transition of their 26 schools to the Ultra Chem Labs School Program. Calvert County was the first school system in the United States to truly "go green" in terms of floor care. Archie now oversees the implementation of another Ultra Chem Labs product, Slam Dunk, into Calvert County gymnasiums, which eliminates the use of urethane.

FREDERICK COUNTY PUBLIC SCHOOLS, FREDERICK, MARYLAND WINS THE E.P.A. 2010 NATIONAL EXCELLENCE AWARD

FOR INDOOR AIR QUALITY (IAQ) TOOLS FOR SCHOOLS

Each year, the United States Environmental Protection Agency (EPA) awards some of the highest performing school districts in the country for their outstanding IAQ management programs. These programs consistently demonstrate a commitment to student and staff health and wellness and have proven that a proactive IAQ management program can have a positive, lasting impact on the school, the staff and students, and the entire community.

CONGRATULATIONS TO FREDERICK COUNTY PUBLIC SCHOOLS ON THIS MAGNIFICENT AWARD!

Frederick County Public Schools, Frederick, Maryland has won the E.P.A. 2010 National Excellence Award for Indoor Air Quality Tools for Schools. Part of the consideration for this prestigious award was their Certified Green Floor Care Program. The E.P.A. stated, "Frederick County School's Operations staff used a zero-VOC floor finish that eliminated the stripping process, reducing use of chemicals from the school facilities and the environment by 34 tons each year."

Frederick County, Md. schools

FREDERICK
COUNTY
PUBLIC
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STRIPPING PROCESS
ELIMINATED
CHEMICAL COSTS
REDUCED 60%
MAN HOURS
REDUCED 40%
34 TONS
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ENVIRONMENT


EXIT

Frederick County
THE STORY

In 2003, Laura Olsen, Environmental and Safety Director for Frederick County Schools, and her team implemented the Ultra Chem Labs School Program to address three objectives: to have a Certified Green Floor Program, to eliminate VOCs to create a healthy building to protect students, staff and visitors, and, being that Frederick County was in the Chesapeake Bay watershed demographics, Laura wanted to address chemical source reduction and eliminate potential harm to the national treasure.

The Ultra Chem Labs School Program was implemented with a five year project which involved 67 schools. Laura, along with Operations Manager, Kathy Mentzer, and Custodial Managers, Cecelia "Pete" Smith and John Carnahan, managed this program to perfection. Today, at Frederick County Schools, operations chemical usage has been cut by 60%, man hours on floors have been cut by 40%, and the stripping of floors has been completely eliminated. Every year, 34 tons of hazardous sludge is prevented from going into drop sinks, storm drains, parking lots and the grass.

Frederick County schools, in working with senior management support, a multi-disciplinary team of IAQ, industrial hygiene, construction, custodial, maintenance and architecture professionals recognized the critical importance of healthy school environments and made it their educational mission. For the past two decades, Frederick County schools have maintained a proactive approach to IAQ decision making, and has created standards second to no school system in the United States.

L-R: Mike Flynn, Director, Office of Radiation and Indoor Air, U.S. EPA; Cecelia "Pete" Smith, Carmen Early, John Carnahan, Laura Olsen, Kathy Mentzer, Ray Barnes, Frederick County Public Schools, MD

Howard County
THE STORY

Maryland's Howard County is the first U.S. public school system to achieve GS-42 Green Seal, Inc. under the organization's standard for commercial and institutional cleaning services. The Ultra Chem Labs School Program was an important factor in this achievement.

The "Green Cleaning Program," developed by the Howard County Public School system, qualified for certification under Green Seal's GS-42 standard, which requires that a cleaning service use products and equipment that have less impact on the environment and that it adopt processes and procedures that help protect human health and the environment for building occupants and custodial staff.

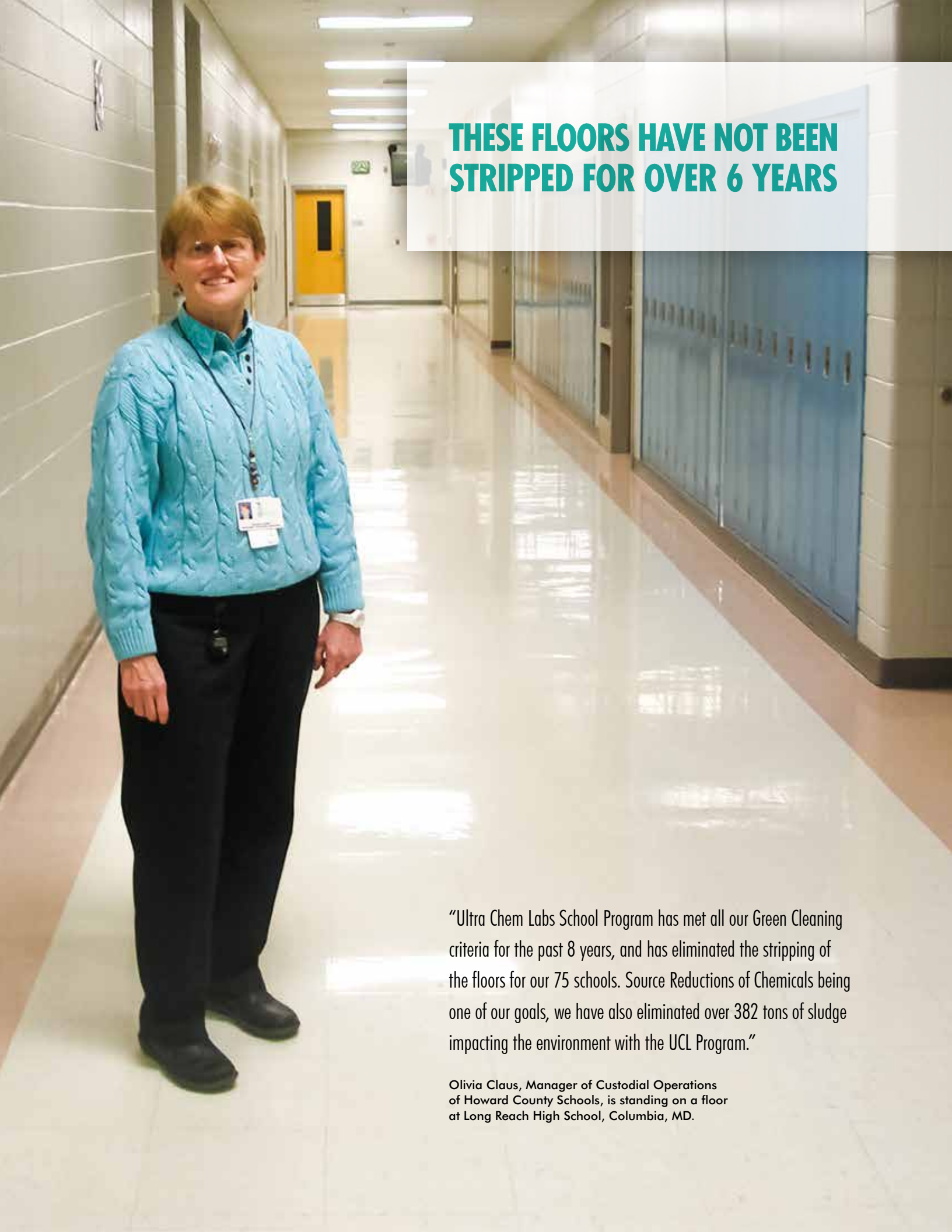
Green Seal's cleaning service standard also requires that custodial staff receive a specified amount of training each year, and that each building within the green cleaning program have a specific plan for cleaning. The standard provides guidance for those looking for green cleaning service options, including facilities managers, managers of LEED-certified buildings, government and university facility directors, and school purchasers.

"The Howard County Public School System has done a phenomenal job in developing and advancing their Green Cleaning Program to protect the health of their students, faculty and staff," noted Dr. Arthur Weissman, President and CEO of Green Seal. "They are truly a trailblazer for schools nationwide in demonstrating how to improve cleaning services for health and environment."

The Howard County Public School System worked with the Building Wellness Institute (BWI), an organization that helps facilities protect the health and comfort of their building occupants, in meeting the requirements of Green Seal certification.

"The Green Seal certification process has certainly been a great opportunity to enhance our knowledge and awareness of green cleaning," stated Olivia Claus, Manager of Custodial Services for Howard County schools. "The criteria advanced by Green Seal helped us implement environmentally sound practices and enhance overall care of our buildings. Our custodial staff has done an outstanding job using green products and applying the techniques they learned as part of this process. Earning certification is great recognition of their efforts."

In order to see first hand the phenomenal accomplishments Howard County Public Schools has made, Cesar Castro (International Sales Manager, Ultra Chem Labs) was present at the school campus in 2011. While present he was able to stand on beautiful floors that have not been stripped in 8 years.



THESE FLOORS HAVE NOT BEEN STRIPPED FOR OVER 6 YEARS

"Ultra Chem Labs School Program has met all our Green Cleaning criteria for the past 8 years, and has eliminated the stripping of the floors for our 75 schools. Source Reductions of Chemicals being one of our goals, we have also eliminated over 382 tons of sludge impacting the environment with the UCL Program."

Olivia Claus, Manager of Custodial Operations of Howard County Schools, is standing on a floor at Long Reach High School, Columbia, MD.

THESE FLOORS HAVE NOT BEEN STRIPPED FOR OVER 8 YEARS

Ultra Chem labs International Sales Manager Cesar Castro, stands on a Howard County Public School floor

True Green Cleaning

Before there even was green

For over 20 years, Ultra Chem Labs has continually developed and set the bar for truly green standards superior to the conventional masses. As environmental health and regulations become more stringent in all industries, Ultra Chem Labs has consistently evolved our products to conform and surpass the higher market standards of environmental consciousness today. There is no fooling that Ultra Technology was truly green before there even was green.

Our Ultra product lines have made huge impacts internationally in providing the public with a healthier environment while immensely reducing and eliminating the amount of source or harmful chemicals in publicly focused areas. Our Ultra technology allows us to accomplish what no other products can. And this is to truly preserve the natural progress of an ongoing environment and to expand/secure business wherever our products are being used. Masses of Carcinogenic, harmful, overly toxic and environmental harmful products are being used and exposed to the public on a daily basis. Our system has existed and has been put in place specifically to stop this. In order for Ultra Chem Labs to sustain such a successful program, the truths and dangers of conventional products must be revealed. Please use this time to discover the dangers of the so-called conventional green products, then discover the power and overwhelming advantage you can obtain from our Ultra Green Cleaning Initiative.

With the Ultra School Program placed within your universities, public school and educational institutions, you can rest easy knowing that the environment is being preserved, people are safe and you are making a difference.

Visit www.ultrachemlabs.com to find out how we can implement this program in your facility today.

Bayonne High School, New Jersey

The New York Times

AS FEATURED IN THE NEW YORK TIMES, TIME MAGAZINE, AND GQ MAGAZINE

MARYLAND'S
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BETWEEN THESE TWO
SCHOOL SYSTEMS
611.84 TONS OF TOXIC
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Ultra Chem Labs School Floor Programs can also be found in:

VIRGINIA

University of Virginia
Albemarle County Schools
Hanover County Schools
Waynesboro County Schools
Wise County Schools
Nelson County Schools
Pittsylvania County Schools
T.C. Williams Alexandria Schools
James City Schools
Gloucester County Schools
Hopewell City Schools
Virginia Beach Schools
Henrico County Schools
Caroline County Schools
Rockingham County Schools
Greene County Schools
University of Virginia
Christopher Newport University
St. Annes - Belfield School
Trinity Episcopal
The Steward School
Richmond Christian Schools
Lunenburg County Schools
Appomattox Regional Governor School
Prince George County Schools
Norfolk Christian Schools
Tidewater Community College
Wyeth County Schools
Fauquier County Schools
Warren County Schools
Page County Schools
Shenandoah County Schools

MARYLAND

Anne Arundel County Schools
Frederick County Schools
Calvert County Schools
Howard County Schools
Baltimore County Schools
St. Mary's County Schools
Prince George's County Schools
Wicomico County Schools
Caroline County Schools
Charles County Government
Frederick County Government
Calvert County Government
Washington D.C. Schools

NEW JERSEY & NEW YORK

Atlantic City NJ Schools
Bayonne NJ Schools
Cherry Hill NJ Schools
Jersey City NJ Schools
Jersey City NJ Charter Schools
Lincoln Park NJ Schools
Plainfield NJ Schools
Caldwell NJ Schools
North Caldwell NJ Schools
Allendale NJ Schools
Waldwick NJ Schools
Livingston NJ Schools
Montclair State University
Monroe - Woodbury NY Schools
Ramapo Central Schools NY
North Rockland Central Schools NY
Trenton NJ Schools

OHIO

Wright State University
Ohio University
Jonphan Alder Schools

CALIFORNIA

Torrance USD
Castaic USD

ULTRACHEMLABS
Floor Care

PRODUCTS UNDER THE ULTRA SCHOOL FLOOR CARE PROGRAM ARE ENVIRONMENTALLY CERTIFIED WHICH IS PROVIDED TO THOSE THAT ARE VERIFIED BY AN INDEPENDENT THIRD PARTY AS COMPLYING WITH BASIC ENVIRONMENTAL CRITERIA

Please visit us at www.ultrachemlabs.com