VOLUME 5, ISSUE 1 JANUARY 2025

# **SSAFE Newsletter**

Senior Stewards Acting for the Environment



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# Eating Our Way to a Healthier Climate



## **EV Myths**

A car show sets the record straight.

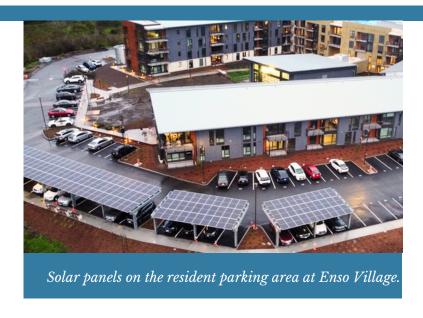
# How To Do an Energy Audit Right

Resident/administration collaboration is key.

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# A Journey Toward Sustainability

By Rahima Warren, Enso Village, a Kendal Affiliate

Many years ago, members of the San Francisco Zen Center began looking for a way to provide a residence for their retiring teachers. After a few false starts, the Center formed a wonderful partnership with Kendal, a network of Quakerbased senior residence communities, to create Enso Village in Healdsburg, CA.

In May 2021, Enso Village, now a Kendal Affiliate, became the first senior living community to fund its construction through "green bond" financing. A green bond (also known as a climate bond) is a fixed-income,

## Enso (cont'd)

tax-exempt bond that is used to fund projects that have positive environmental and/or climate benefits. To qualify for green bond financing, Enso Village was built in accordance with strict guidance associated with California green bonds.

At Enso Village, sustainability factored into all aspects of its construction and equipment. For example, the type of insulation; steel roofing and siding; ducted heat pumps; double-pane windows; energy-efficient electric appliances; and LED lighting maximized energy efficiency throughout the community. (Only the main kitchen and pool use natural gas.) Additionally, Enso installed 36 EV charging stations to encourage use of electric vehicles, many of which are in our green-built car barn. Finally, Enso ensured healthy conditions inside the buildings by avoiding use of any redlisted products--those chemicals (12,000 of them in 2024) commonly used in building materials that have been designated as harmful to health and the environment.

To achieve water efficiency, the community installed low-flow shower heads, toilets, and faucets, as well as water-efficient appliances, such as dishwashers and washing machines. In addition, we have a 19,000 gallon rainwater retention tower, and during the construction phase, we carefully managed water run-off from a ponding basin and related ducting and filters.

Enso diverted at least 65% of all construction waste from the landfill. In

addition, cardboard and plastic from the move-in process is being sent to county recycling.

While successfully implementing many sustainability measures during the construction phase, Enso Village is spearheading several ongoing efforts. We have an array of 168 recently activated solar panels above a residents' parking area. This array generates approximately 40 to 75 kilowatts of clean energy. We hope to add more panels to achieve near net-zero energy, but financial considerations underlie our ability to achieve this.

We're proud of our large on-site kitchen garden, which plays a key role in our food sustainability program. At its maximum yield, the garden will offset our external produce needs by approximately 30%. By supplementing with locally sourced farm-to-table products, we can thereby reduce food-related costs substantially. With wise recipe development, ordering, preparation, and plating, we are fortunate to have healthy and delicious meals!

To promote cleaner transportation, Enso Village encourages residents to bring only



The impressive kitchen garden at Enso Village.

# Enso (cont'd)

one car with them, and to reduce single-person car trips of 5 miles or less. The residents' Transportation Committee worked with the City of Healdsburg to add a bus stop at Enso Village. Enso currently owns a seven-passenger hybrid van, an all-electric car known as "Mustang Sally," and a gas-powered bus that seats ten, including driver, wheelchairs, and ambulatory passengers. Current services include:

- On-call (reservation required) shuttle service within a 20-mile radius, 5 days a week (M-F).
- Shuttle service in Healdsburg (Tuesday) and to a nearby market (Wednesday). No reservation is required.
- The big bus is available for special events hosted by Enso.

We will expand these services (e.g., weekends) as soon as an additional part-time driver is hired. Meanwhile, we encourage use of bicycles and electric bicycles by residents for recreation and to replace a portion of single-person car trips.

In January 2024, the Enso Earth Care Team (EECT) was formed by residents. We have worked to improve our basic recycling, composting, and trash systems. We have made good progress in educating residents and staff about what goes where, and our trash room monitors are finding fewer "trash room bloopers."

More needs to be done, including using food waste from the central kitchen to create compost for the kitchen garden.

We are inspired by Wake Robin's extensive recycling and reuse program! EECT is focusing on water conservation in our landscaping by planting drought-tolerant plants and improving irrigation. We plan to hire a knowledgeable landscape manager to take charge of this complex situation in the coming year.

In conclusion, Enso Village has made a great start on our journey toward sustainability! But, it is a journey, and we still have a ways to go. We won't have the capital for large improvements, such as a roof-top solar installation, until we reach stabilization (about 93% occupancy), which is expected by 2026. In the meantime, EECT continues to collaborate with the administration on earth-friendly improvements in several areas, such as utilizing greener energy, reducing energy usage, conserving water, and good landscaping practices. We will continue to encourage recycling and the circular economy, so we can increase reuse, repair, recycling, and upcycling initiatives across our campus. And we will continue to provide robust education to the entire community about our sustainability efforts. We were founded on sustainability, and that foundation will guide our next steps.

For more information:

https://enso.kendal.org/news/ziegler-closes-297030000-financing-for-enso-village/

https://www.treasurer.ca.gov/greenbonds/index.asp

#### ON THE ROAD TO NET ZERO: LAYING THE GROUNDWORK

By Stu White, Kendal at Hanover

Nearly five years ago, a small group of Kendal at Hanover (KaH) climate advocates found each other and began meeting regularly, pandemic be damned. In a couple of years their numbers had grown exponentially, and their voices were being heard. As a result, in 2022 the KaH board commissioned a comprehensive energy audit. We were about to take our first step on the long road to carbon neutrality.

Immediately following the commissioning of the audit, the administration took the lead in creating a resident/staff committee, the Energy Audit Sprint Team (EAST). This marked the start of a collaborative effort that is ongoing. EAST consisted of three residents and three to four staff, including the CEO, the COO, the Facilities Director, and a key facilities staff person. The team created a Request for Proposal (RFP), facilitating the hiring of a well-qualified audit team. Incredibly, at the same time a SSAFE energy audit working group produced RFP guidelines, a template that affiliates could choose to adapt to their campuses. It was completed just in time for Hanover to put it to the test, and most of the rigorous SSAFE provisions survived intact.

Just as the successful audit team landed on campus in January 2023, the KaH board once again took significant action, revising the Guiding Principles at Hanover to include this statement: "We are resolved to achieve scope 1 and scope 2 carbon neutrality throughout our campus." These goals, missing from the Hanover RFP, had

an immediate and profound impact as word was quickly passed to the auditors and became part of their thinking. A strong signal was sent: KaH is serious about reducing greenhouse gas emissions. Lesson learned: It is so important to include goals in the RFP.

# "We are resolved to achieve scope 1 and scope 2 carbon neutrality throughout our campus."

With the audit completed by the end of 2023, KaH had reached the first major milestone on the journey. Importantly, the work of EAST showed that residents and staff could collaborate effectively to achieve significant results.

Audit in hand, EAST's original charge was complete. The task now was to interpret audit findings and implement recommendations. It was felt a new name was needed to mark a new mission; how about WEST? Offered in jest, this met with unanimous approval. The blanks were filled in, resulting in the "Working Environmental Sustainability Team."

Last winter the COO issued a draft charter for WEST, describing goals and responsibilities of team members. Front and center are the Board's new guiding principles. Space does not permit a detailed summary of the finished document, but it has proven to be a valuable description of purpose, scope of

# Net Zero (cont'd)



The WEST Team: (L to R) David Urso, COO; Dean Sorenson, Director of Facilities; Keith Fossett, Facilities Project Manager; Stu White; Margaret Clark; Beth Vettori, CEO; Scot Drysdale.

activities, and roles and responsibilities, demonstrating the value of skilled management professionals guiding the process. Following are a few key items currently under consideration, stemming from the charter provision calling for involvement of "external experts."

- Architect and engineering consultants have recently submitted proposals for a feasibility study to replace the existing fossil fuel boiler plant with a variety of heat pump strategies to achieve carbon reductions in line with Kendal's carbon neutral goals.
- Architects and sustainability
   consultants have submitted proposals
   to develop a sustainability plan in line
   with KaH's carbon neutral goals.
   Critically, a Life Cycle Cost Analysis is
   included.
- KaH has created a position for a fundraiser to be hired in 2025, to work with the numbers generated by the above-mentioned consultants.

In a recent interview for this article the KaH COO, David Urso, was asked how did this happen, EAST, WEST, the charter? He replied, "We did it together." When pressed, he said, "It was just a natural part of how we operate; we knew we were going to have a better outcome by working together." He added that the leadership, above all, wants what's best for Kendal at Hanover.

"...we knew we were going to have a better outcome by working together."

—David Urso, COO, KaH

So five years on, and all this has been laying the groundwork. No ground has been broken, no golden shovels. Patience is being tested. Come the 2024 election, and one could lose heart. And then we see our grandchildren; we think of all the children to come, our beautiful planet, and we keep on "beating against the current," realizing there is no other way.

The SSAFE Energy Workgroup developed a deep-retrofit energy audit request for proposal (RFP) template utilized by Kendal at Hanover.

Go to <u>www.SSAFE.org/rfp</u> to download the energy audit template for free.

#### **UNPACKING PLASTIC BAGS: A JOURNEY FROM CREATION TO LANDFILL**

By Steven Fellows, RiverWoods Durham

This is the hypothetical but entirely plausible journey of a typical plastic retail shopping bag—just one of over a trillion manufactured every year.

Our story begins in the Permian Basin, a vast region famed for its deep reserves of oil and natural gas. Around two miles beneath the surface in Coyanosa, TX, natural gas is extracted and sent through pipelines to a processing plant in Midland, TX. Here, impurities are stripped away, and the gas is separated into methane, ethane, and other components.

From Midland, the ethane is transported via pipeline to a cracker facility in Port Arthur, TX, where it's converted into ethylene. This ethylene is then sent through another pipeline to a factory in Houston, where it undergoes high-temperature polymerization to become low-density polyethylene (LDPE). The liquid LDPE is cooled, solidified, and chopped into small pellets.

The journey continues. These polyethylene pellets are shipped by rail to Waxahachie, TX, where they are melted down, mixed with stabilizers, plasticizers, and colorants, and extruded into a thin, flat film. That film is then cut, shaped, and sealed into the familiar form of a shopping bag. Let's call this bag "Trashnik."

Trashnik, nestled among hundreds of identical bags, is packed onto a truck and transported to a distribution center in South Portland, ME. From there, it's delivered to a grocery store in Dover, NH.

Now the story takes a personal turn. Riley, a resident of RiverWoods Durham, makes a quick trip to the local grocery store, just two miles away, to purchase a loaf of bread and some lettuce—both wrapped in plastic. At checkout, Riley is handed Trashnik, now carrying the two plasticwrapped groceries. A few minutes later, Trashnik has made its way back to RiverWoods, where it briefly serves its purpose before being emptied.

Aware of the environmental impact of plastic bags, Riley, with good intentions, places Trashnik in the single-stream recycling bin. From there, housekeeping transfers the contents to a recycling compactor, which is transported to the Materials Recovery Facility (MRF) in Billerica, MA.

At the MRF, Trashnik is dumped onto the tipping floor alongside mountains of other recyclables. It's then loaded onto a conveyor belt, where, in the best case, a worker might pull it from the stream and discard it into the waste pile. If not, it will eventually reach the star-screener, a sorting machine designed for glass and plastic bottles. But plastic bags like Trashnik are notorious for jamming the machine's spinning arms. When that happens, the entire operation grinds to a halt as a worker manually removes the tangled plastic—a hazardous and tedious task.

Whether manually removed or entangled in machinery, Trashnik's fate is inevitable. It will be diverted into the waste stream,

## Plastic Bags (cont'd)

compacted, and hauled to the Turnkey Landfill in Rochester, NH, where it will be buried, far from any chance of recycling.

How far has Trashnik traveled by now? About 750 miles by pipeline, 245 miles by rail, and another 2,310 miles by truck—a total of more than 3,300 miles. And what is Trashnik's lifetime? It served a purpose for less than an hour, from the grocery store to home. But once in the landfill, it will take anywhere from 100 to 1,000 years to degrade into microplastics and nanoplastics, particles that will remain in the environment indefinitely.

Though this story centers on a journey through New Hampshire, the plastic bag problem is universal. Across the country, billions of bags like Trashnik follow a similar path—from production to brief use and, ultimately, to landfills. Plastic bags contribute to a cascade of environmental harms, from the fossil fuel extraction required to make them, to their persistence in landfills and oceans, where they break down into harmful microplastics. These tiny particles infiltrate our soil, waterways, and food chains, posing risks to wildlife and human health.

The vast majority of plastic bags aren't recycled—they end up in landfills or find their way into the natural environment. Reducing our reliance on single-use plastic bags is essential if we hope to mitigate their long-term environmental impact. Ending their journey starts with us.



# **Advocacy Corner**

#### **Post-Election Editorial**

By Ted Wolner, Kendal at Oberlin

President-elect Trump's choice of fracking advocate Lee Zeldin to lead the EPA confirms campaign promises to undo the federal government's climate efforts. Trump will probably withdraw from the Paris accords, thus crippling American leadership in the climate struggle, abandoning our allies, and effectively handing the reins to China. He has threatened to rescind all unspent money in the Inflation Reduction Act (IRA), the most far-reaching set of climate actions in our history. He wants fossil-fuel industries to "drill, baby, drill," dooming any chance to reduce emissions 40% by 2030, a must to achieve carbon neutrality by 2050.

At the same time, however, walls of opposition are forming. The bulk of IRA money so far has gone to red districts; in August, a group of House Republicans opposed cuts to clean-energy tax credits since their states have benefited disproportionately from new wind, solar, and battery factories and some 330,000 good-paying jobs. The Trump-Musk relationship has already dampened Trump's opposition to EVs. Chipping away at CHIPS Act regulations could go nowhere, since, again, local economies benefit from chip factories. As former EPA head Gina McCarthy puts it, attacking CHIPS and the IRA is "a fool's errand." A Trump administration may look like a gut-wrenching face-plant in a climate race we were already losing, but economic realities could make it difficult to gut these signature laws.

#### A CLASSY CAR SHOW DISPELS EV MYTHS

By Jim Salvas, Crosslands

Although driving an electric vehicle (EV) can cut dependence on fossil fuels, many seniors are reluctant to switch. Some of this is natural resistance to something new, but much comes from the misinformation surrounding EVs.

To help counter EV myths and provide reliable information, the Crosslands Energy Committee recently held an EV Car Show for residents on an October Sunday afternoon.

Vehicles displayed included sedans, SUVs, pickup trucks, and even a couple of electric bikes. Owners proudly showed off their fully electric vehicles, battery electric vehicles (BEVs), and plug-in hybrid vehicles (PHEVs). Twelve vehicles from eight different manufacturers ranged from a nearly new pickup to a nine-year-old sedan.

Owners stood by to explain features and share experiences. Each vehicle's windshield displayed a large datasheet plus one "EV Myth" and an "EV FACT" to counter it.

**MYTH:** Pollution from manufacturing EVs and mining the materials for their batteries offset any gains made during use.

FACT: Pollution from manufacture is offset by carbon savings within less than two years of average driving. In a typical car's life span, an EV accounts for much less than half the pollution caused by a gasonly vehicle.

**MYTH**: It is hard to find chargers when traveling.



The affordable 2024 Chevrolet Equinox EV has an estimated range of 315+ miles.

FACT: Now, there are nearly 9,000 public fast-charging sites in the U.S. They will outnumber gas stations in about eight years.

MYTH: EVs are too expensive.

FACT: Current models with ranges of over 300 miles start at \$35,000 and can qualify for a \$7,500 tax credit.

**MYTH**: EV batteries need costly, early replacements.

FACT: All EV batteries are warranted to last at least 100,000 miles. Current batteries are engineered for 300,000 to 500,000 miles.

MYTH: Electric vehicles are worse for the climate than gasoline cars because the electricity we use comes from the electric grid, which gets a high percentage of energy from fossil fuels.

FACT: EVs are up to four times as efficient in energy use as gas vehicles, so even if all of the electricity is generated by fossil fuels, the pollution savings are huge.

# EV Show (cont'd)



The 2024 Rivian R1T pickup impresses residents with the size of its truck bed.

In addition to displaying these EV myths and facts on their windshields, owners also shared their experiences maintaining and charging their vehicles. Most say they rarely use public chargers, depending almost exclusively on the roughly 60 miles they get by home-charging on standard 120v outlets overnight.

For most, maintenance is nearly non-existent, amounting to little more than tire replacement and refilling the windshield washer fluid. As for oil changes, well, there are none. One owner of a PHEV said she drove almost entirely on her battery, forcing the car occasionally to use the gas in the tank, "so it doesn't get stale."

Many of the 100-plus attendees said the information had helped change their minds about EVs, and at least a few agreed they would now consider an EV purchase. After a test ride, one person summed it up this way: "I had no idea!"

For more information, email Jim Salvas at camerajim@me.com.

#### COP29 Ends with a Whimper

By Barclay Ward, Kendal at Hanover

The 29th Conference of Parties (COP29), held in Azerbaijan in November 2024, centered on a contentious issue: financing of a fund to compensate the Global South for disproportionate damage to their countries from climate change and to help them fight it. The agreed amount was \$300 billion per year, an increase over the current \$100 billion, but far short of the \$1.3 trillion needed. Donor support has proved to be elusive. U.S. compensation is modest at best. When the fund was originally proposed, China, with the second highest GDP in the world, noted that the 1992 climate treaty categorized China as a developing state, and as such it could hardly be expected to contribute. And so it goes.

COP30 will be held in Brazil next year, possibly without U.S. participation. President-elect Trump has promised to withdraw—again—from the Paris agreement. Indeed, there is doubt about U.S. acceptance of any previous commitments, including those made this year.

Many people have expressed disappointment in COP29. Al Gore questioned whether a conference of parties is a productive format, expressing dismay at the role played by fossil fuel-dominant countries. Perhaps he or someone else will figure out a better way forward.

Look for a more in-depth article on COP29 in the April newsletter.



#### **GOOD FOOD, HEALTHY PLANET**

By Patty Motch and Helen Ostermiller, Wake Robin

Food choices have a significant impact on the climate; for instance, beef production generates substantially more greenhouse gas emissions than plant-based foods. Embracing plant-forward meals, minimizing food waste, and sourcing locally are effective ways to lower the environmental impact of our diets, but encouraging change can be challenging.

Knowing of negative reactions to "meatless Mondays" and "eat less beef," our Eating for Sustainability Group (a part of Wake Robin's Climate Action Task Force) decided to take a gradual, positive approach to encouraging change.

Our mission is: "To foster a realistic awareness of how our eating at Wake Robin impacts the climate and to support the community's movement toward more sustainable options and food choices. We include all aspects of sustainable eating, from production and transport to consumption and waste."

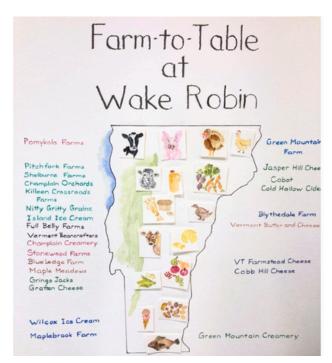
Dining Services was already offering a daily vegetarian option and an extensive plant-based salad station. In addition, it buys a majority of our meat, dairy, eggs, and produce from local sources.

To make positive change, we adopted non-threatening language, e.g., avoiding the term "vegetarian," suggesting residents try eating a half each of the plant-based and the meat options (eating less meat weekly helps), and using terms like "plant-forward."

Our projects educate and engage residents

as we highlight the climate impact of our food choices. Among the projects we've initiated so far are:

- Strategically-placed posters
- Online annotated slides linking readers to informative print, graphic, and audio materials
- A presentation and conversation with University of Vermont food and climate scientist Dr. Eva "Lini" Wollenberg



A poster displayed at Wake Robin shows where food is sourced. Created by resident Susu Brown.

Working collaboratively with our Director of Dining Services, we've gained support for the expansion of plant-based dining choices and have begun to see successes. Our chefs report more interest in their vegetarian options.

Future plans include grain bowl offerings, vegetarian recipe contests, and a survey measuring progress. Our hope is to foster a meaningful change in eating behavior.

#### WANT MORE ENERGY-EFFICIENT KITCHENS?

By Dorothy Luciano, Kendal at Oberlin

Whether in our central kitchens or our personal homes, induction cooking is by far the most energy-efficient way to cook. Induction appliances are up to three times more efficient than gas stoves, and up to 10% more efficient than conventional smooth top electric ranges. But not only do they reduce energy expenditure, they also avoid fossil fuel pollution. Gas cooking emits greenhouse gases such as methane, a more potent greenhouse gas than carbon dioxide, as well as nitrous oxide, carbon monoxide, and formaldehyde, which can be harmful to our health.

The magic of induction technology is that it heats the pan itself rather than the burner. It does so by creating an electromagnetic field that interacts with metallic elements in the pan to generate heat. In contrast, gas burners or standard electric coils generate heat under the pan.

Induction cooking surfaces come as portable countertop units that have one or two burners, cooktops that have four to five burners and are installed in the countertop, and full stoves with an induction cooktop and conventional oven.

You must use cookware made of a substance that can conduct a magnetic current. If a magnet sticks to the bottom of a pan, it will work. And a caution for those with cardiac pacemakers: ask your physician before using an induction cooktop because of the magnetic field.

Recently an ENERGY STAR certified double-burner induction cooktop was installed in the Care Center at Kendal at Oberlin during construction. All-electric cooking in the new kitchen (the central kitchen uses gas) allowed for a small, low-capacity kitchen exhaust hood because no fuel is used in the kitchen. In addition, the smaller HVAC systems and lack of a need to plumb gas lines reduced construction costs. This helped to compensate for the increased expense for the cooktop and appropriate cookware.

Personally, I can attest to the value of induction cooking. I purchased a one-burner countertop unit to compare to my electric stove. I liked the faster cooking speed, precise control of both power and temperature, and even cooking so much that I have not used my electric stove since.



A portable induction cooktop.

Induction cooking is ecologically sustainable and safe. The cooktops can only be "on" if a magnetic pan is placed on them, so a burner cannot be turned on accidentally. Also, the cooktop is "off" as soon as the pan is removed, so one can't leave the stove on after cooking. The area around the cooktop doesn't heat, and the cooktop itself, heated only by the hot pan, cools quickly, so there is less chance for burns. Because of its benefits for human health, greater efficiency and economy, and enhanced food quality, induction cooking is truly the most sustainable choice.

# **Wrapping Up**

### We're expanding...again!

SSAFE is excited to announce the addition of another new SSAFE chapter. Formerly a Kendal Community, **Otterbein Granville** joined Otterbein SeniorLife in 2021. With the Kendal values as a guide, the fledgling community focused on sustainability and forged a new core value statement: "We value environmental sustainability and seek to minimize our environmental impact and carbon footprint both individually and as a community."

There is plenty of evidence that these values are being applied in real practice. Residents help nurture, manage, and sustain the natural areas of the campus, which has been designated a Level 1 Accredited Arboretum. They plant trees and native plants, install rain gardens and bioswales, and foster the reproductive success of native birds.

Their efforts to lower reliance on fossil fuel range from installation of a geothermal HVAC system in the health center to plans for electric vehicle charging stations, always with an eye to best practices and the most effective and cost-saving technologies.

#### **Donate Today!**

It's tax-deductible!

And it's easy. Just send a check—made out to SSAFE:

Scot Drysdale 32 Penn Road, Apt. 419 Hanover, NH 03755

SSAFE uses these funds to support efforts such as guiding senior living campuses to net-zero emissions, climate advocacy, and climate education. Senior Stewards Acting for the Environment (SSAFE) is a 501(c)(3) nonprofit corporation. EIN: 87-1229514.

At its 47-acre campus in Granville, OH, Otterbein Granville has 175 independent living residents, but this nonprofit provides a full spectrum of senior healthcare services.



Otterbein Granville in Granville, OH.

#### **SSAFE Newsletter**

This newsletter is a publication of SSAFE, a non-profit organization started by residents from Kendal senior living communities. SSAFE has no official affiliation with the Kendal Corporation.

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#### **Submissions & Comments**

We want your feedback! We're always looking for good stories to provide inspiration to other senior living community residents. Send us your articles, ideas, questions, or comments!

We'd love to hear from you—drop us an email at info@SSAFE.org