

The LEAGUE LINE

Spring 2013

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On Thin Ice:
Nuclear Power in the Southeast

by Louis Zeller

Four nuclear power stations in the Southeast rely on baskets of ice to control excess heat and pressure during a nuclear accident: McGuire in North Carolina, Catawba in South Carolina and Watts Bar and Sequoyah in Tennessee. This system was designed to save the industry money by reducing the amount of concrete and steel in the nuclear reactors' containment buildings. The seven nuclear reactors at these four plants, plus two more in Michigan, are the only such units operating in the United States. They should all be shut down; they should certainly not have their licenses extended.

The containment buildings of nuclear reactors must do two things without fail: contain radioactive emissions during an accident and prevent intrusion from outside forces such as wind driven objects and man-made missiles. Ice condenser nuclear reactors depend on 2000 baskets of ice to reduce heat and pressure in the event of an accident, preventing damage to the containment and leaks of radioactive steam. Typical nuclear power plants have concrete containment several feet thick, but ice condenser reactors substitute a steel shell of smaller volume and less ability to withstand pressure. Ice condenser containment buildings are simply not as strong as comparable reactors using dry containment systems.

But the Nuclear Regulatory Commission and reactor builder Westinghouse have accounted for all this, right? Well, no. Sandia National Laboratories found that if an accident involving hydrogen ignition occurs, a common characteristic of nuclear emergencies, the concrete containment will almost certainly fail. In fact, ice condenser plants are at least one hundred times more vulnerable to early containment failure than other commercial pressurized water reactors in the US. [1]

In order to work properly, doors to the ice baskets must open if, for example, a high pressure steam pipe bursts. But during an inspection at Sequoyah workers found buckled floors which prevented half the doors from opening at Unit 2, and one-quarter of the doors at Unit 1, causing an immediate shut-down.[2] McGuire plant employees determined that 10 of the 48 ice condenser inlet doors would not have opened in an accident situation. [3] All these plants suffer from this critical weakness. And if the doors fail to open during an accident, the containment buildings cannot withstand the pressure. **(continued pg 3)**



[1] NUREG/CR-6427, Assessment of the Direct Containment Heating Issue for Plants With Ice Condenser Containments, April 2000

[2] Fission Stories #11, Dave Lochbaum, Union of Concerned Scientists.

[3] Blue Ridge Environmental Defense League request for hearing and leave to intervene in the matter of license renewals at Catawba and McGuire, Docket Nos. 50-369, 50-370, 50-413, and 50-414, September 14, 2001

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BREDL: Who and what we are

In March 1984, fifty citizens of Ashe and Watauga Counties met in the Mission House of Holy Trinity Church in Glendale Springs, North Carolina. Teachers and farmers, home-makers and merchants listened to the report of the Episcopal Church Women on the US Department of Energy's siting search for a high-level nuclear waste dump in the rain-rich east.

Recognizing that the North Carolina mountains were a region at risk, the assembled group organized the Blue Ridge Environmental Defense League (BREDL) to protect their own backyard and those of other threatened communities.

Grassroots organizing was a cornerstone of our early all-volunteer organization. One of our first multi-county boards of directors adopted our credo, which embodies our mission statement:

BREDL Credo

We believe in the practice of earth stewardship, not only by our league members, but by our government and the public as well. To foster stewardship, BREDL encourages government and citizen responsibility in conserving and protecting our natural resources. BREDL advocates grassroots involvement in order to empower whole communities in environmental issues. BREDL functions as a "watchdog" of the environment, monitoring issues and holding government officials accountable for their actions. BREDL networks with citizen groups and agencies, collecting and disseminating accurate, timely information. BREDL sets standards for environmental quality, and awards individuals and agencies who uphold these standards in practice.

Moving into the future

Since then, the Blue Ridge Environmental Defense League has grown to be a regional community-based, nonprofit environmental organization. Our founding principles - earth stewardship, environmental democracy, social justice and community empowerment - still guide our work for social change. Our staff and volunteers put into practice the ideals of love of community and love of neighbor, which help us to serve the movement for environmental protection and progressive social change in Maryland, Virginia, North Carolina, South Carolina, Georgia, Alabama and Tennessee.

Grassroots Campaigns

Nothing creates hopefulness out of helplessness like a successful grassroots campaign - and our chapters have a history of winning. For over twenty-eight years Blue Ridge Environmental Defense League chapters have protected their communities by stopping dangerous facilities and promoting safe alternatives.

In the 1980's and 1990's, BREDL prevented a multi-state ThermalKEM hazardous waste incinerator, a southeastern nuclear waste dump and a national nuclear waste dump. In the 2000's, our coordinated grassroots citizens' campaigns have had further victories. We won a legislative victory with the passage of the NC Solid Waste Act, effectively blocking at least four multi-state mega-dumps. Our Person County chapter convinced their Board of Commissioners to reject expansion of the Republic Services landfill. Our Cascade, Virginia, chapter shut down a huge hazardous waste incinerator. We eliminated mercury waste from the Stericycle incinerator, shut down a tire incinerator in Martinsville, won the landmark environmental justice court decision in Greene County, NC. Further, with our chapters we have protected air quality by blocking scores of asphalt plants, four medical waste incinerators, a PVC plant and a lead smelter, and passage by local governments of eight polluting industries ordinances. Our work on nuclear power and coal plants laid the groundwork for our new Safe Energy Campaign. Victories over twenty-four mega-dumps have resulted in our affirmative Zero Waste Campaign. Guided by the principles of earth stewardship and environmental justice, we have learned that empowering whole communities with effective grassroots campaigns is the most effective strategy for lasting change.■

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(continued from Page 1)

On Thin Ice: Nuclear Power in the Southeast

Ice condenser reactors are vulnerable to other problems. Dr. Edwin Lyman, now at the Union of Concerned Scientists, wrote:

> However, even if the ice condensers do work as they are supposed to (which in itself is a questionable proposition), containment failure can still occur as a result of the combustion of hydrogen gas, which would be generated in large quantities during severe accidents when the metal cladding on fuel rods reacts with coolant water....The ice condensers not only cannot reduce the risk of hydrogen combustion but also can actually increase it, because they divide the containment volume into small compartments where hydrogen gas can more readily reach explosive concentrations.[4]

Dr. Lyman points out that the typical failure pressure for ice condenser containments is about 63 pounds per square inch. Pressure from hydrogen combustion in a nuclear reactor can reach 110 pounds per square inch. He concludes, "Therefore, hydrogen burns can easily over-pressurize and rupture ice condenser containments." [5]

What has the NRC done about this problem? Too little. The ice condenser containment was the subject of an internal review in the 1980's which concluded that, despite the uncertainties, "No change in the [standard review plan] was required" and the issue remains closed. NRC estimated that at the time an overall solution to these deficiencies at all ice condenser plants would have cost about $208 million. But the cost-benefit radiation dose per person was considered too low to justify this expense: for two scenarios considered the doses were based on 260 man-rem and 4,700 man-rem. [6]

Of course, a person receiving the radiation dose would disagree.■

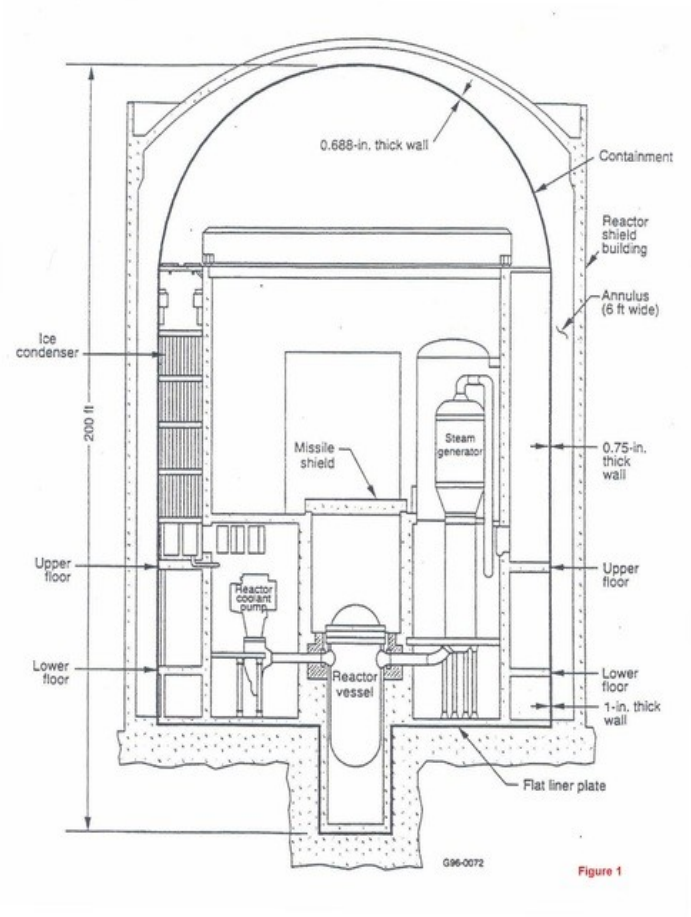


Photo credits: 1)Union of Concerned Scientists, Fission Stories #11, http://allthingsnuclear.org/fission-stories-11-no-knock-knock-joke/, 2) http:// www.shutterpoint.com/photos/B/215822-FIRE-ICE_view.jpg

[4] "Plutonium Fuel and Ice Condenser Reactors: A Dangerous Combination," Edwin S. Lyman, PhD, October 19, 2000,

http://www.nci.org/e/el-ice-condensers.htm

[5] *ibid*

[6] NRC Resolution of Generic Safety Issues: Item B-54: Ice Condenser Containments (Rev. 1)(NUREG-0933) Updated March 29, 2012

(no)waste confidence!

NUCLEAR WASTE RULE UPDATE

By Louis Zeller



In 2012 the DC Circuit Court of Appeals invalidated a broad federal regulation which supports all US nuclear power plant licenses. The Court's decision forced the NRC to address the risks of nuclear waste disposal before licensing and more power plants. This reckoning was long overdue. (See Summer 2012 League Line for the legal story.)

The NRC rushes new rule

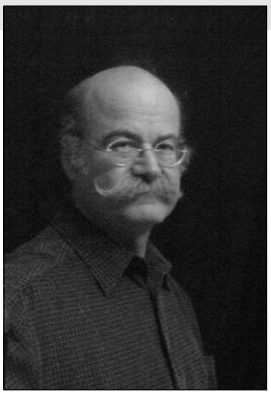
Late in 2012 the NRC held scoping hearings for an environmental impact statement for a new *generic* waste confidence rule. A generic rule attempts a one-size-fits-all approach, similar to the overturned rule. A Draft EIS and further hearings are expected sometime in 2013 and the NRC plans to have a new rule in place by September 2014.

However, to be done properly, detailed long-range assessments are necessary, a time-consuming enterprise which the NRC has avoided for decades precisely because it is difficult. Even NRC staff estimated that the waste confidence EIS should take seven years. NRC must resolve many technical issues including long-term waste integrity, vulnerability, deterioration and accidents. Also, the nuclear waste stored at Fukushima is still being evaluated. Yet the NRC has set a two-year deadline to finalize the new rule.

The NRC's generic rule approach remains utterly inadequate to satisfy the requirements of the Atomic Energy Act and the National Environmental Policy Act for the licensing of nuclear power. The Commission is in danger of abrogating its responsibility to allow public to participate in a decision which affects them. Rather than a generic approach, there should be well-supported plant specific safety findings at all of the nation's 65 reactor sites.

For decades we at Blue Ridge Environmental Defense League have had no confidence in assertions by the nuclear industry and various regulatory agencies about nuclear waste and we have not been silent about it. Now a federal court has agreed with us. We must use this opportunity to halt the industry push for a quick and dirty solution and inject some sanity into the debate on nuclear energy and radioactive waste.





What You Can Do

The NRC is holding monthly telephone conference calls to update the public on the waste confidence rule. All comments during the calls are off the official record, but hard questions can and should be asked. To join a call, dial the toll-free number 1-800-857-2553 and provide the operator with passcode 3682386. Calls begin at 1:30 EDT and last 60 minutes. Remaining call dates: May 15, June 19, July 17and August 21.

Relevant NRC documents and updates are posted at:

http://www.nrc.gov/waste/spent-fuel-storage/wcd.html

Welcome BREDL 2013 Duke Stanback Interns

who are part of the Stanback Internship Program at Duke University's Nicholas School of the Environment. Since its founding in 1995, the program, which is funded by Duke alumni Fred and Alice Stanback, has enabled more than 500 deserving students to do intensive summer internships at nonprofit conservation and environmental organizations across North Carolina and nationwide.



Dan Zhou

***BREDL* PROJECT: Biomass and Medial Waste Controversy: To Burn or Not to Burn?**

I am currently at Duke University in a Master's program for Environmental Management, with a focus on Energy & Environment. I have a Bachelor's degree of Environmental Engineering from Tsinghua University, China. As a Chinese girl, I come from a small city called Karamay, which is famous for its petroleum resources and deserts. I am a huge movie fan. I also enjoy reading and skating in my spare time.



Changchang Zhou

BREDL PROJECT: Emergency Planning at Nuclear Power Plants for Public Health and Safety

I am currently at Duke University in the Environmental Management Master's program, concentrating on energy and environment. I am from Jiangsu, China. I did my undergraduate degree in Environmental Science. I enjoy listening to music and watching movies in my spare time.



Maria Khvatskaya

BREDL PROJECT: Exposing 'Trade Secrets': Do State and Federal Agencies Help Polluting Industries Raise Corporate Personhood Above Environmental Justice?

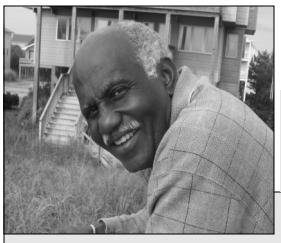
I was born in Russia and moved to New York in 2001. I graduated from Macaulay Honors Program at Hunter College in 2012 with a dual degree in Political Science and Philosophy. During my undergraduate career, I studied abroad in Argentina, Spain and India, learning Spanish language and exploring different cultures. I started at Duke University School of Law in the fall. In my free time during the year, I volunteer and like to work with children. I enjoy traveling, reading and being outdoors in almost any weather.



Wendy Shi

BREDL PROJECT: Homeland Security: Threats to the Sustainability, Safety and Security of NC's Food/ Water

Currently I'm a first-year Master of Environmental Management student at the Nicholas School of the Environment, Duke University. My concentration is Energy and Environment. Prior to Duke, I completed a double major in Geology and Economics. This interdisciplinary background has enabled me to analyze issues in a more comprehensive and creative way. While at Duke University, I have continued my passion in the environmental area. I pursued courses in both quantitative analysis and management projects, such as using Excel in energy modeling, data analysis, program management and sustainability. In addition to my program of study, I have completed several research projects related to environment, through which I mastered the ability to gather information, analyze data, conduct independent research and collaborate in teams.



"It's not all that it's cooked up to be"

By Rev. Charles Utley

How much more can we take in our communities surrounding Plant Vogtle, and the Savannah River Site? There is a push to increase the amount of toxins in our area with plutonium fuel and nuclear waste.

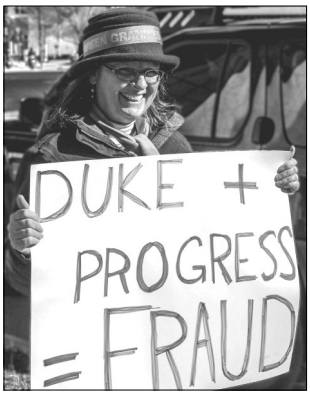
We realize that the buzzword these days is jobs. We are not fooled. But we must be careful when they come with such a high price tag. There are many other things we could buy using that money. Shaw AREVA MOX Services have just gotten a performance rating of 50.4 percent on the plutonium fuel plant they're building at SRS. That means they got $4,392,594 out of a possible of $8,715,465 for their work. In some very important areas, engineering and construction, their performance was just 1 percent!

The Nobel Laureate economist Joseph Stiglitz said that the proper lens for these policy debates is environmental justice. Recently he said, "There is a two-way relationship between environment and inequality. When you're poor, your focus is not on the complex issues of the environment and how the environment affects your economic future. Those seem too esoteric. You're focused on survival."

Our communities surrounding these plants are at an all-time high level of concern because of the proximity of communities such as Augusta and Shell Bluff, GA, New Ellenton, SC, and downstream also. We must be cautious and monitor the work at SRS and Plant Vogtle. Let's not take anyone's word for how safe these plants are or how many great jobs they will bring. The bottom line is who will be around to work these jobs if they are ever developed. We have a catastrophic disaster hanging over our heads; we will always be slaves to receiving more and more nuclear waste. These communities are already suffering from a disproportional amount of contamination, causing a variety of illnesses among our citizens.

In a few weeks, we will hear from the Nuclear Regulatory Commission how great Vogtle has been doing and how many jobs we can expect there, but we must not forget we are paying Southern Company for every one of those proposed jobs ***now*** and we will continue to pay for them from **now on**. Southern Company is like a money leach. Let's stop the sucking and cut them out of our wallets.■





Hardworking BREDL Chapter Inspires with Workshops, Rallies, Public Speaking, Petitions, Letter Writing and Canvassing

By Laura Sorensen, SAFECarolinas, Asheville, NC

When our local SAFE Carolinas chapter in Asheville, NC learned that public utilities across our state had to justify their 15-20 year business plans to the NC Utilities Commission on a biannual basis we immediately rolled up our sleeves and got to work. We held information and writing workshops at our local library, helped organize a rally at Pritchard Park, wrote letters to the editor, and worked hard to get a public hearing scheduled in Asheville.

The business reports to the commission are called the Integrated Resource Plan or I.R. P. and the law requires public input. We felt one scheduled public hearing in Raleigh on a weeknight to address the energy future of North Carolina was a slap in the face. We created an online petition, collected letters and canvassed our area which resulted in about 1200 signatures demanding an IRP public hearing be held in Asheville as a central location for Western North Carolina ratepayers. Greenpeace and another environmental group ran the same campaign for a Charlotte IRP public hearing. Although Asheville was denied, the NC Utilities Commission granted Charlotte a public hearing and we feel the double pressure made that happen.

Duke Energy's response to our demand for a public hearing in Asheville and Charlotte were very pointed and typical of the monopoly mentality:

"…….nothing will be gained by additional possible hearings where members or supporters of Movants appear and deliver the same message."

Duke suggested they hold a public hearing in Hickory if necessary but added,

"……Movants will appear and virtually all will have the same talking points provided by Movants denouncing fossil and nuclear generating units in favor of energy efficiency, conservation, demand-side management and renewable resources such as wind and solar."

These statements are proof that Duke / Progress Energy does not respect due process under the law and will continue to ignore the desperate pleas from customers who know the time is now for changing our energy future.

According to a NC survey done in January of this year by Fallon Research:

"85% of respondents support new energy policies that would create opportunities for clean energy companies that use renewable energy resources, such as the sun and wind, to offer electricity services directly to consumers and businesses in North Carolina– thus creating more options and market competition than is currently allowed by our utilities such as Duke Energy and Progress Energy."

The proof of this survey was evident when hundreds of speakers at the IRP public hearings in Raleigh and Charlotte brought the urgent message to save the planet and humanity from destruction by fracking, coal and nuclear power. Parents, grandparents, students, children, environmental groups, social justice groups, retirement groups and scientist pushed the hearing rooms to over capacity.

Thanks to a generous donation from BREDL, SAFE Carolinas drove a 15 passenger van to the Charlotte public hearing and the western part of our state was well represented with even more folks attending by carpool. About 200 people were at the hearing and 92 speakers! We stayed until after midnight when testimony was still going strong.

Outside the Mecklenburg County Courthouse in Charlotte, protestors and speakers gave the press a good showing an hour before the hearing was scheduled and got decent coverage. We made signs that read NO MORE NUCLEAR and DUKE NO RATE HIKES, NO DIRTY ENERGY. Minutes before the meeting was called to order, an "occupy" style mic check (call and response) was completed by the audience with no interruption from security. We all had a good laugh when one speaker from Asheville announced his lump of coal brought as evidence was confiscated by security outside the meeting room because it was considered a "lethal weapon".

It was a very emotional evening with tears, frustration and a great deal of pleading from speakers while the commissioners and utility companies listened with a stone face. I expressed my opposition to Duke Energy's plan for the new nuclear plant, the WS LEE in Gaffney, SC. Millions have been spent on construction and public properties have been bought before it has even received an official license from the Nuclear Regulatory Commission. I showed them a picture of a typical Japanese kindergarten student on this way to school dressed in face mask with a radiation monitor clipped around his neck. Is this what we want for our children? No way !

I was inspired by this statewide effort organized by many environmental organizations and learned so much from all who participated.

SAFE Carolina is grateful to BREDL and in particular Lou, Beverly and Therese who always champion us onward!

Heavy Handed Authorities Overreact and Interfere with MY Freedom of Speech and Civil Rights!

By Julius Kerr, BREDL N.E.W. Chapter
(Neighborhood Environment Watch, Alamance County NC)



Feb 2013

I got caught up in traffic for almost three hours as I was headed towards the Duke Energy Hearing in Charlotte. Once I got there, I put on my specially made accordion type environmental signs from head to toe! I joined many other environmental activists and we were off to a good start with our uplifting and energetic rally which was well planned and executed.

The atmosphere changed dramatically when I tried to enter the hearing. Security officers stopped me and instructed me to leave all my signs outside, lay down my camera, notepad and pen, empty my pockets, take off my BREDL button and even take off my shoes. There was nowhere to sit down to untie and remove my shoes. I am a retired and disabled veteran and I had a hard time with that balancing act. With nowhere to sit, I wasn't sure if I could get my shoes off or get them back on again after the security search. There were folks older than me standing in line and going through the same embarrassing shakedown.

One intimidating security officer was announcing to the crowd, "No cameras allowed in the courtroom. No pens allowed in the courtroom. A pen is a lethal weapon. Remove everything from your pockets to run through the scanner and you have to go through the scanner too. Nothing metal past this point."

I told the officer I had to have my pen to take notes. The officer finally said I could take it in, but not to stab anybody with it!

One woman said she couldn't just leave her camera there and the officer said, "Well, you can take the camera in but do not take pictures." Even so, pictures were taken and no one was stopped.

Everyone was told they could not stand up or speak out of turn or they would be escorted out of the building. One young woman posted something on the wall and security officers immediately told her to take it down. When she did take it down, she playfully stuck it to her forehead instead of putting it away. The officer told her to leave the building. She got her belongings and he escorted her out and she never returned.

When I finally got in the room to sign up, there was a line all the way out the door. I ended up on page six of a long list of pages. Then officials announced that if anyone spoke during the public hearing in Raleigh, they could not speak at this hearing. I stayed for quite a while anyway, hoping to speak. I listened to testimony and mingled with BREDL members, SAFEcarolinas, NCWARN, Greenpeace and others and discussed the situation.

Around 9 pm there were still so many folks ahead of me that the official said he would start cutting the time allowed to speak. I decided to head for home at that point. My signs and all the others were gone when I went back outside for them and they were never returned. I got home around 11 pm. Some groups didn't get home until after 3 am.

We did receive good TV and newspaper coverage. Our friends from Canary Coalition filmed everything and Laura Sorensen and I took pictures too, while we were allowed to have our cameras.

We should all follow up on how people were treated. We need to respond to the way the Utilities Commission ran the meeting and how security mistreated folks. People were given wrong information in Raleigh and in Charlotte. There are no rules about not speaking. They are supposed to hear all comers.

As my friend and mentor, BREDL Executive Director Lou Zeller says "It's important to know how to act and to make the most of each event. BREDL does the unexpected! The situation where authorities are heavy handed and overreacting can benefit us. It brings people to our side to protects our freedom of speech and our civil rights."



Director's Report: Beyond Business As Usual

This month I attended the American Clean Energy Agenda's 2013 Leadership Conference in Cambridge, Massachusetts. The meeting was jointly sponsored by the Civil Society Institute and the Environmental Working Group. The theme of the meeting was "Energy Policy as if People Matter" and "Organizing to Make It Happen." The three-day planning session focused on natural gas, coal, nuclear and biomass. The two main strategy areas centered on 1) the nexus of water and energy, moving beyond carbon as an organizing principle and 2) energy exports of shale gas and coal. The bulk of the meeting was spent formulating strategy and developing key tactics in the areas of legal, research, legislative, electoral, communications, education, and outreach. The ACEA has a keen appreciation for grassroots organizing, which is why we were invited.

Activists opposing dirty energy sources such as coal, hydrofracking and nuclear can get very knowledgeable very quickly. It's easier than ever these days. But too often, as the facts pile up the action slows down. Familiarity with the technical material creates a tight cadre of citizen experts who wonder "Why are we always preaching to the choir?" and "Why is the public is so apathetic?" These are two sides of the same coin. The new experts lapse into jargon, terms created by the power industry, a deceptively harmless shorthand or, more problematically, a presumed symbol of credibility when talking truth to power. But the new energy revolutionaries have done to themselves what their opponents never could; that is, alienate them from their natural allies. To become hog-tied in technical jargon is to find yourself speaking louder and louder to a person who hears quite well but still does not understand because she speaks a different language. Technical jargon is not the only pitfall for activists. The inner workings of federal, state and municipal governments offer a similar labyrinth of who does what when and where. Being on first-name basis with officials can result in its own slang, likewise incomprehensible to those we need to talk to.

Global warming is upon us, but where is the sense of urgency in the halls of power? One of the greatest nuclear disasters in history occurred just two years ago, but why are industrial nations still building nukes? Are we being clear about the danger we perceive? It is time to move beyond business as usual.

"Fracking has nothing to do with energy independence," said Bruce Ferguson of Catskill Citizens for Safe Energy during the American Clean Energy Agenda meeting. Exports will continue to grow because prices in the US are falling below the cost of production. Likewise, coal mined in Wyoming and West Virginia is being shipped overseas. Teresa Erickson of Northern Plains Resource Council said, "A Coal to China Rail Road" may run through your town or city. How do you feel about that? It is the local community that pays the price.

In power plants generating electricity for domestic consumption fully two-thirds of the heat produced with coal, natural gas or atomic power is flushed down the drain as heated water, unusable. Meanwhile, high river water temperatures and falling reservoir levels are creating unsafe conditions for nuclear power plants because they have no off switch, they must have water to avoid overheating. And a single plant may consume more than the largest cities in a given state combined. What if we were to put the water hogs on a diet? We should call for a "Water Budget." The highest and best use for water in every state is to use this limited natural resource as if people matter; that is, for public health and agriculture, not generating electricity which can be done better other ways. At the closing session of the conference, Pam Solo, founder and president of the Civil Society Institute, said, "It is time to make business as usual too costly." I agree.

The Columbus Dispatch, May 29, 2012

Fracking bosses would choke if tables turned

By Joe Blundo

A fracking executive, a state legislator and an oil-and-gas-industry lobbyist walk into a bar.

They're pretty pleased with the way they've managed to keep some of the chemicals in fracking liquid secret from the public, and they're ready to celebrate.

Under a bill passed by the legislature last week, people who fear that the secret chemicals sickened them or polluted their water could find out what those chemicals are only by filing a lawsuit after the fact. This seems reasonable to the trio, toasting the victory.

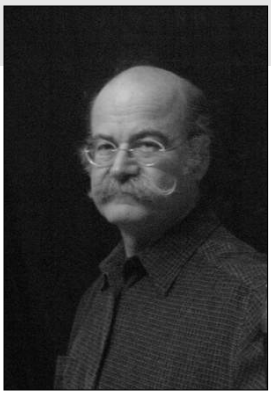
"I don't know why all the fuss in the first place," says the lobbyist. "What is it about the process of injecting millions of gallons of chemical-laced water deep underground that makes people so nervous?"

They proceed to order drinks, then decide to have dinner, too.

"How's the meatloaf?" the fracking executive asks the waiter.

"Excellent," says the waiter.

By Louis Zeller



"There aren't any peanut products in it, are there? I'm allergic to peanuts."

The waiter explains that the chef doesn't disclose the ingredients in his meatloaf, because it's proprietary information.

"You don't understand," says the executive. "I'm at risk. I have to know the ingredients."

The waiter repeats that the recipe is a secret one. The executive usually wouldn't put up with such treatment, but he's hungry.

"Well, how about the potpie?" he asks. "Can you disclose the ingredients in that?"

"Certainly," says the waiter. The diners sigh, relieved, until the waiter adds, "But first you'll have to get sick and file a lawsuit."

The diners stare at him, slack-jawed.

"You have to be kidding me," the executive says.

"No, sir, I'm not," the waiter replies. "What we'd like is for you to eat the potpie first. Then, if your throat swells up and you have trouble breathing, call a lawyer. Once the suit is filed, let us know, and we'll tell you what was in the food so you can arrange for the correct medical care. Of course, your doctor might face some restrictions on whom he can tell about the chemicals. But our recipe secrets will be safe, and your heart can be restarted. It's a win-win."

The legislator rises in anger.

"I demand to see the chef right now. I will not let a job creator be treated this way."

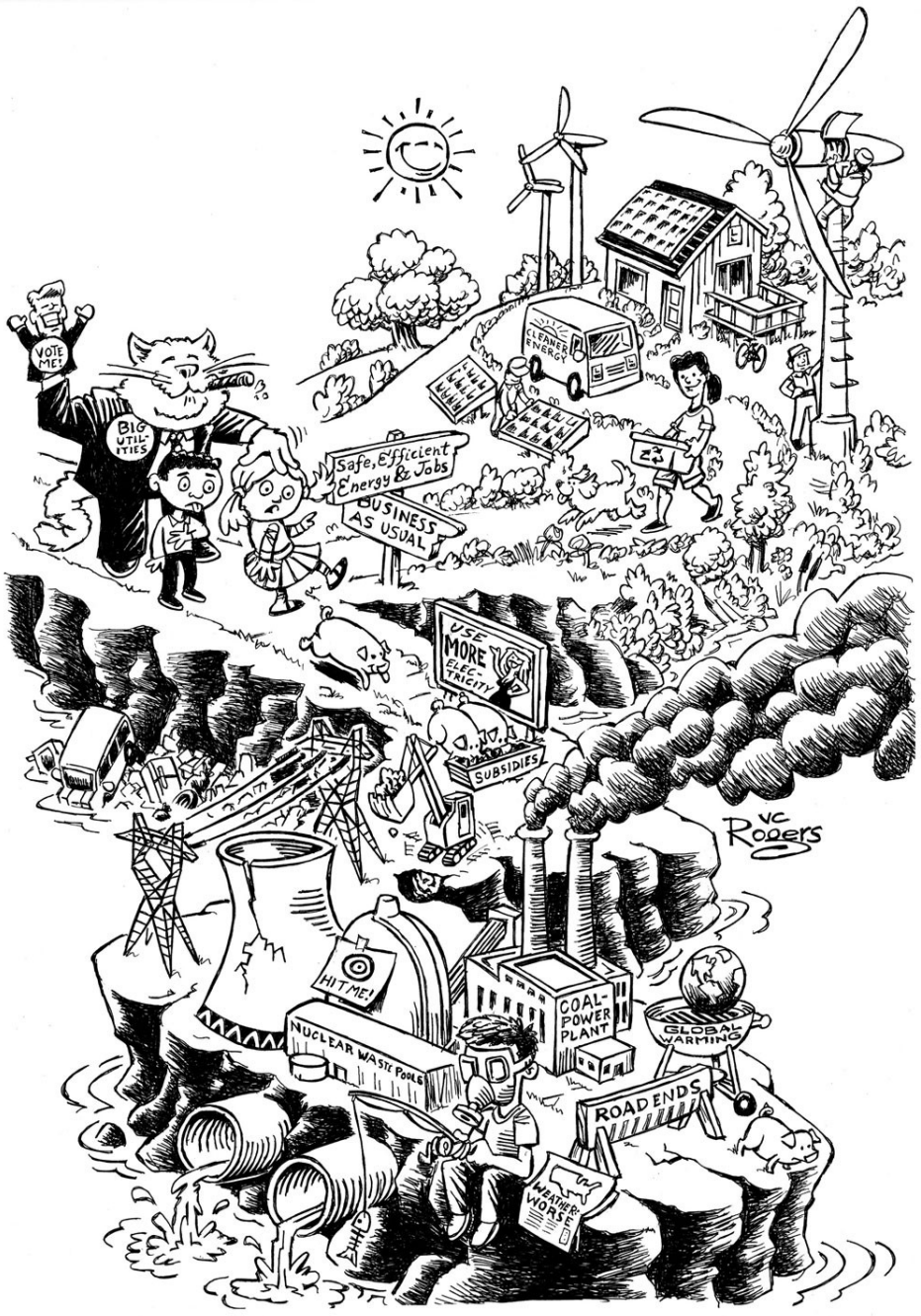
The waiter says the chef has a long list of appointments today and can't see the legislator.

"Appointments with whom?" the legislator thunders.

"A special group of customers willing to pay large amounts for access to the chef," says the waiter. "They state their opinions on the chef's recipes and ingredients. Of course, this in no way influences the chef's decisions."

"Oh, please," the legislator scoffs. "We're leaving. And I'm telling all my friends never to patronize this place. What's the name of it again?"

The waiter, walking away, says, "It's called the Business as Usual ■





Bellefonte Efficiency & Sustainability Team, and its subset Mothers Against Tennessee River Radiation

and other organizations stepped up to say...

By Sandy Kurtz, BREDL Tennessee / Alabama Vice President

Sequoyah Nuclear Plant is <u>really</u> old. Its two reactors (1160 Megawatts each) began operating in 1981 and 1982. Now owner Tennessee Valley Authority (TVA) wants to get a new license to continue operating the plant for another twenty years. The current licenses will not expire until 2020 and 2021. That means if relicensing occurs, these ice-condenser reactors will have operated for 60 years. It has turned out to be a bad design many times more vulnerable to radiation releases and risk than others.

You will not be surprised then to learn that BREDL's Bellefonte Efficiency & Sustainability Team, its subset Mothers Against Tennessee River Radiation, and other Tennessee organizations stepped up to say NO! BAD IDEA! THERE SHOULD BE NO MORE NUCLEAR POWER TO POISON US NOW AND IN THE FUTURE!

TVA submitted their Supplemental Environmental Impact Statement (SEIS) to Nuclear Regulatory Commission (NRC) opening up the path for public comments during a scoping session held April 3 in Soddy-Daisy, Tennessee. The plant lies about 18 miles north of Chattanooga along the Tennessee River. The scoping session was our chance to tell NRC what we think they should look at as they consider whether to grant the relicensing request. Boy, did we give them an earful. We stressed that no license should be given without seeing that lessons from Fukushima are part of considerations and that no environmental impact statement could be completed until NRC resolves what is to be done with radioactive waste. We urged decommissioning as the best solution. Here are some of our arguments many of which apply to all nuclear plants. TVA has six operating reactors with one under construction at Watts Bar.

The two alternatives to relicensing TVA lists in the SEIS are to 1) decommission and build another nuclear plant on another site or 2) decommission and build a gas powered plant on another site. We asked NRC to consider excessive cost, risk, and need to continue or replace Sequoyah power at all given the fact that demand is down and other viable alternatives exist such as energy efficiency, solar and wind.

A nuclear plant uses enormous amounts of water two-thirds of which goes up the cooling towers. What goes back into the river is hot and has radionuclides impacting both aquatic species and drinking water daily. Tritium has been found in the groundwater from Sequoyah. NRC should consider likelihood of numerous shutdowns when the river is too hot to release water (has already happened to Sequoyah). Every shutdown is extremely expensive and shows that nuclear power is not reliable in our climate-constrained world of the future.

Upstream from Sequoyah lay two earthen dams. Should they break, Sequoyah would be seriously damaged. TVA has admitted that their original calculations to protect against flooding were too low. Now that we know more about likely earthquake activity, NRC should include a risk assessment and actions needed for flooding and earthquake mitigation.

Sequoyah nuclear reactors are old and have had several emergency shutdowns (SCRAMS). Last year NRC cited TVA for too many Sequoyah shutdowns in one year. We questioned whether TVA could properly manage an aging facility. TVA has not implemented good fire protection or maintenance of the ice in the ice baskets with its higher risk of hydrogen explosions. They ice-condenser design was designed to allow for a less robust containment building, i.e. on the cheap, thus increasing risk from an accident. Only a few were built and NRC should not allow this one to continue.

TVA has no workable evacuation plan and the evacuation zone is much too small for a population of over half a million. It should be expanded to a 25-50 mile radius. NRC should not grant a license until this is done.

NRC should not allow continued exposure to radiation. The standards used to determine allowable dosages are questionable especially for children and woman. Besides, there is no safe dose and ionizing radiation including tritium is cumulative. NRC should consider the likely significant environmental impacts associated with water quality and exposures to a growing population for an additional twenty years.

Why is insurance not required for TVA despite NEPA requirement? In case of a severe accident, Price-Anderson money will not cover the cost and yet people's homeowner's insurance policies do not cover nuclear accidents.

TVA has signed a treaty with Department of Energy to make tritium until 2035. A commercial nuclear plant should not be making tritium to boost fission in bombs for the military and certainly a poor excuse to extend a license. Neither should TVA agree the Dept. of Energy's request to use experimental and radioactive mixed oxide fuel (MOX) for which Sequoyah was not designed.

When uranium fuel rods have completed their fission life in a reactor, they are moved to a spent fuel pool. They are even more highly radioactive and need 5 years to cool before moving into safer storage casks. TVA is waiting to place rods in casks to store on site as they wait for a waste repository to be established. When moved off site, this radioactive trash becomes taxpayer liability. Meanwhile, the rods are being more and more crowded in the pool, more vulnerable to accidents and subject to severe weather events.

NO!

BAD IDEA!

NO MORE NUCLEAR POWER TO POISON US NOW AND IN THE FUTURE!

Numerous accidents, incidents, SCRAMS, shutdowns, leaks, dishonesty in equipment monitoring, lack of proper reports filed, ignoring safety procedures, poor nuclear employee education, and the installation of non-certified equipment, does not assure the public that TVA can properly run their nuclear plants. Ice-condenser technology is old and more subject to hydrogen explosions and meltdowns than other designs. There can never be enough so-called failsafe measures to avoid human error. We can and should move on to other ways to produce electricity.

We will continue to speak up attempting to pressure NRC to do the job of really scrutinizing the environmental and safety impacts.



BEST member Tim Anderson delivers his comments.

At this writing, we are considering whether or not to legally intervene.

Public comments on the scope of the environmental review may be submitted in writing as follows. Your comments and any personal information you share may be published. **The deadline to submit scoping comments is May 3.**

Those who wish to make comments can send comments to Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB–05–B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

• FAX comments to: RADB at 301–492–3446.

• ONLINE: Federal Rulemaking Web site: Go to **http://www.regulations.gov** and search for Docket ID NRC–2013–0037. That will take you to a list of dockets and a button "Comment Now". Click on that button to lead you the page where you can enter your comments.



Sequoyah Nuclear Plant and the Tennessee River

(Chickamauga Reservoir)

You can also see our remarks on six videos taped by Garry Morgan at Everything Sequoyah. Go to http://arklite.blogspot.com/2013/04/tva-sequoyah-nuclear-plant-nrc.html and data file of Sequoyah information.

Aging is an issue, and the plant is operating with outmoded technology, and with parts that you can't get to because they are buried in concrete. And there are concerns over flooding [because of changes in river operations, mistaken calculations and changing regulations]," said Kurtz. "If this truly is an [environmental impact statement], this has to be taken into consideration," Johnston added."

http://www.timesfreepress.com/news/2013/apr/04/sequoyah-seeks-20-year-nrc-license-extension/?news

Uncontrolled Public Health Experiment In Fracked Communities

By Therese Vick



We hear a great deal about the threats to clean water from hydraulic fracturing. However, there is a growing concern about air emissions around well pads and other infrastructure needed for the process. In February 2013, The Office of the Inspector General (OIG) for the United States Environmental Protection Agency (EPA) released a report titled:" EPA Needs to Improve All Emissions Data for the Oil and Natural Gas Production Sector.[1] The OIG is responsible for seeing that EPA "protect [s] the environment in a more efficient and cost effective way." [2] It is separately funded to maintain its independence.

In the report, the OIG finds that:

- EPA Has Limited Air Emissions Data for Several Key Oil and Gas Production Processes and Sources
- EPA Lacks Data to Develop and Improve Emission Factors Impacting Key Decisions for Many Oil and Gas Processes
- Oil and Gas Production Emissions Data in EPA's NEI (National Emissions Inventory) Are Incomplete
- Limited Data Could Affect Decision-Making, Impacting Human Health and the Environment

"Oil and gas production processes and sources emit large amounts of harmful pollutants that can impact air quality globally, regionally, and locally."

Dr. Theo Colborn, well known for her work on endocrine disrupting chemicals,[3] released a study in 2012 which found that non-methane hydrocarbons (NMHC) are released into the air during the extraction of natural gas. Findings from the exploratory study included this: "It is apparent from what is presented in this paper that the NMHCs need far more attention not only because of their potential immediate and long term chronic health effects, but also for their secondary indirect health and environmental impacts as precursors to ozone."[4] Additionally, the study found the solvent methylene chloride present in 73% of the air samples, although it is not listed as a chemical used during the extraction process.

Of interest to North Carolina, the state Division of Air Quality (DAQ) has adopted a "we got this" attitude; developing a baseline monitoring plan which is woefully inadequate[5], even though they were sent OIGs report.[6] Dr. Colborn's study showed the existence of dozens of chemicals in the air samples taken. The DAQ proposal will only monitor for a small set of compounds pre-drilling.[7] In conversation with Mining and Energy Commissioners, it was generally felt that DAQ was saying "hands off." [8]

There could be hundreds, if not thousands, of new air emission sources in the shale basins if fracking is allowed in North Carolina.

It is increasingly clear that the practice of hydraulic fracturing is an uncontrolled public health experiment visited on the communities who live near well pads, pipelines, compressor stations and other infrastructure. State and federal agencies charged with protecting public health and the environment have not addressed this issue adequately, and it is unclear if they will have the political will and resources to do so.■

[1] Office of the Inspector General. United States Environmental Protection Agency. February 2013. Web. http://www.epa.gov/oig/reports/2013/20130220-13-P-0161.pdf

[2] OIG Website "about". http://www.epa.gov/oig/about.html#Who_What_Why

[3] The Endocrine Disruption Exchange (TEDX), founded by Dr. Theo Colborn' is a non-profit organization dedicated to compiling and disseminating the scientific evidence on the health and environmental problems caused by exposure to endocrine disruptors. Website: http://www.endocrinedisruption.com/home.php

[4] Colborn T, Schultz K, Herrick L, and Kwiatkowski C. 2012 (in press). "An exploratory study of air quality near natural gas operations." *Hum Ecol Risk Assess*. Web. http://www.endocrinedisruption.com/chemicals.air.php

[5] NC Department of Environment and Natural Resources. "Project Plan for Baseline Ambient Air Monitoring near Potential Shale Gas Development Zones in Lee County, NC." 19 February 2013 http://www.ncair.org/news/shale/DAQ_Project_Plan.pdf

[6] Email of 11 March 2013 from DAQ Director Sheila Holman to Therese Vick re: OIG Report

[7] http://www.ncair.org/news/shale/DAQ_Project_Plan.pdf

[8] Remarks in response to public comments from Mining and Energy Commission meeting 5 April 2013.

Victory Over Uranium Mining and Milling in Virginia?

By Anne Cockrell, PRIDE

(Piedmont Residents In Defense of the Environment) Danville, VA

For at least one more year, the citizens of VA and NC have been successful in staving off uranium mining and milling from occurring on Virginia soil. The pro-mining and milling factions have been working ceaselessly, it seems, to overturn Virginia's standing moratorium on uranium mining. Their concerted efforts were stymied during this past January legislative session of the Virginia General Assembly, when a united contingency of many organizations, governmental groups and concerned citizens voiced its strong opposition to mining. At that time, 16,000 people had signed a petition requesting that Virginia maintain its current moratorium on uranium mining. As of today, that number has risen to 18,000. (Please add your name by going to http://keeptheban.org/?page_id=237 to sign the "Keep The Ban" petition.) Because so many voiced a loud, unequivocal stance of "No to uranium mining!," to the in-session legislature, Virginia will get to keep its 30-year moratorium on uranium mining for one more year. THIS IS TRULY A GREAT VICTORY TO BE SAVORED!!! But, sadly, no sooner had VA Senator John Watkins withdrawn his proposed bill to have uranium mining rules written up by the VA legislature (January 31, 2013), did he and VA Delegate Terry Kilgore send a letter to Virginia's Governor, Robert McDonnell, seeking a different approach to the mining issue. In their letter, they asked the governor to use Virginia's Administrative Process Act to have uranium mining rules and regulations written up. At this point in time, the Governor has not declared whether he will use the APA-- which would circumvent the wishes of the people-- by having state agencies write up uranium mining rules and regulations. Clearly, our work to uphold Virginia's current uranium mining moratorium will not be finished until a permanent ban can be achieved. At stake is the future health, safety and well-being of both citizens and the environment.

Holding Up a Mirror



By Dr Michael Noll, W.A.C.E.

(Wiregrass Activists for Clean Energy) Lowndes County, GA

Isaac Asimov once stated that “it is the obvious which is so difficult to see most of the time. People say ‘it's as plain as the nose on your face’. But how much of the nose on your face can you see, unless someone holds a mirror up to you?”

One of the biggest challenges activists face is the ability to find creative ways to hold up mirrors to our society. Even if we are able to find a mirror that suits our purpose, it may still fog up and there are no guarantees that those presented with the possibility for reflection will have the courage to clear the glass and seek the truth. And when some finally see the light they may become paralyzed as if their minds turn into Jell-O, perhaps intimidated by their discovery. How does one break this pattern of blindness and inactivism?

The wisdom of some well-known figures has encouraged me over the years to find answers to challenges we face as activists. I would like to share them in the hopes that others will be similarly inspired, because at the end of the day the simplest ideas are often the best response to our gravest problems.

“If you think you are too small to make a difference, try sleeping with a mosquito.” (Dalai Lama)

It always astonishes me how little confidence people have in their ability to bring about change. I am sure that some use this as an excuse, but many are sincere in their desire to make a difference, they simply haven’t figured out how. Let’s be honest. None of us are born with an activist gene, however just as toddlers learn how to run, activists need to acquire their skills too. This may start with the attempt to break through a barrier of lacking confidence by developing a mantra of “yes, I can”. Taking this hurdle is much easier than it seems and soon the realization kicks in that with every step you take and with every voice you add, you edge closer to your goal.

"First they ignore you, then they laugh at you, then they fight you, and then you win." (Mahatma Gandhi)

When people become active and get organized, they have to realize that they are in it for the long haul. This is not a 100m dash, nor a 5k run, but likely a marathon. While it is true that strength lies in numbers, perseverance is just as important. Even a 500 pound gorilla (e.g. the fracking industry) can be worn down by the tireless efforts of a community (the “mosquitoes”) willing to stop it. However, in order to avoid the fly swatter you must develop a multipronged approach (see *Silver Bullets*, Summer 2012, The League Line). Once the fighting starts, you are no longer being ignored and they have stopped laughing, and you have only one step left.

"The greatest enemy of knowledge is not ignorance, it is the *illusion* of knowledge." (Stephen Hawking)

Tireless efforts of education are perhaps the most important component for a successful campaign. It is not just that people may choose to be blissfully ignorant, the information they receive from major news networks can be alarmingly inaccurate if not completely false. In early February, for example, Fox News claimed that “solar won’t work in America because it is not as sunny as Germany.” While such nonsense may serve as comic relief for those who know better, too many will take such gibberish at face value.

In the month of February the news also surfaced that conservative billionaires like the Koch brothers doled out hundreds of millions of dollars over the years to support a climate change denial industry. This theme was also picked up in a recent documentary by Craig Rosebraugh (“Greedy Lying Bastards”) in which he skillfully exposed the reasons for stalled efforts to fight global warming. The lessons from this film (and the title sums it up!) can easily be applied to issues like fracking, biomass and nuclear power. While there can be no doubt that we have our work cut out for us, I know we can make it.

“Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience, and the passion to reach for the stars to change the world.” (Harriet Tubman)



Community Organic Gardens

Provide Food and Fun During Tough Times

Many of us know the joy of growing fruits and vegetables for ourselves, supplementing and enhancing supermarket purchases. Yet for too many American families, access to healthy food is difficult. The United States Department of Agriculture has identified areas in the United States as "food deserts"; defined as having no access to grocery stores, produce stands or farmers markets within 1 mile of urban areas or 10 miles of rural areas. These areas are also heavy on convenience stores.[1] In addition to exacerbating hunger and fueling higher food costs, food deserts also contribute to obesity. In North Carolina there are 171 food deserts affecting 410,000 residents. [2]

One way communities have been addressing this problem is through collective gardening. The American Community Gardening Association estimates that there are almost 18, 000 community gardens in the United States and Canada.[3] Organic community gardens are a safer and healthier choice than traditional gardens that rely heavily on pesticides. Starting a community organic garden relies on the same organizing strategies we use in our other work such as:[4]

* Identifying support in the community and engaging others on the idea.
* Involving the people who are to benefit from the garden in all phases of the planning process.
* Organizing a meeting of interested people.
* Locating potential financial or in-kind support for the project.
* Finding a safe site, with good sun and adequate drainage, which is not been contaminated by pollutants.
* Developing a workable plan and identifying those who can be resources in garden planning such as garden clubs, local organic gardeners, or Agricultural Extension Agencies.

Gardening is not only good for our physical health; it provides a source of personal and community pride. The connection to the land and growing things increases awareness of the environment around us as well as a sense of place. Community gardens play an important role in sustainable economic development by providing food and facilitating empowerment. ■

Contact BREDL staff to schedule an environmental presentation, including tips on sustainable economic development projects like this for your community.

1 "USDA Defines Food Deserts". *Nutrition Digest.* Volume 36. Issue 3. Web. http://americannutritionassociation.org/newsletter/usda-defines-food-deserts

2 Chuang, Kevin. Food Deserts: What they are, what they do, and what is being done about them."UNC School of Global Public Health." UNC Gillings School of Global Public Health. Spring 2012. http://gillingsproject.wordpress.com/food-deserts-what-they-are-what-they-do-and-what-is-being-done-about-them/

3 American Community Gardening Association. http://www.communitygarden.org/learn/faq.php

4 "How to start a community garden." *Organic Gardening*. Web. http://www.organicgardening.com/learn-and-grow/community-gardens?page=0,1

By Therese Vick





The Garden of Concord is an organic community garden located at 4462 E. Greensboro-Chapel Hill Road, Graham, North Carolina. Everyone is welcome, no experience is necessary, and all tools, seeds, plants, and instructions are provided. An annual membership of $25 and one hour of work per week allows each member to share in the day's harvest. Work days are Tuesdays and Thursday afternoons and Saturday mornings. Visitors are welcome during any work times, and tours are Saturday mornings. It's a family garden with activities for children. Come GROW with us!

The Garden of Concord is an extension ministry of Concord UNC, is dedicated to feeding the hungry in our community through sharing our harvests. We celebrate the connection of church and community as we work, learn and care for God's creation together while experiencing Christian fellowship, love, joy and unity. Garden coordinator

Thanks to Tina Harris and Donna Poe of The Garden of Concord, who may be reached at (336)512-7434.■

Affiliate Organizations

Come to the Table: http://www.cometothetablenc.org

PING (Piedmont Interfaith Network of Gardens): http://www.cometothetablenc.org/ping.html

American Community Garden Association: http://communitygarden.org

Local Harvest: http://www.localharvest.org

Chatham Marketplace Coop member: http://chathammarketplace.coop/

BREDL is a regional, community-based non-profit environmental organization founded in 1984. BREDL encourages government agencies and citizens to take responsibility for conserving and protecting our natural resources. BREDL advocates grassroots involvement to empower whole communities in environmental issues.

Protecting children's health from environmental poisons, empowering whole communities to engage in crucial decision making, and changing the balance of power to prevent injustice are key components of our work.

It's easier than ever to join, renew and donate online. Check out our secure online donation forms at www.bredl.org.

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