

## THE LEAGUE OF WOMEN VOTERS® OF THE FAIRFAX AREA

# Fairfax VOTER

February 2013 Volume 65, Issue 6

## **Uranium Mining in Virginia**

Chances are you have heard about a proposal to lift the ban on mining uranium in Virginia. You might also know that Virginia, namely Pittsylvania County, is the site of what could be the largest undeveloped uranium deposit in the U.S. But we very much doubt you have a handle on the pros and cons of such a decision, and even more, staggering, what would be involved in lifting the ban. Reading this month's study will go a long way toward your having the same information about this that our legislators will have as they ponder this decision in the current General Assembly. Pittsylvania County may seem a long way away, but the economic impact at the very least could play a role in our quality of life. Give yourself enough time to digest this material and come prepared to have your say.

#### Calendar

#### February 2013

1	Approximate GA Crossover date
1	LWVNCA Board meeting
2	Briefing and At-Large meeting
4	VOTER deadline
5	Democracy in Action award event -
	Richmond
6	League Day/WRT Richmond
11-14	Units: Uranium Mining in Virginia
13	WRT Richmond (last one this session)
	8
13	WRT Richmond (last one this session)
13	WRT Richmond (last one this session) League founded 1920
13 14	WRT Richmond (last one this session) League founded 1920 (93 <sup>rd</sup> Anniversary)
13 14 18	WRT Richmond (last one this session) League founded 1920 (93 <sup>rd</sup> Anniversary) FCPS holiday
13 14 18 18	WRT Richmond (last one this session) League founded 1920 (93 <sup>rd</sup> Anniversary) FCPS holiday Presidents' Day

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# Presidents' Message



The New Year has begun with much activity by your League volunteers. Facts for Voters has again been completed in record time, thanks to Maggie Luca and her group of fact checkers and proof readers. Helen has testified at the Northern Virginia State Delegation public hearing, stressing the importance of maintaining good election policies. We hope you enjoyed our General Meeting format this year. Let us know what you thought of doing program planning as a large group. Would this work for local planning as well? We hope that you will consider attending the Women's Roundtable in Richmond every Wednesday while the House and Senate are in session. We especially hope to see many LWVFA members at the February 6 LWV-VA League Legislative Day.

We still are concerned that we have a small group of long time volunteers and we need some "new blood" if we are to continue to be the vital, engaged, and energetic organization that we are. Look at the nominating committee report and let us know of a position that you can do, be it large or small. Even though you have heard it often, it is still true – many hands make large tasks easier.

We hope that you will be able to attend (weather permitting!) our February unit meetings on uranium mining. We thought that background information on this timely topic would help us understand this dilemma – "Should mining be permitted or not?" Thanks go to Rona Ackerman for all the work that she has done on this report.

Save the Date: Our Annual Meeting will be April 27. We are still working on the details, but our desire is to give you an interesting, productive meeting, a delicious meal, and good conversion with your fellow League members. Mark your calendars now for Saturday, April 27.

Julie and Helen

#### **News & Notes from LWVNCA**

By Olga Hernandez, LWVNCA Secretary

LWVNCA will be holding its Annual Convention on May 4, 2013. A new idea for LWVNCA fundraising will be put in practice at that gathering. Fundraising Director Andrea Gruhl will be assembling items from each member league for a silent auction. Each will be asked to donate at least one item or service of value that attendees can bid on. More information on this effort will be forthcoming.

The LWVNCA is encouraging the local leagues to write letters to the editor, the LWVUS and legislators using the LWVUS Gun Control position asking all to prioritize and support reasonable gun policy for public safety.

The LWVUS has informed LWVNCA that the 2016 Convention will again return to DC. The event will be held at the Washington Marriott Wardman Park hotel located at 2660 Woodley Road NW. This hotel has a more accommodating floor plan and is closer to a Metro station.

## Domestic Violence Hotline (703) 360-7273

#### LWVFA Fairfax VOTER 2012 - 2013

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Please e-mail address corrections to the office or call 703-658-9150

Editor:

# Members Weigh in on Proposed 2014 Fairfax County Budget

By Judith Helein and Karole McKalip, Co-Program Chairs

Analysis and discussions about the fiscal year 2014 Fairfax County Budget are currently underway. An informed citizenry is more important than ever, especially given our national budgetary conversations. The December issue of the *VOTER* asked League members to learn about the county's fiscal issues and thus be prepared to provide input to our local leaders. Members were asked to see where the money comes from and where should it be going. Over 100 LWVFA members attended unit meetings in December and participated in lively discussions regarding the proposed Fairfax County Budget.

There was wide divergence as to what information in the county profile might be relevant or have an impact on budget decisions and why. Most units found the demographics of the county to be of interest. Several units remarked on the number of school age children in the county. The income of county residents also proved to be helpful in examining revenue enhancements. The "fiscal cliff" and its impact on Fairfax County came up in several units because many residents of the county work for the federal government or are contractors who depend on the business of the county.

When asked about ranking the priorities of the Board of Supervisors, many members admitted that this was a difficult, though thoughtful, exercise. Some said that trying to determine what the overall community should value forced them to look at their own individual value systems. Everyone has different life experiences that might dominate their choices. Another reason for the difficulty was that the issues were not defined or program specific.

That being said, the results of the prioritization exercise were as follows in priority order:

- ☐ Quality Education System
- ☐ Living, Caring and Affordable Communities
- ☐ Clean Sustainable Environment and Transportation
- ☐ Safe Streets and Neighborhoods
- ☐ Vibrant Economy
- ☐ Recreational and Cultural Opportunities
- □ Affordable Taxes

It is interesting to note that the first and the last two priorities mirrored the priorities of the Fairfax County Board of Supervisors.

Some members felt that with a vibrant economy, recreational and cultural opportunities and affordable taxes would follow. Others thought that a vibrant economy would result if such opportunities and taxes already existed.

In responding to how any financial shortfall might be addressed, unit members were not averse to the raising of taxes and felt that the Dillon rule should be abolished. Some ideas regarding the raising of revenues included meals and hotel taxes as well as a gas surtax. Since many felt that the county's real estate taxes were low compared with communities in other states where they had lived, an increase in property taxes would not be onerous. Service cuts did not seem to be a high priority. Some mentioned that there might be a merging of services in areas such as payroll, procurement, school/public libraries; an examination of the pension system and a reduction in the use of contractors also should be considered.

Regarding the issues of transportation, specifically, road construction, maintenance and repair, members expressed a need for more information about who should own or pay for roads. Initially, if the county were to take over the ownership and repair of roads, there would be tremendous capital and personnel expenses. Where would the money come from?

When asked about improvements to the budget process and how to make it more understandable and user friendly, participants expressed the need for much more publicity for the early budget briefings and suggested that materials need to be written at the high school level so that ordinary citizens could understand them. The school budget process was of great interest to all. More transparency was needed especially since more than half of the county budget goes to the schools.

Fairfax County Office of Management and Budget will send a representative to present the proposed county budget to LWVFA at the Packard Center on March 6 at 10:30 a.m. All are invited.

## Fairfax County's Bi-Partisan Election Process Improvement Commission Begins Meeting

By Olga Hernandez LWVFA Voter Service Coordinator

Fairfax County Board of Supervisor (BOS) voted to create the *Bi-Partisan Election Process Improvement Commission*, as proposed by Board Chairman Sharon Bulova, at its November 20 meeting. The commission is to examine what went well or not so well in the aftermath of the presidential election and how improvements can be made in Fairfax County. Although in Virginia elections are a state and local electoral board's responsibility, the BOS helps provide the funding for elections.

The commission is thus tasked to:

- ➤ Review of operations during the November 2012 General Election
- ➤ Identify improvements and efficiencies to ensure access and convenience for voters in future elections
- Consider optimal locations for precincts, adequacy of parking, and sufficient space to carry out election operations
- Analyze precinct size and determine if division is
- Analyze a variety of issues associated with equipment, voting machine to voter ratios, electronic poll books, back-up equipment
- Staffing at precincts, training, how workers are identified, instructional materials, reporting forms
- Evaluating the process by which election officials are approved and dispatched to the polls
- Review the County's Absentee Voting policy, including both the by mail and in-person voting processes.

The appointees met on January 3 for the first time. The LWVFA Board selected Olga Hernandez, to be appointed as the League's representative on this group. The commission is chaired by former Fairfax County Board Chairman Kate Hanley and former Dranesville Supervisor Stuart Mendelsohn. Each supervisor appointed a representative with the current chairman appointing two. In addition, civic groups such as the League, the Federation of Citizens' Association, Hispanic, African American, Asian/Pacific Islander and disability communities have been appointed. Also represented on the 25-member committee are the Bar Association, Chamber of Commerce, both major political parties and Fairfax County Schools facilities staff.

The meetings, at the Government Center's room 232, are open to the public and subject to FOIA laws. The chairs listened to the attendees' introductory comments and will organize the group by subject based on the statements made at the first meeting. We are scheduled to convene January 17, 24, and 31. Other meetings may follow. The recommendations of the commission will be presented to the Board of Supervisors in March assuming the work is completed.

The commission is very aware that some changes would require legislation at the General Assembly, or pre-clearance by the U.S. Justice Department. The group is composed of many citizens with broad experience in many facets of election administration.

The information for this article was taken from the BOS Board minutes of November 20 and the January 2013 Bulova Byline along with my attendance at the meeting.

## LWVUS Focuses on Voter Protection for 2013

By Tim O'Brien, LWV-US, Specialist for the Public Advocacy for Voter Protection project

As we move into the 2013 and new state legislative sessions I want to share with you a *Huffington Post blog* by LWVUS President Elisabeth MacNamara that discusses four "provoter" reform issues the League will be focusing on next year. In an effort to change the way we discuss voting rights it is important to offer solutions as well as fight back voter suppression tactics. To that end, the League has identified four proactive priorities for our elections administration

reform work next year:

- 1. Secure Online Voter Registration
- 2. Permanent and Portable Statewide Voter Registration
- 3. Expanded Early Voting
- 4. Improved Polling Place Management

In states where these issues can be incorporated into a larger pro-voter reform strategy we will do our best to support your efforts with additional details and tools to help you push these issues to the forefront in the coming year.

In case you have problems accessing the blog post above here is the direct link: <a href="http://www.huffingtonpost.com/elisabeth-macnamara/path-free-fair-accessible\_b\_2278842">http://www.huffingtonpost.com/elisabeth-macnamara/path-free-fair-accessible\_b\_2278842</a>. html

# **Uranium Mining in Virginia: Issues for the 2013 General Assembly**

By Rona Ackerman

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Virginia's State Assembly's 10<sup>th</sup> District Senator, John Watkins, issued a press release<sup>1</sup> on Dec 4, 2012, stating that he will be the patron of a bill to lift the moratorium and that it will adhere to the principles outlined by the UWG. He notes that passage of this legislation would be the first step in a long, five-to-eight-year process and will not authorize any mining activity. So, it is expected that the GA will address this issue in the 2013 session. What does this mean for Virginians? To understand the issue and its ramifications, this month's study presents important information to help with understanding the situation.

#### **Background:**

In the early 1980s, a large uranium deposit was discovered at Coles Hill in Pittsylvania County, VA. It may be the largest undeveloped uranium deposit in the US.



In 1982, the Virginia General Assembly (GA) passed §45.1-283 requiring that "permit applications for uranium mining shall not be accepted by any agency of the Commonwealth prior to July 1, 1984, and until a

program for permitting uranium mining is established by statute." This law has come to be known as the moratorium, or ban, on uranium mining. The issue waned when the 1985 GA did not write regulations and a major investor pulled out. In 2007, two families living at Coles Hill formed Virginia Uranium, Inc., and the Department of Mines, Minerals and Energy issued a permit to conduct exploratory drilling. In 2008, the Coal and Energy Commission created a Uranium Mining Subcommittee and later authorized two independent studies: 1) a scientific and technical study by the National Academy of Sciences (completed Dec. 2011), and 2) a social, economic and environmental impact study by Chmura Economics and Analytics (completed Nov. 2011).

In his Jan.19, 2012, Directive<sup>4</sup>, Governor Robert McDonnell established the Uranium Working Group (UWG) to provide a scientific policy analysis to help the legislature assess whether the moratorium on uranium mining should be lifted, and if so, how best to do so. The Directive set out 18 tasks for the UWG, including the creation of a draft statutory and conceptual regulatory framework.

The UWG's work was intended to permit the GA to make an informed decision, not to develop regulations to be adopted. In Nov. 2012, UWG provided its findings to the governor who shared them with the GA. If the GA lifts the moratorium by directing agencies to create regulations, the rules of the Administrative Process Act, including its public review requirements, would be followed.

## Nontechnical Summary (Abridged) on Uranium Mining in Virginia<sup>5</sup>

What is Uranium? Uranium is a radioactive element found at low concentrations in virtually all rock, soil, and seawater. Significant concentrations can occur in phosphate rock deposits and minerals. The main commercial use is to make fuel for nuclear power reactors.

**Demand for Uranium.** In Nov. 2011, the U.S. had 104 nuclear reactors requiring 18,376 metric tonnes of concentrated uranium. By 2035, reactors in the US are expected to require between 10,886 – 22,680 metric *tonnes* per year. (A metric tonne equals nearly 2,205 lbs.) In 2010, the U.S. imported 92 percent of the uranium it needed.

Understanding future uranium demand is difficult because it is hard to predict when aging reactors will be retired and when new reactors will be constructed. Also, unanticipated events, such as the accidents at Chernobyl or Fukushima, could affect how governments plan for and utilize nuclear power. This impacts demand for nuclear energy and, therefore, uranium.

Where Does Uranium Come From? Uranium comes from mining uranium ore deposits, from existing stockpiles held by government and commercial entities, and from recycling uranium from sources such as nuclear warheads. In 2009, world uranium mining fulfilled 74 percent of world reactor requirements, and the remaining 26 percent came from secondary sources such as stockpiles and decommissioned warheads. Uranium was produced in 20 countries in 2010,

but eight countries accounted for more than 92 percent of the world's production. The U.S. produced 3 percent. (See Figue 1.)

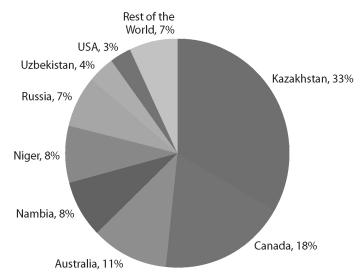


Figure 1 - World uranium production in 2010. Source:

WNA (2011) [Ed note: Nambia should be Namibia.]

In order for a uranium occurrence to be considered commercially exploitable, it must be of sufficient size, appropriate grade, and be amenable to mining and processing. In Virginia so far, only Coles Hill is potentially economically viable.

## The Lifecycle of a Uranium Mine and Processing Facility

What is Yellowcake? The concentrated form of uranium oxide made by processing uranium ore. Yellowcake is refined, enriched, and undergoes chemical conversion in specialized uranium enrichment facilities. The process of taking uranium ore out of the ground and transforming it into yellowcake includes several components:

*Mining:* Three types of mining could be used: open pit, underground, and in situ leaching/in situ recovery (ISL/ISR—dissolving the minerals in liquid underground, pumping it to the surface, and taking uranium out of the solution). The choice depends on factors including quality and quantity of ore, shape and depth of the deposit, the type of rock, and environmental conditions. In Virginia, it is very unlikely that ISL/ISR can be used. Accordingly, the report focuses on open pit and underground mining.

**Processing:** The ore must be processed to remove impurities and produce yellowcake. This involves physical processes

(such as crushing and/or grinding) and chemical processes (i.e., dissolving uranium from ore using acids or bases, called leaching). Separation, drying and packaging are also part of the process. The choice of processing depends on the nature of the uranium ore and its host rock as well as environmental, safety and economic factors. During uranium ore processing, several waste products are created, including tailings and waste water.

What Are Tailings? The solid waste remaining after recovery of uranium from ore are the tailings. Tailings consist of everything that was in the ore except the extracted uranium. Tailings contain radioactive materials remaining from the radioactive decay of uranium, such as thorium and radium. Tailings are typically neutralized and compacted to reduce water content, and then stored in tailings impoundment facilities either above or below the local ground surface; modern best practice is for storage below the ground surface

**Reclamation:** Reclamation and cleanup to return the site to as close as possible to its pre-mining state can occur either while the site is being mined or after mining and processing operations are complete. Reclamation includes decontamination and cleanup, such as demolition of buildings, and on-site or off-site waste disposal. After the site is reclaimed, a large volume of low activity tailings usually remains. In that case, reclamation may include long-term operation and maintenance of water treatment systems or other clean-up technologies.

Long-term stewardship: After reclamation, ownership of the parts of the site containing tailings passes to either the federal or state government, which is charged with maintaining the site in perpetuity. Ownership of a mine site on private land typically is retained by the property owner. If wastes such as tailings remain at a site, ongoing monitoring, operations and maintenance will be required, as well as signage and barriers.

## **Potential Health Effects of Uranium Mining and Processing**

Uranium mining and processing carry a range of potential health risks to the people who work in or live nearby. Although some would apply to any hard rock mining or industrial activity, others are linked to the potential for exposure to radioactive materials. These mostly affect workers in the uranium facilities, but some can also apply to the general population.

The Health Risks of Radiation Exposure: People are

exposed to ionizing radiation every day. About 50 percent comes from natural sources, including radon from rocks and cosmic radiation, and 50 percent from man-made sources, such as CT scans, fluoroscopy and nuclear medicine, such as x-rays.

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Working in, and to a lesser extent living near, a uranium facility could increase a person's exposure to ionizing radiation. Ionizing radiation ("radiation") has enough energy to change the structure of molecules, including DNA. Some molecular changes may be difficult for the body to mend correctly. If a cell is not effectively repaired, this can lead to uncontrolled cell growth and potentially to cancer. Exposure to a very small amount of radiation could raise the risk of cancer—but only by a very small amount; increased exposure leads to increased risk. Only a small fraction of the molecular changes to DNA as a result of exposure to radiation would be expected to result in cancer or other health effects. Uranium and the radionuclides produced in the uranium decay chain (thorium, radium, radon, and polonium) are sources of radiation.

The Risk to the General Public: People living near uranium facilities could be exposed to airborne radionuclides (e.g., radon, radioactive dust). Exposure could also occur from the release of contaminated water or by leaching of radioactive materials into surface or groundwater, where they could eventually end up in drinking water supplies or could accumulate in the food chain, eventually ending up in the meat, fish or milk produced in the area. Some of the worker and public health risks could be mitigated or better controlled if uranium mining, processing and reclamation are all conducted according to best practices. A robust regulatory framework could help drive such a culture. Conversely, these potential health risks can be exacerbated by poor planning and design, inadequate regulation and failure to adopt protective mining and processing methods. A mine or processing facility could also be subject to uncontrolled releases of radioactive materials as a result of human error or an extreme event such as a flood, fire or earthquake.

The Risk to Workers: Worker radiation exposures most often occur from inhaling or ingesting radioactive materials, or through external radiation exposure. Generally, the highest potential risk for workers is lung cancer associated with inhaling radon gas. In 1987, the National Institute for Occupational Safety and Health recognized that current standards for radon exposure in the U.S. do not provide adequate protection and recommended that the limit be reduced substantially. To date, this recommendation has not been incorporated into an enforceable standard. Workers are also at risk from exposure to radionuclides

Non-Radionuclide Health Effects to Workers: Silica dust can cause the chronic lung disease silicosis as well as other problems, while diesel exhaust fumes have been linked to adverse respiratory health effects. Of particular importance is evidence they increase the risk of lung cancer, the main risk also associated with radon exposure. Thus, workers can be co-exposed to three separate lung carcinogens: radon, silica and diesel exhaust fumes. All types of mining pose a risk of traumatic injury from accidents such as rock falls, fire, explosion, fall from height, entrapment and electrocution. In addition, mining has the highest prevalence of hazardous noise exposure. Processing workers are also at risk from hazardous chemicals, such as solvents, cleaning materials and strong acids.

## **Potential Environmental Effects of Uranium Mining and Processing**

Environmental impacts include elevated concentrations of trace metals, arsenic and uranium in water; localized reduction of groundwater levels; and exposures of populations of aquatic and terrestrial biota to elevated levels of radionuclides and other hazardous substances. Such impacts have mostly been observed at mining facilities that operated at standards of practice that are generally not acceptable today. Designing, constructing and operating uranium mining, processing and reclamation activities according to the modern international best practices presented in this report have the potential to substantially reduce near- to moderate-term environmental effects.

Tailings present a significant potential source of radioactive contamination for thousands of years, and therefore must be controlled and stored carefully. Over the past few decades, improvements have been made to tailings management systems to isolate tailings from the environment, and belowgrade disposal practices have been developed specifically to address concerns regarding tailings dam failures. Modern tailings management sites are designed so that the tailings remain segregated from the water cycle to control mobility of metals and radioactive contaminants for at least 200 years, and possibly up to 1,000 years. However, monitoring data are insufficient to assess the long-term effectiveness of tailings management facilities designed and constructed according to modern best practices. Furthermore, Virginia is subject to relatively frequent storms. It is questionable whether currently-engineered tailings repositories could be expected to prevent erosion and surface and groundwater contamination for as long as 1,000 years. Natural events such as hurricanes, earthquakes, intense rainfall or drought could lead to the release of contaminants if facilities are not designed and constructed to withstand such events, or if they fail to perform as designed. The failure of a tailings facility could lead to significant human health and environmental effects. Thorough site characterization, supplemented by air quality and hydrological modeling, would be essential for estimating any potential environmental impacts and for designing facilities to mitigate potential impacts.

#### **Regulation and Oversight**

Multiple laws, regulations, and policies apply to uranium mining, processing, reclamation and long-term stewardship activities in the U.S. Understanding the complex network of laws and regulations, which are the responsibility of numerous federal and state agencies, can be difficult.

Making Regulations Proactive. The laws and regulations relevant to uranium mining and processing were enacted over the past 70 years, and many were created following a crisis or after recognition that there were gaps in laws or regulations. Standards contained in regulatory programs represent only a starting point for establishing a protective and proactive program for defending worker and public health, environmental resources and the ecosystem. A culture is required in which worker and public health, environmental resources and ecological resources are highly valued, continuously assessed and actively protected.

Coordinating Regulations Across Multiple Agencies and Levels of Government. Laws, regulations, and policies governing uranium mining and processing are spread across numerous federal and state agencies. Activities on nonfederally owned land are not regulated by federal agencies—state laws and regulations have jurisdiction. For any specific facility, a mix of federal and state worker protection laws, as well as federal and state environmental laws might apply.

Limited Experience in the U.S. and Virginia. The federal government has only limited experience regulating conventional uranium mining, processing and reclamation over the past two decades, with little new open pit and underground uranium mining activity in the U.S. since the late 1980s. So, federal laws and regulation have remained in place, with very few changes, for the past 25 years. Both the Environmental Protection Agency and the Nuclear Regulatory Commission have recently revised, or are in the process of revising, some of these regulations. The federal government has considerable experience attempting to remediate contamination due to past, inappropriate practices. Most uranium mining and processing has taken place in parts of the U.S. that have a negative water balance

(dry climates with low rainfall), and consequently federal agencies have little experience developing and applying laws and regulations in locations with abundant rainfall and groundwater, and a positive water balance (wet climates with medium to high rainfall), such as Virginia. In Virginia, there are substantial gaps in legal and regulatory coverage for activities involved in uranium mining, processing, reclamation and long-term stewardship. Some of these gaps have resulted from the moratorium on uranium mining that Virginia has in place; others are gaps in current laws or regulations or in the way that they have been applied.

Public Participation in the Regulation of Uranium Mining, Processing, and Reclamation. Under the current regulatory structure, opportunities for meaningful public involvement are fragmented and limited. Key points for public participation include the promulgation of regulations of general applicability, the licensing of particular facilities and the development of post-closure plans for facility reclamation and long-term stewardship. To participate in the regulatory process, members of the public need to be aware of -- and be able to respond to -- actions such as rule-making by a range of different state and federal agencies.

#### **Best Practices**

There are internationally accepted best practices, founded on principles of openness, transparency and public involvement in oversight and decision-making that could provide a starting point for Virginia. For example, guidelines produced by the World Nuclear Association, International Atomic Energy Agency and International Radiation Protection Association could provide a basis from which specific requirements could be developed. Laws and regulations from other states (e.g., Colorado) and other countries (e.g., Canada) provide examples of how certain of these best practices have been incorporated into uranium mining, processing, reclamation and long-term stewardship programs. Three overarching best practice concepts are:

- Plan at the outset of the project for the complete life cycle of mining, processing and reclamation, with regular re-evaluations. Good operating practice is to carry out site and waste remediation on a continual basis during operation of the mine.
- Engage and retain qualified experts. Ensure integrated and cross-disciplinary collaboration encompassing all areas related to mining and processing, including legal, environmental, health, safety and engineering considerations.
- Provide meaningful public involvement in all phases of uranium mining, processing, reclamation and long-term stewardship.

#### **Specific Best Practices**

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*Health Impacts.* Best practices for safeguarding worker health include the use of personal meters to monitor workers' exposure to radiation.

**Environmental Impacts.** A well-designed and executed monitoring plan is essential to limiting environmental impacts, determining and demonstrating compliance with regulations, and triggering corrective actions if needed. Make it available to the public. Regularly update it. Undertake an assessment of the appropriate mitigation and remediation options.

**Regulation.** Regulatory programs are inherently reactive. As a result, the standards contained therein represent a starting point for establishing a protective and proactive program for protecting worker and public health, environmental resources and ecosystems.

#### Conclusion.

If the Commonwealth of Virginia removes the moratorium on uranium mining, there are steep hurdles to be surmounted before mining and processing could be established in a way that is appropriately protective of the health and safety of workers, the public and the environment. There is only limited experience with modern underground and open pit uranium mining and processing in the U.S. and no such experience in Virginia. At the same time, there exist internationally accepted best practices that could provide a starting point for the Commonwealth if it decides to lift its moratorium. After extensive scientific and technical briefings, substantial public input, the review of numerous documents and extensive deliberations, the committee is convinced that the adoption and rigorous implementation of such practices would be necessary if uranium mining, processing and reclamation were to be undertaken.

#### Two Views on Modern Best Practices in Canada

<u>View 1:</u> On Nov. 11, 2012, in an op/ed piece in the Richmond *Times-Dispatch*, Kevin Scissons, former director of the Uranium Mines and Mills Division of the Canadian Nuclear Safety Commission, wrote "Today, in Canada and around the world, the modern uranium mining industry is very different than it was in the 1960s... By putting mill tailings in below ground impoundments, the operation keeps the tailings isolated from surface runoff and flooding,

preventing tailings from seeping into surface waters. The multi-layered containment system and seepage detection systems have also successfully prevented tailings from seeping into the groundwater... The experience of Rabbit Lake [Saskatchewan] and several other Canadian mining operations, such as those in Elliot Lake, Ontario, show all of us that modern uranium mining can safely take place in regions with similar rainfall, flooding and other hydrological conditions to Virginia...today's uranium mines boast the best environmental performance of any form of mining in Canada, with a100 percent compliance record with our country's strict air and water quality standards...Our studies have shown that over the past 30 years, modern uranium mines and mills in Canada have had no adverse impacts on the health of local populations. Our robust air monitoring programs show that there are no harmful off-site releases of radiation. We have recorded no increased cancer rates or any other health problems in our uranium mining communities."

**View 2:** The Southern Environmental Law Center (SELC) issued a report<sup>6</sup> that compared the Coles Hill site with Canadian operations. It stated that Coles Hill would produce significantly more waste because the average concentration of uranium in the ore body in northern Saskatchewan is 254 times higher than at Coles Hill, leading to a more challenging situation for managing the waste. Also, the proximity of uranium in Virginia to major population centers stands in stark contrast to the isolation of the northern Saskatchewan mines where tailings spills have occurred. SELC states this is significant because spills impact a watershed that provides drinking water for more than 1 million people in Virginia Beach, Chesapeake, Norfolk and surrounding communities. Finally, SELC claims that Canada mines have also faced significant environmental problems. In 1989, a leak of contaminated waste water at a Rabbit Lake mine resulted in the release of approximately 528,300 gallons and in 1993, 500,000 gallons of waste water was released from tailings ponds at the Stanleigh mine at Elliot Lake. In 2006, massive flooding overwhelmed the Cigar Lake mine as it was being developed, before production could begin. In addition to these major disasters, dozens of smaller spills have been routinely reported.

## **Executive Summary (Abridged) From the Chmura Economics & Analytics Report**<sup>7</sup>

In the opinion of Chmura, the mining and milling operations would bring substantial and much needed economic benefits to Pittsylvania County, the immediately surrounding areas and the state. During its projected 35 years of operations, the

Coles Hill site is expected to support more than 1,000 jobs annually and have an annual net positive economic impact of approximately \$135 million. [These jobs would be created through economic activity generated directly or indirectly by the project, and induced activity generated by increased household income and spending.] This net benefit comes after subtracting for a broad array of potential socioeconomic costs (such as public health and the environment) and negative "stigma" effects on some sectors (such as tourism and agriculture), which under specific circumstances, Chmura judges most likely to be minimal. Over the life of the operation, the Coles Hill site could generate almost \$5.0 billion in net accumulated economic revenue for Virginia firms. These impressive figures, however, are predicated on the assumption that the Coles Hill site will be continuously operated and ultimately decommissioned within established federal guidelines, which, by law, reduce environmental and public health risks to the surrounding communities to near negligible levels.

Chmura defined and analyzed four scenarios that assume various levels of environmental contamination. Scenario 2 is the "baseline" scenario and the main focus of this report.

<u>Scenario 1:</u> Negligible environmental impact. The qualities of air, water, noise and soil are not materially altered from today's existing conditions.

Scenario 2: (BASELINE) Moderate environmental impact in terms of the qualities of air, water, noise and soil—all contamination remains within limits set by current federal standards.

Scenario 3: Significant environmental impact in terms of the qualities of air, noise or soil (but not water). At least in one of these three areas, (air, soil, or noise but not water) contamination exceeds the limits set by current federal standards.

Scenario 4: Severe environmental impact in terms of the qualities of air, water, noise and soil. Contamination of both water and at least one other area (air, soil or noise) exceeds the limits set by current federal standards.

Chmura makes no determination as to the likelihood for each of these scenarios, save that the baseline scenario is more likely to occur than the other scenarios. Chmura assumes a \$60 price for uranium (yellowcake) in the baseline scenario.

Under the first two scenarios, the net economic impact for Pittsylvania County as well as for Virginia is clearly substantial and positive. Under scenario 3, the Coles Hill operation would still provide a positive net economic impact over the long-term so long as the mine and mill operated for roughly 10 years. Under scenario 4, the Coles Hill site unambiguously has a negative net economic impact

no matter how long the site operates. A key finding, however, is that the most significant driver of the socioeconomic costs is not the reclamation and remediation pricetag to cleanup the environment but rather the potential negative stigma effects impacting agriculture, tourism and possibly other industries.

Key findings of Chmura's analysis of the **baseline** scenario:

- 1. The Chatham Labor Shed—Pittsylvania County and a few adjacent localities—has lower income and education levels and higher unemployment and poverty rates than Virginia as a whole. The area badly needs investment and economic development opportunities.
- **2.** Coles Hill will generate jobs and a net economic benefit during all three phases—construction, operation, and decommissioning and reclamation.
- **3.** During the construction phase, the investments in Coles Hill would support 323 jobs annually (direct, indirect and induced) in Virginia. Roughly 75 percent of these jobs would likely be filled by residents of the Chatham Labor Shed. The roughly three-year construction phase would have a net economic impact of over \$35 million per year and would generate roughly \$2.5 million per year in state and local taxes.
- **4.** During the operational phase, Coles Hill will support 1,052 jobs (direct, indirect and induced) in Virginia, and about half of these jobs are likely to be filled by the residents of the Chatham Labor Shed. The projected 35-year operational phase will generate \$135 million per year of net economic benefits to Virginia and produce approximately \$3.1 million per year in state and local taxes. Remediation spending will add a total of \$25 million in net economic impact and, assuming this money is largely spent in the final 20 years of the mine, it will generate an additional 13 jobs per year in Virginia over this period.
- **5.** This impressive positive economic impact is net of anticipated socioeconomic costs realized due to possible negative stigma effects, added costs of regulation, added use of public services, emergency planning and risks to public health and the environment.
- **6.** Assuming the Commonwealth of Virginia becomes an agreement state for the purposes of regulating the mill tailings portion of the Coles Hill operation, Virginia will need to spend an additional \$2.5 million per year to monitor the industry.
- 7. Any negative stigma effects on real estate are likely to be localized, short-lived and minimal. Approximately 175 residences located within a 2-mile radius are likely to see a 5 percent impairment of their real estate values.
  - 8. Prudent management, and transparent

communication between VUI and the public, means neither the tourism nor the agricultural sector are likely to experience any decline due to Coles Hill. It is unlikely that any private school in the area will be harmed.

- 9. Coles Hill will not result in any increase in cancer rates or other fatal illnesses. A portion of the approximately 2,700 people living within five miles of the site who are already sensitive to air quality issues could experience increased asthma-related symptoms or other respiratory problems.
- 10. Coles Hill poses minimal risk to degrade the surrounding environment—air, soil and water. Natural vistas and landscapes within a one-mile radius of the site are likely to be negatively altered.
- 11. Coles Hill will not induce a large in-migration of people to the region and thus there is little chance that the site will strain the resources of public services—schools, police and fire—or other public and civic institutions.
- 12. Addressing the issue of environmental justice, African Americans, the area's predominant minority community, are unlikely to be disproportionality impacted—either positively or negatively—by the Coles Hill site relative to their peers. The Virginia chapter of the National Association for the Advancement of Colored People currently opposes uranium mining in Virginia.
- 13. Coles Hill will not adversely affect the image of the region nor erode the quality of life for the residents of Pittsylvania County. Conversely, given the assumptions of the baseline scenario, the added economic benefit will likely improve the quality of life via increased economic opportunities.

Overall, Chmura found that residents of the Chatham Labor Shed were of mixed opinion as to whether the benefits of the Coles Hill operation would outweigh the costs and risks to public health and the environment. Most citizens of the region were aware of the poor track record of the uranium industry as a steward of the environment, and many were correspondingly skeptical of VUI's ability to be a good steward of the environment. A vast majority were skeptical of state or federal authorities to safeguard the environment or public health via an enhanced regulatory environment.

Chmura notes, however, that several steps could be taken to mitigate some of this skepticism and bolster the public's confidence in VUI as well as in state and federal regulatory agencies. These steps include the signing of an "Impact-Benefit Agreement" between VUI and Pittsylvania County, the establishment of permanent Environmental Quality Committees and the utilization of "adaptive management" practices by VUI.

#### **Uranium Working Group Final Report**<sup>8</sup> (Abridged.)

The Uranium Working Group (UWG) was made up of representatives from the three primary agencies that would have responsibility for the regulation of uranium mining and milling in Virginia: Virginia Department of Health (VDH), Department of Mines, Minerals and Energy (DMME) and Department of Environmental Quality (DEQ). Should the moratorium be lifted, a comprehensive uranium mining statute would be needed. First, Virginia will need to decide whether or not to regulate uranium milling or to leave this responsibility with the Nuclear Regulatory Commission (NRC). Then, under the Administrative Process Act, which includes public comments and hearings, VDH, DMME and DEQ would draft and promulgate regulations.

The next steps would involve VUI preparing an environmental report and applications to the appropriate agencies for review: DMME for a mine permit; NRC or VDH for a mill license; and DEQ for environmental permits. Each of these steps includes opportunities for public comment.

#### What Is the Role of the State Agencies?

**DMME:** lead agency for the health and safety of mine workers and the protection of the environment from activities associated with mining. Regulates the mining process from exploration, permitting, development and operations to reclamation, closure and bond release.

**DEQ:** lead agency for protection of water quality and quantity, and air quality. Enforces Clean Air Act and the Clean Water Act; documents baseline environmental conditions, and has compliance and monitoring responsibilities during the operational phase.

**VDH:** protects health by ensuring safe drinking water; protecting from waterborne disease and pollution; preventing exposure to toxic substances and radiation, and responding to public health emergencies.

VDACS Virginia Dept of Agriculture and Consumer Services: agricultural and consumer protection; collaborates on environmental monitoring

*VDEM Virginia Dept of Emergency Management:* emergency preparedness, response, recovery and mitigation.

#### What Is the Role of the Federal Agencies?

*NRC:* protects the health and safety of the public and the environment during the active life of a uranium recovery operation and after the facility has been decommissioned. The NRC develops regulations, reviews license applications,

develops environmental assessments, inspects uranium recovery facilities and reviews decommissioning plans and activities.

**EPA Environmental Protection Agency:** lead agency regulating radon; sets health and environmental standards at both active and inactive tailings sites.

**MSHA Mine Safety and Health Administration:** enforces occupational health and safety mines and mills; regulates exposure limits for radon, gamma radiation, silica, and diesel fumes.

**DOE Department of Energy:** responsible for decommissioned uranium milling tailing sites.

#### What Should Be Included in the Regulations?

UWG identified several areas that fall within multiple jurisdictions. Any potential regulatory program must include coordination between the relevant agencies to minimize duplication of effort and coordinate enforcement. Some concerns can be addressed by revised environmental standards. Others will have to be addressed by wholly new statutory authority. UWG suggests the following be considered for inclusion:

#### 1. Public Participation

Continue the public participation requirements included in the Administrative Process Act and on the VDH and DEQ citizen boards.

Include multiple opportunities for public input throughout the complete lifecycle of the uranium mining/milling operation.

Require a data management system that allows the agencies and the public to have timely access to environmental data.

Require a Community Involvement Plan from the owner/operator laying out an ongoing process for public involvement.

## 2. DMME Regulatory Program Key Components The Permit Application Should Include:

- i. Environmental Impact Analysis
- ii. A complete operations plan, including the method of mining, the equipment used, the required facilities and structures and their locations, and radiation protection for mine workers
- iii. A groundwater protection plan, surface drainage plan and an environmental monitoring plan including long term surveillance plan
- iv. Reclamation plan

#### Strong Compliance and Enforcement That Includes:

 Coordination of inspections and monitoring functions among the agencies; and the right to make unannounced inspections;

- ii. Authority to order immediate cessation of activities to prevent or eliminate an imminent danger;
- iii. Authority to revoke or suspend the permit when a pattern of violations exists; and provisions to appeal of violations;
- iv. Public access to all inspection, monitoring and violation records; and public notification and participation for all hearings resulting from enforcement actions.
- v. GA needs to legislate mandatory civil penalties, and specific activities that will be subject to criminal prosecution

#### Financial Assurances:

- i. <u>Mine Financial Assurances</u>. Key components to include a performance or reclamation bond; liability insurance; an emergency fund to respond to the release of any contaminant; and long-term environmental monitoring fund for monitoring surface water, groundwater and air quality. Each of these components needs to be funded by the operator and established prior to the commencement of operations.
- ii. Mill Financial Assurances: The NRC has a strong financial assurance program for uranium mills. Equivalent provisions would need to be instituted by Virginia if it were to regulate milling. Funds must be sufficient for decontamination, decommissioning and reclamation of tailings.

#### 3. DEQ Regulatory Program Key Components

*Water Quality Standards:* Establish a Scientific Advisory Committee to review and make recommendations on the groundwater and surface water criteria for radioactivity; look at a special standard for public water supplies downstream of any uranium operation.

#### Permitting:

- *i. Air Permitting.* Add radionuclides and radon to the list of toxics regulated by Virginia. Require baseline information by which to measure change.
- ii. Groundwater Permitting. Establish a groundwater management area and an anti-degradation standard for engineering design requirements. Determine the natural background concentration of uranium in groundwater.
- iii. Surface Water Discharge Permitting. Excess water from mine dewatering, tailings management etc. should be stored and released only if it meets both a new special water quality standard, and Virginia new source technology effluent limits for process wastewater.

#### Monitoring:

i. Air Quality Monitoring. Air monitoring equipment installed and operated by the owner/operator is needed.
 Evaluate the need for early warning of offsite impacts.
 Monitor for radon, radionuclides and radiation.

- ii. Groundwater Monitoring. Comprehensive hydrologic characterization and groundwater monitoring network installed and operated by the owner is needed. Also, offsite monitoring of private wells and monitoring wells.
- iii. Surface Water Monitoring. Add uranium and radionuclides to DEQ's Trace Element Monitoring Program. Routinely monitor streams.

#### 4. VDH Public Health Program Key Components:

Monitoring. Owner/operator monitors for contaminants; must make timely notifications if regulatory limits are exceeded. Agencies perform confirmatory monitoring and inspections. VDH needs the authority to investigate human exposures and conduct epidemiologic studies. Studies of the health of the population living near any potential mining or milling operation should be conducted initially and reassessed at regular intervals to identify any changes in health status.

**Commercial Food Source Monitoring.** VDH needs the authority to monitor crops grown within a minimum of two miles and make the results public.

**Private Water Supplies.** VDH needs the authority to: establish water quality standards for private wells; require routine sampling and analysis; require permanent abandonment of contaminated wells; require the licensee to remediate or provide alternate water supply.

**Recreational Water Supplies.** VDH needs the authority to: establish water quality standards for swimmable water; prevent access to contaminated waters at camps, beaches, etc.

#### What Is an Agreement State?

The NRC is the lead regulatory authority for uranium milling. Virginia is an Agreement State, meaning it has the authority to regulate certain uses of radioactive materials within the State, but not uranium milling. It would take at least three years to amend the Agreement, which involves adopting legislation, issuing regulations, hiring and training staff, providing funding and putting program procedures in place. VDH's Division of Radiological Health (DRH), the state radiation control agency, would become responsible for amending current radiation protection regulations; licensing and inspecting uranium mills; and administering and regulating uranium milling, siting, design, construction, operation and reclamation. Virginia's regulations may be more stringent than the NRC's.

#### What Will It Cost?

Having permit and license fees (initial and annual) covering the full costs of regulating uranium mining and milling in Virginia would ensure that the public does not

have to bear such costs. Funds from these fees should be held in a dedicated non-general fund account in each agency. Other possible resources could include general funds and fees generated from a severance tax.

Personnel, equipment, vehicles, laboratory and field supplies make up the bulk of the anticipated costs. DMME anticipates needing \$1.12 million annually including 5 positions; DEQ \$800,000 annually including 4 positions; VDH anticipates needing and \$250,000 and 12 positions. An additional 8 positions and \$1 million annually would be needed at DRH if the Agreement is amended.

#### (Endnotes)

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- <sup>2</sup> Uranium mining permit applications; when accepted; uranium mining deemed to have significant effect on surface. Va. Code Ann. Sec. 45.1-283. 1982 and Supp. 1983. Print http://lis.virginia.gov/cgi-bin/legp604.exe?000+cod+45.1-283
- <sup>3</sup> Virginia Department of Mines, Minerals and Energy. *State Issues Exploration Permit to Virginia Uranium, Inc.* Richmond: n.p., 28 Nov. 2007. Print. http://www.dmme.virginia.gov/dmm/uranium.shtml
- <sup>4</sup> McDonnell, Robert F. "Re: Establishment of Uranium Working Group." Letter to James Cheng, Doug Domenech, and Bill Hazel. 19 Jan. 2012. TS. http://www.governor.virginia.gov/utility/media/Governor%27s%20Directive.pdf
- <sup>5</sup> Uranium Mining in Virginia: Scientific, Technical, Environmental, Human Health and Safety, and Regulatory Aspects of Uranium Mining and Processing in Virginia. Washington: National Academies, 2012. Print. http://dls.virginia.gov/commissions/cec.htm?x=std
- <sup>6</sup> REPORT: Comparing Potential Virginia Mine Sites to Mining and Milling Operations Globally. Southern Environmental Law Center, n.d. Web. 28 Dec. 2012. <a href="http://www.southernenvironment.org/uploads/fck/file/uranium/can">http://www.southernenvironment.org/uploads/fck/file/uranium/can</a> fra fl comparisons.pdf>.
- <sup>7</sup> Chmura Economics and Analytics. *The Socioeconomic Impact of Uranium Mining and Milling in the Chatham Labor Shed, Virginia*. N.p.: n.p., 2011. Print. http://dls.virginia.gov/commissions/cec.htm?x=std
- Wranium Working Group. Commonwealth of Virginia. 2012 Uranium Working Group Report. By Department of Mines, Minerals and Energy, Department of Environmental Quality, and Virginia Department of Health. N.p.: n.p., 2012. Print. http://www.uwg. vi.virginia.gov/pdf/UWG%20Report%20-%20FINAL%2030Nov2012. pdf

#### **Discussion Questions:**

- 1. What are the potential health and environmental impacts of uranium facilities?
- 2. How much of your feelings about uranium mining come from "past" incidents? Do you think it is possible to adequately regulate uranium facilities with modern best practices?
- 3. Do you agree with Chmura that Scenario 2 is most likely?

- 4. How important should the potential economic impact be in deciding to allow uranium mining?
- 5. Do you believe there will be a negative stigma associated with the Coles Hill site?
- 6. Should Virginia become an agreement state or should milling remain under the NRC?
- 7. If you were in the General Assembly, these three reports might represent the bulk of the information you have to make a decision. Would you vote to rescind the moratorium?

# Domestic Violence: Continuing to Increase Our Awareness and Understanding

[Ed Note: This is the second in a series of facts about domestic violence faced by many people in their daily lives. Other facts will be presented as space allows.]

#### Did You Know?

Did you know that domestic violence occurs at about the same rate in LGBTQ relationships as it does in heterosexual relationships?

A 2008 Virginia study reported that 41 percent of respondents who identified as lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ) had been in an abusive relationship at some time in their life.

- Almost one third of respondents (30 percent) had been stalked
- ☐ Half of respondents (50 percent) experienced hate violence or harassment based on their actual or perceived sexual orientation.
- ☐ Ten percent of respondents said they experienced hate violence or harassment based on their gender identity/ expression.

(The State of Violence in Lesbian, Gay, Bisexual, Transgender, and Queer Communities of Virginia: A Report of the Equality Virginia Education Fund Anti-Violence Project, Found at: http://virginiaavp.corgibytes.com/documents/resources/Report.pdf)

Domestic Violence Hotline (703) 360-7273

#### What Can We Do?

**Get Educated.** Encourage your colleagues and staff to receive ongoing training on LGBTQ issues, including learning about the:

- 1. dynamics of DV in LGBTQ relationships (http://www.ncavp.org/issues/DomesticViolence.aspx)
- 2. access to justice issues (http://www.vsdvalliance.org/secAbout/FAQ%20lgbtq2tf.html), and
- 3. resources available for victims who identify as LG-BTQ (http://www.virginiaavp.org/).

## Assess your organization's capacity to serve clients who identify as LGBTQ or gender variant.

- Make proactive statements of inclusion. Include sexual orientation and gender identity in mission and values statements.
- 2. Review and revise program materials (intake forms, brochures, websites, etc.) to be LGBTQ inclusive. For example, "All services are provided regardless of race, gender, ethnicity, national origin, age, disability, religion, *gender identity or sexual orientation*."
- 3. Consider LGBTQ inclusive symbols in agency waiting area/office space
- 4. Mirror the language people use to describe themselves.
- 5. Remember that language matters: i.e. never use 'gay' to mean 'stupid.'
- 6. Don't tolerate discriminatory behavior of others. You never know who is listening and watching. You can set an example for others. (Tips from Erika Callaway Kleiner, Alexandria Department of Community and Human Services Domestic Violence Program and Sexual Assault Center)

### This Month's Unit Meeting Locations

### Topic: Uranium Mining in Virginia

Members and visitors are encouraged to attend any meeting convenient for them, including the "At Large Meeting" and briefing on Saturdays when a briefing is listed. As of January 1, 2013, the locations were correct; please use phone numbers to verify sites and advise of your intent to attend. Some meetings at restaurants may need reservations.

#### Saturday, February 2

### 10 a.m. At-Large Unit and Briefing

Packard Center 4026 Hummer Rd. Annandale 22003

Contact: Judy, 703-725-9401

#### Monday, February 11

#### 1:30 p.m. Greenspring (GSP)

Hunters Crossing Classroom Spring Village Dr. Springfield 22150 Contact: Kay, 703-644-2670

#### **Tuesday, February 12**

### 10:30 a.m. Centreville-Chantilly (CC)

Sully District Gov. Center 4900 Stonecroft Blvd. Chantilly, 20151

Contact: Olga, 703-815-1897

#### Wednesday, February 13

#### 9:30 a.m. Mt. Vernon Day (MVD)

Mt. Vernon Dist. Government Center 2511 Parkers Lane Alexandria 22306 Contact: Louise, 703-960-0073

#### 9:30 a.m. McLean (MCL)

Star Nut Gourmet 1445 Laughlin Ave. McLean 22101 Contact: Peggy, 703-532-4417 or Sharone, 703-734-1048

#### 10 a.m. Fairfax Station (FXS)

8739 Cuttermille Place Springfield 22153 Contact: Kathleen, 703-644-1555

#### 6:15 p.m. Dinner Unit (DU)

Yen Cheng Restaurant Main Street Center 9992 Main Street 22030 Contact: Tin, 703-207-4669

#### 7:30 p.m. Reston Evening (RE)

Reston Art Gallery at Heron House Lake Anne Village Center, Reston 20190 Contact: Lucy, 703-757-5893

#### Thursday, February 14

#### 9 a.m. Reston Day (RD)

11037 Saffold Way Reston 20190 Contact: Barbara, 703-437-0795

#### 9:30 a.m. Springfield (SPF)

Packard Center 4026 Hummer Rd. Annandale 22002 Contact: Nancy, 703-256-6570 or Peg, 703-256-9420

#### 1 p.m. Fairfax City/Vienna (FX-V)

Oakton Regional Library 10304 Lynnhaven Pl. Oakton 22124 Contact: Bobby, 703-938-1486 or Liz, 703-281-3380

### 7:45 p.m. Mt. Vernon Evening (MVE)

Paul Spring Retirement Community Mt. Vernon Room 7116 Fort Hunt Road Alexandria 22307 Contact: Jane, 703-960-6820

## **March Meetings:**

Clean, Affordable Water: Can We Take It for Granted?



The League of Women Voters of the Fairfax Area (LWVFA) 4026-B Hummer Road, Annandale, VA 22003-2403 703-658-9150. Web address: www.lwv-fairfax.org

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February, 2013
Julie Jones, Co-President
Helen Kelly, Co-President
Ron Page, Editor
Liz Brooke, Coordinator

The League of Women Voters is a nonpartisan political organization that encourages the public to play an informed and active role in government. At the local, state, regional and national levels, the League works to influence public policy through education and advocacy. Any citizen of voting age, male or female, may become a member.

The League of Women Voters never supports or opposes candidates for office, or political parties, and any use of the League of Women Voters name in campaign advertising or literature has not been authorized by the League.

I W/VFA	MEMBERSHIP	APPLICATION
	MEMBERSHIP	AFFLICATION

(Dues year is July 1 through June 30, Current dues year ends June 30, 2013.)

(Duc	s year is bury I through bune 50	. Current dues year ends buile 30, 2013.)			
Membership Category:		(2 persons–1 <i>VOTER</i> ) \$90; Donation \$			
Membership is: New; Renewal; Reinstate; Subsidy Requested We value membership. A subsidy fund is available, check block above and include whatever you can afford.					
<u>Dues are not tax deducti</u> Fund.	ble. Tax-deductible donations m	ust be written on a separate check payable to LWVFA Ed.			
	Please P	rint Clearly!			
Name		Unit			
		StateZip + 4			
Phone (H)	(M)	E-Mail			
Fiscal Public Libraries Transportation	<ul><li>Voting Procedures</li><li>Environmental Quality</li><li>Land Use Planning</li><li>Water</li></ul>	Health Care Schools Human Services Other (Specify) Judicial Systems Affordable Housing Juvenile Problems Domestic Violence			
Thank you for checking  County Govt  Fiscal Public Libraries Transportation	off your interests: Voting Procedures Environmental Quality Land Use Planning	<ul> <li>Health Care</li> <li>Human Services</li> <li>Judicial Systems</li> <li>Juvenile Problems</li> <li>Domestic Violence</li> </ul>			