Facts Concerning RESOLUTION 11- C-17 -- A RESOLUTION URGING THE RADFORD ARMY AMMUNITION PLANT TO ADDRESS ENVIRONMENTAL HAZARDS

Concern: Montgomery County has been recognized as having the highest levels of toxic emissions in the state of Virginia as a direct result of RAAP practices;

Facts: Radford Army Ammunition Plant (RFAAP) water discharges contain nitrate, a nutrient also associated with fertilizer. This one category of nitrates drives the large numbers reported by the Environmental Protection Agency (EPA). Not all who discharge nitrates are required to report the discharges. RFAAP is one source of these discharges.

Concern: Radford employs open burning of hazardous munitions waste along the bank of the New River, and the direct dumping of hazardous waste into the New River the result of this being the harmful release of tens of millions of pounds of toxic emissions into the air, water, and soil of Montgomery County and surrounding areas in close proximity to tens of thousands of residents and several Montgomery County schools;

Facts: RFAAP does not dump any hazardous waste into the New River. All of our air, water and soil discharges are permitted under the Clean Water Act, Clean Air Act and Resource Conservation and Recovery Act. These laws create discharge limits that are protective of human health and the environment. Our emissions are monitored in accordance with these national statutes and state law. We report all discharges to state regulatory agencies and the data is fully available to the public.

Concern: A Department of the Army draft study dated June 20, 2017, reports concentrations of arsenic, lead, cadmium and silver, and methyl chloride—all toxic chemicals with well-documented health hazards—at levels significantly higher than previously estimated;

Facts: The referenced report is a voluntary cutting edge RFAAP initiative to directly measure emissions from open burning. The EPA, NASA, and University of Dayton performed the testing. The planning, execution and results of the testing were shared with the public during our voluntary public meetings. The results presented to the public on August 16, 2017 were:

- The results are NOT concentrations. They are emission factors. New and improved emission factors are now available for the permit renewal process. Emission factors are NOT permit limits. They are used in health risk assessments and then ultimately to calculate permit limits; and,
- Of the 73 new emission factors, 68 were lower and 5 were higher than existing emission factors. The permit process considers the combined effect of the emission factors.

Concern: Radford failed to self-report 287 violations of smokestack regulations established by EPA.

Facts: The 287 number could not be validated by either the Army or EPA. However, of the 187 alleged reporting errors identified in a 2014 EPA inspection visit to RFAAP:

• 157 were not reportable as they did not exceed permit conditions;

- 22 were properly reported to the Virginia Department of Environmental Quality (VADEQ);
- 2 were not reported due to a monitoring system communication error that was resolved with VADEQ;
- 1 was reported as a 12-minute event rather than 18-minute event due to an equipment error; and,
- 5 were actual reporting errors due to human error.

These events were associated with the former coal-fired powerhouse which was permanently shut down in May 2017 and replaced with a state-of-the-art natural gas facility. The new facility eliminates 1,200 tons-per-year of nitrous oxide compounds, 3,400 tons-per-year of sulfur dioxide, and 200 tons-per-year of particulate. It uses the best available control technology in the industry to provide cleaner community air and eliminate the source of the violations discussed above.

Concern: The commercial operators of the RAAP have continued to dispose of the toxic wastes of its commercial, non-military tenants, enjoying the unique shield of reduced environmental regulation and enforcement given to Department of Defense sites.

Facts: RFAAP tenants do use our drinking water, sewers, water treatment, and waste management systems. However, that use is strictly permitted in accordance with federal and state law. There is no "shield" of environmental regulation. In fact, additional regulations apply to federal facilities.

Concern: The RAAP is located on karst geology, within the 100-year floodplain, less than 100 feet from a navigable waterway, less than one mile from the Pulaski Thrust Fault, and approximately one-mile upwind of Belview Elementary School — all conditions specifically cited by the EPA as inappropriate for the location of hazardous waste.

Facts: RFAAP is located as described. However, wind direction is not as described. EPA and VADEQ highly regulate all the activities at RFAAP regardless of location.

Concern: The National Cancer Institute reports thyroid cancer rates in the New River Valley are among the highest in the Commonwealth and nearly two times the national rate, and thyroid disease is understood to be caused by exposure to environmental toxins.

Facts: The Virginia Department of Health presented data during a RFAAP public meeting to help educate the public on thyroid disease causes. Their presentation highlighted links between obesity, genetics, and socioeconomic factors with regard to thyroid disease. The assertion that thyroid disease frequencies are linked to RFAAP is not supported by facts, evidence, and science.

Concern: For decades the citizens of Montgomery County (including the Town of Blacksburg) have been primarily impacted by RAAP pollutants. The Town of Blacksburg and Montgomery County not only have enviable natural resources, but also an abundance of educational institutions, medical institutions, commercial enterprises,

community and faith organizations, leadership, and other thoughtful citizens with a proven ability to work together to solve complex problems.

Facts: RFAAP is well aware of the resources in our area and actively reaches out to them. For example, we work closely with Virginia Tech (VT) and frequently hire engineers and scientists from there. We actively work with the VT Natural Resources Department and the Department of Game and Inland Fisheries to preserve and protect our unique undeveloped habitats.

RFAAP does not have an adverse impact on community health. Numerous studies including the Agency for Toxic Substance and Disease Registry (ATSDR), conclude that RFAAP does not present a risk to drinking water in the community. The agencies referenced already address RFAAP industrial operations through rigorous permitting processes that are protective of human health and the environment. RFAAP has a dramatically positive impact on the economic development of the area and preservation of our land.

Concern: Establish a one-year timeline in which the RAAP will terminate equal to or greater than 95% of open burning and convert to only the safe and contained burning of toxic chemicals.

Facts: RFAAP already uses two contained burn chambers as our primary method of treating energetic waste. Those items that cannot be safely treated in our incinerators are burned in the open burning ground in accordance with strict permit limits and conditions to ensure the safety of our personnel and the community. We constantly work to reduce our open burning and we have achieved remarkable reductions that we share with the community during our public meetings.

Concern: Phase out treatment and disposal of non-defense hazardous waste until all open burning done by the RAAP and its affiliates on site has ceased.

Facts: All treatment and disposal at RFAAP, including our tenants, is conducted in accordance with federal and state law.

Concern: Commit to reduce the ranking of Montgomery County as the most toxic area in Virginia.

Facts: RFAAP has, and continues to, reduce pollution and its impact on the environment. The historical record clearly demonstrates our success and we are committed to drive further improvements like the elimination of our coal fired powerhouse in May of this year.

Concern: Commit to measures to significantly reduce the overall quantity of toxic chemicals released into groundwater and the New River.

Facts: RFAAP does not release toxic chemicals to the ground water and the New River. Our permits only allow safe discharges and our treatment plants are designed to maintain or exceed those limits. Our drinking water plant received a Gold Award for Treatment Operations from the Virginia Department of Health in April of 2017. The ATSDR concluded that RFAAP operations do not impact water supplies of the surrounding community.

Concern: Adequately test and model air, water, and soil within the RAAP property and surrounding area, and establish best practices to clean up all ongoing and legacy waste management operations.

Facts: RFAAP uses state of the art testing and monitoring systems that go beyond our permit requirements. We have operated a dedicated environmental clean-up program for more than 20 years. In addition, we are certified to the International Standard for Environmental Management (ISO 14000), which requires excellence in environmental management and continuous improvement.

Concerns: Share all non-classified environmental and health data with the community, and establish a public data center to access, organize, map, and analyze this taxpayer-owned data.

Facts: RFAAP does not restrict all publicly available information. The VADEQ has a webpage dedicated to RFAAP data and reports. For more than 20 years, we have maintained an information repository at the Christiansburg library for our clean-up program. For more than five years, we have conducted voluntary public information sessions to provide the public direct access to RFAAP personnel and leadership. The next meeting is Dec. 14, 2017.