

1. What is the average quantity of waste burned at the OBG on a monthly basis? What percentage of that amount is done as skid burns?

a. The Radford Army Ammunition Plant (RFAAP) thermally treats approximately 37,000lbs of energetic material per month at the open burning ground. All burns at the open burning ground are conducted in a specially designed refractory pan rather than the ground.

2. Does BAE burn waste from ATK, Grucci Fireworks, and other tenants at the OBG? Is that waste from ATK the result of manufacturing ammunition for the commercial market, not the military?

a. BAE Systems is responsible for thermally treating all energetic material waste at RFAAP, including any tenant operations that create energetic waste. RFAAP tenants provide both military and commercial products. We encourage you to contact the companies directly if you have questions about their products and consumers.

3. Is chromium an ongoing component of the waste stream for the OBG? Is this chromium from plating operations?

a. Chromium is not added or used in our manufacturing process. The chromium present in our energetic material waste is from contact with the stainless steel equipment and vessels. Radford Army Ammunition Plant does not conduct plating operations of any type.

4. Do you have an estimate of how much of the waste contains hexavalent chromium when it gets burned?

a. Hexavalent chromium is not added or used in our manufacturing process. The trace amount of chromium present in our energetic material waste is chromium +3 (Cr+3) which enters the material from contact with the stainless steel equipment and vessels. Although the energetic waste material contains Cr+3, the DEQ establishes our limit using the more protective hexavalent chromium standard.

5. EPA recommended testing drinking water for the specific type of chromium in 2011, is that testing being done for the drinking water sold by the Arsenal?

a. Chromium is included in our annual metals testing for both of our of drinking water plants that produce drinking water for our use and the Montgomery County PSA. The next sampling date is July 2013.

6. Do you expect to request more chromium when OBG the permit comes up for renewal?

a. As we discussed in the public meeting on April 23<sup>rd</sup>, 2013, BAE Systems requested a change in the daily Chromium concentration for small (500 pound) burns in order to increase operational flexibility, NOT an increase in the daily Chromium emission limit. The entire permit for Treatment of Hazardous Waste by Open Burning is due for renewal in April 2015 and we will evaluate any need for changes at that time.

7. Is chromium also burned in the Hazardous Waste Incinerators? If so, do you expect that amount to increase?

a. The energetic waste material that is treated by the Incinerator contains trace amounts of chromium from contact with the stainless steel vessels in the manufacturing process. The Incinerator contains Maximum Achievable Control Technology (MACT) which captures these trace emissions. Our continuing goal and current practice is to shift as much energetic material waste from the open burning ground to the incinerator as we can safely accomplish.

8. How often is chromium tested for in the water under the OBG – HWMU13?

a. The ground water under the open burning ground (HWMU 13) is tested for heavy metals, including chromium, every six months.

9. Is it possible to have the EPA perform a risk assessment prior to the next renewal of the OBG permit? Could this fresh analysis include exposure scenarios for children and infants?

a. We are open to the process if the EPA or the DEQ pursues this action.

10. In 2003, the Roanoke Times reported "Arsenal told to test water for pollutant," stating that regulators instructed RAAP to test all drinking water for perchlorate. Six years later, a U.S. Army memo directed, "DoD owned drinking water systems...SHALL add perchlorate to their current analyte list for at least two sampling events..." retests for perchlorate conducted for the water sold by the Army? What were the results? Is anyone testing drinking water in the NRV for perchlorate currently?

a. In May, 2004 the intakes at both drinking water plants as well as the New River were tested for perchlorate using the most sensitive EPA approved method available. The detection limit was 0.2 parts per billion (ppb). The results were non-detect for all samples. Recently, RFAAP made significant improvements to the drinking water treatment systems. Due to the changes in the system and the length of time since our last test, BAE Systems, in partnership with the U.S. Army, will voluntarily test for perchlorate this year. As with all of our testing, this information will be reported to the appropriate regulatory agency which, in this case, is the Virginia Department of Health (VDH).

11. Is the official U.S. Army site for the RFAAP, and the facts provided there, correct, current and regularly updated?

a. The facts on the U.S. Army site are correct but may be outdated. Following our community engagement survey, we heard the request for a website with current, up-to-date information and we are in the process of responding to that request.

12. There is some confusion between a U.S. Army report and a Roanoke Times article published on 4/23/13 concerning customers of RFAAP water sales. Which municipalities does the RAAP sell drinking water to at the present time?

a. RFAAP currently sells water to Montgomery County. We ceased selling water to Pulaski County in December, 2007.

13. If the TRI reporting threshold for chromium is 100 pounds, how did the Arsenal ship off over 21 TONS of ash containing chromium in 1999 & not report it on the TRI? What is meant by "recycling metal" as the source of the 21 tons of chromium ...containing ash? Is Open Burning a form of recycling?

a. The annual EPA report Toxicity Release Inventory (TRI) threshold for regulated chemicals, including chromium, is 25,000 lbs used in manufacturing and 10,000 lbs otherwise used. RFAAP does not use chromium as part of the manufacturing process; therefore, it is not reported on the TRI. RFAAP does have a robust paper, cardboard, plastic, and metals recycling program. In addition, the ash from the Power House is tested per EPA guidelines for heavy metals, including chromium, and this non-hazardous ash is recycled into cinder blocks. In the last six months, we have recycled of 12 million lbs of material. The open burning ground is not considered a form of recycling nor is the ash collected from the open burning ground able to be recycled.