#### **Blue Ridge Landfill Corrective Action Plan, Public Comment Period Ends Soon**

By Tom Hart

The Concerned Citizens of Estill County (CCEC) recently hosted a public forum to share with the community Advance Disposal Blue Ridge Landfill's proposed Corrective Action Plan (CAP) for dealing with the Technologically Enhanced Naturally Occurring Radioactive Material (TENORM, in this case, oil and gas well drilling waste) that was illegally imported into Kentucky and was subsequently dumped in our landfill. I want to encourage everyone to take a moment and send a quick email or note to the state to let them know your position about the course of action you think the state should pursue

During the period from July of 2015 until February 2016, 92 loads of processed drilling waste from oil and gas drilling fracking operations in West Virginia and Ohio were deposited in the Estill County landfill (1157 tons, altogether). The processing of the drilling waste (rock dust, dirt, brine water, fracking fluid) to remove and recycle the fracking fluid tends to concentrate the naturally occurring radioactive material (NORM) found in the rock dust and dirt, leading to elevated radiation levels in the final waste. It is illegal to import such waste into Kentucky if its radiation levels are above 5 picocuries/gram. Some of this waste material had pretty low levels of radioactivity, right at the regulatory limit, but a significant amount of it had levels of hundreds of picocuries/gram – therefore making it illegal to bring it into Kentucky from these states.

An individual from West Liberty, KY brokered all of these shipments, falsifying shipping documents about the origin and nature of the material, and had it delivered to the Blue Ridge Landfill. Over this 8-month period landfill workers checked the individual loads in and sent them to the working face of the landfill where the waste was spread, intermingled and mixed with municipal solid waste (MSW), other trash, loads of dirt, etc., and a daily cover of dirt. While the landfill cannot now identify where each of the loads went, they know where the working face was at the time; the waste is within an area 600 feet by 900 feet.

The Kentucky Energy and Environment Cabinet (EEC) issued a Notice of Violation (NOV) to the landfill in March of 2016 citing the landfill for allowing the dumping in violation of their permit. That NOV was followed with a signed Agreed Order (AO) between the EEC and Advanced Disposal Blue Ridge Land Fill in January of 2017. The AO had two parts. First, in lieu of a \$95,000 fine for their insufficient control over what came into the landfill they agreed to give a \$60,000 grant to the Estill County Schools to be used for environmental projects, and they agreed to install radiation monitors at the entry gates of our Blue Landfill and a second landfill they operate in Morehead. Second, Advanced Disposal had 90 days to submit a Corrective Action Plan (CAP) to the state concerning their proposal for what to do about the TENORM drilling waste already in the landfill and what they proposed to do to prevent such violations from happening in the future.

Advanced Disposal hired a top tier national and international consulting firm called Risk Assessment Corporation (RAC) to conduct a risk analysis. Their 150 some page report, Dose and Risk Assessment of Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) Disposals at the Blue Ridge Landfill, addresses threats to public health and safety from the time of the disposals until as far into the future as can be reasonably calculated, and suggests courses of action to mitigate the risk. This risk analysis became the foundation and justification for Advanced Disposal's proposed CAP. Advanced Disposal hired a second consulting firm (Gradient) to draft the CAP based on the findings and recommendations from the risk analysis. .

Advanced Disposal sent the first version of their CAP to the EEC on time in April of 2017. After some weeks the state sent it back to Advanced Disposal with specific directions for needed revisions. Advanced Disposal submitted a revised CAP in August of 2017, which the state again rejected and sent back for more changes, to include a more detailed analysis of the possibility of locating and removing the drilling waste from the landfill. The state has tentatively accepted the third version of the CAP, submitted in November 2017. That is the version we have before us, which has by law been released for a 30-day public comment period. It is 46 pages and is available in the Estill County Public Library or online through the EEC web page on the Commonwealth of Kentucky's web site.

In a nut shell, two alternatives are investigated in the CAP:

**Remediation Alternative 1:** Closure-In-Place and Monitoring. This is the alternative recommended in the CAP and tentatively accepted by the state. It includes putting an interim cap over the current waste pile, continuing to bury the drilling waste through normal landfill operations to depth of about 35 feet, then enhancing the normally required final cap over this section of the landfill with an enhanced extra layer. Also, they would add testing for radionuclides to the routine testing of liquids (leachate) that are collected from the bottom of the waste pile, and they commit to move methane extraction wells out of the area. A couple of points to make concerning this alternative. The real concern with elevated levels of radionuclides in the waste pile is the potential for rain water to leach down through the pile and carry the radionuclides from this drilling waste further down to the ground water table at levels high enough to be of concern to human health.

It is important to note that this is a "contained landfill". By design, its bottom has 3 feet of very low permeability recompacted clay covered by virtually impermeable 60-millimeter-thick high-density polyethylene geomembrane – all meant to prevent any number of nasty elements and compounds in municipal solid waste from leaching down to the ground water. (Leachate is drained from the top of this membrane, tested and treated.) The clay layer on the bottom will never degrade. The geomembrane on top of the clay has a design life of 200 years; recent testing suggests the real-life expectancy is closer to 2000 years or more. The final cap over the landfill includes 6 inches of compacted clay, 40 mil geomembrane, and 36 inches of top soil. The called for enhancement to this top cap adds another layer below the clay. The primary purpose of the cap, other than preventing erosion of the pile, is to prevent rain water from getting to the waste pile at all: water runs off the cap instead of leaching down through the cap. The design life of the top geomembrane is also 200 years, with recent testing suggesting the real life is as much as 1400 years, at a minimum. The conclusions of the Risk Analysis and the CAP report are that Alternative 1 is the recommended course of action, it being most protective of the environment and human health and safety now and into the calculable future.

**Remediation Alternative 2**: Excavate and Re-dispose BES Waste. This alternative proposes removing approximately 16,300 cubic yards of soil and MSW from the area above the drilling waste and then removing an estimated 45,575 cubic yards of mixed drilling waste, MSW, and dirt. The plan calls for moving 25 truckloads of waste a day, each loaded with 20 tons of the waste, taking approximately 93 work days (1,823 truckloads). The proposed redisposal site is 425 miles away in Pennsylvania. The landfill intends to continue operations during this removal process, so they would no doubt hire an outside contractor to perform and manage the removal. :

Both alternatives include the same preventative measures for precluding this kind of violation in the future: install radiation detection devices (now installed at the entry to the scales) and develop policies, procedures and training for ensuring all vehicles entering the landfill pass through the radiation detectors and what to do if an alarm is triggered. These procedures are in place today.

Please, please think about this and VOTE. This is our county. Your opinion makes a difference. Be heard. Just a quick email to the EEC from you can make a difference. All you need to say is: "I concur that Alternative 1, Closure in place and monitoring, is the right course of action." or "I believe the state should pursue Alternative 2, Excavate and redispose." You can explain your position, or not. Include your name, address, and add 'Citizen of Estill County' at the bottom of the email. If you do not have email you can send a letter or hand-written note. However, if you are going to use the mail you need to do it today – the deadline for receiving comments is this coming Monday,

At the top of your email or letter write: Reference Agency Interest No. 998 and Agreed Order DWM-160048

Send emails to Jeff.Cummings@ky.gov

Send letters to: Jeff Cummins Director, Division of Enforcement 300 Sower Boulevard Frankfort, KY 40601

**Editor's Note:** This was edited due to its length.

# 25-year-old indicted for theft

An Irvine man has been indicted for stealing from Owlhead's Grocery in South Irvine.

Dylan Collett, 25, of Rosebud Avenue, Irvine was indicted for theft by unlawful taking - disposition over \$500 but less than \$10,000.

The indictment says that on Nov. 13, Collett fired two rounds into the door of the gromissing money. The indictment charged him with tampering with physical evidence.

According to the indictment \$1,200 was taken from the grocery.

KSP Trooper Derek Lovett investigated. An unrelated indictment charges Darvis Court. McIntosh III, 39, of Church Street, Irvine with theft by unlawful taking.

The indictment says McIntosh took a Samsung Galaxy S8+ cell pone from the AT&T Store on Dec. 18. The phone was valued at \$849.99.

Jeffery Henry, 35 and homeless, was indicted for burglary third degree, criminal mischief, second degree, and theft of services.

tered an unoccupied residence owned by Sandy Brogbent on December 4. Christie L. Crowe, 40, of Ruby Lane, Ir-

vine was charged by indictment with theft of mail matter and first degree persistent felony offender. The indictment says that Crowe concealed

a package received in the mail intended for Jacob Tuttle on Dec. 5. It adds that she hs been previously convict-

ed of two felonies.

Deputy Doc Morris conducted investiga-

tions into the above three cases.

Michael S. Bullock, 43, of Burton Williams Road, Irvine, was indicted for failure to comply with sex offender registration, first offense as of March 8.

Trooper Lovett investigated.

Alison Barnard, 32 and homeless, was cery to implicate someone else had stolen the indicted on a misdemeanor charge of theft receipt of stolen credit/debit card (one card). The indictment says she took the card belonging to Larry Brown without consent on Nov.

Her case will be remanded to Estill District

Trooper Casey Caudill was the investigating officer.

In unrelated cases, David T. Arvin, 35, of Sandhill Road, Irvine and Rachel Turner, 29, of Dry Branch Road, Irvine were indicted for escape second degree.

Their indictments say the two cut off courtissued monitoring devices off their ankles, Arvin on Oct. 15 and Turner on Nov. 18. He allegedly broke out the front door en- Brad Kirby of Probation and Parole investigated.

Brandy Crim, 36, of N. Stacy Lane, waived her indictment to the grand jury.

Crim faces sentencing for possession of a controlled substance, first degree and first offense, drug paraphernalia - buy/possess, and posession of marijuana.

The waiver states that on Sept. 24, Crim had in her possession methamphetamine, syringes and a spoon with white residence, and two marijuana cigarettes.

# Drug indictments returned

Continued from Page 1

He also allegedly had a scale and several plastic baggies.

Trooper Lovett was the investigating

Debra Lynn Maness, 60, of Bobby Miller Road, Irvne was indicted for illegal pos- Deputy Russell "Doc" Morris was the arsession of a legend drug (180 neurontin resting officer. pills); possession of a controlled substance (three percocet pills), first degree and first vine was named in a two-count indictoffense; and possession of a controlled ment, which charges him with possession substance, third degree (five diazepam of a controlled substance, first degree pills) on May 28, 2017.

the case.

Thomas Estes, a 28 year old homeless which field tested positive for metham-

It charges him with public intoxication of a controlled substance (excludes alco- fore the grand jury.

hol) on December 9.

The indictment also charges Estes with possession of marijuana and tampering with physical evidence. The indictment states that he tried to swallow a xanax pill to conceal evidence.

Devin Coffey, 22, of Glory Street, Irand first offense (methamphetamine) and Trooper Nick Brumback investigated drug paraphernalia - buy/possess on Nov. 1. The indictment says that Coffey had a An indictment was returned against syringe containing a brownish substance

Irvine Chief Brad Smith appeared be-

## Local police activity report

Joshua Harrison of Rich-Department on an Estill rooms. County warrant.

arrears of \$32,233.42.

Harrison was charged with flagrant non-support.

He was arraigned in Estill District Court on Jan. 31 and will return to court for a preliminary hearing on Feb. 7.

His bail was set at \$7,500.

Biggs of Stanford, KY was also charged with flagrant non-support..

set at \$7,500 cash.

- Bertha Lynn Jones, 46, of Scott Court, Irvine was charged with forgery of theft by deception under \$500, and theft of a stolen 38 rounds of ammunition credit card.
- Jeffrey Shannon Gross, 32, of N. Plum Street, Irvine was charged with possession of a controlled substance, first degree and second offense (Methamphetamine) and drug paraphernalia.
- Bradley S. Hardy, 41, of Hardy Road, Irvine was charged with burglary second degree and flagrant nonsupport.
- A couple was arrested Jan. 29 after the female allegedly overdosed at their residence at 220 Noland Court.

Irvine Officer Brian Cloyd said the woman was slumped over on the living room couch and was unresponsive. Estill EMS provided treatment on the scene.

Her boyfriend, William Darrell Puckett, said the had used heroin prior to him calling 911.

Puckett removed several empty syringes from the kitchen cabinet.

The couple's children,

The woman was identihas not made a payment since She and Puckett, 26, were was set at \$1,000 cash. Oct. 27, 2017 and is now in each charged with wanton change to Dept. of Transpor- ruary 7.

The couple was arraigned mond was arrested January ages one and two, were Jan. 31 in Estill District Court 28 by the Richmond Police sleeping in the back bed- where they entered not-guilty pleas to their charges. Riggsby's bail was set at

The arrest warrant says he fied as Crystal Riggsby, 28. \$2,500 cash while Puckett's

District Judge William endangerment first degree "Bo" Leach has scheduled a and failure to notify address pre-liminary hearing on Feb-

#### Felon arrested over gun

rested the alleged victim.

Officer Michael Gross Bail for Biggs was also Food Mart where a man by a convicted felon, two sum of money in the mail

Gross saw a gun in a bag a felony offender. second degree, two counts held by Dills Berryman III of Lebanon, Ky. and found set at \$20,000 cash.

Ravenna Police were in- and a pipe. Ninety-four vestigating a money theft rounds more were found in ■ In a separate case, Bryan on January 31 when they ar- a backpack with a needle, knife, and small spoon.

> Berryman was charged was dispatched to Ravenna with possession of a firearm claimed he had lost a large counts of drug paraphernalia - buy/possess, and carrying a concealed weapon by

Berryman's bail has been

#### Candidates' names to add

The name of James Walters, a republican candidate can for jailer. for Estill County Judge was omitted in last week's list magistrae in distict 3. of candidates in the Estill County Tribune.

David Harvey, republi-

Joey Arvin, democrat for Braden Davis, a repub-

lican and Melissa Jessie-Those filing after the Riddell, a democrat, both Tribune's press deadline in- candidates for the Irvine Council,.

### Golf course burglary Continued from Page 1

Bowman and Brian O. Bowman, 47, of South Irvine Road were named as co-defendants in another indictment. The Bowmans were each indicted on a

receiving stolen property charge. The indictment states that on January 2, 2018, they possessed a 16 foot L.A. Cargo trailer which had been

reported stolen by Tyler Gibson. In an unrelated indictment, Jason Alvey, 42, of Irvine and Monty Steelman, 53, of Winchester Road, Irvine were named as co-defendants.

That indictment says on Dec. 9, those men possessed a 350 orange Honda Rancher ATV valued at \$750. The ATV had been reported stolen by Robert Farrell.

Deputy Russell "Doc" Morris investigated those three cases.