

Ryan Benefield
Deputy Director, ADEQ

October 10, 2014

Director Benefield,

I am writing on behalf of the Buffalo River Watershed Alliance to express our strong opposition to your agency's decision to allow a plasma arc pyrolysis unit to be installed at C & H Hog Farms, Inc, Mt Judea, AR without a proper permit. We assert that a trial of untested technology for processing swine waste onsite at C&H is completely inappropriate.

According to correspondence below, ADEQ is allowing Mr. Murray Vance to install and operate a plasma arc pyrolysis "trial" plant for processing swine waste. This technology is experimental and untested for use in this application and in your correspondence your department urges pilot testing prior to its use at C & H. You have received a letter (attached) from The Buffalo River Coalition dated Sept. 18, 2014 expressing our concerns over significant errors in Mr. Vance's data and calling into question his ability to properly implement and monitor such a trial. This is especially troubling because Mr Vance's company, Plasma Energy Group, was only recently formed and has little or no experience with this technology as proposed.

Your department admits that the company has provided insufficient information to determine if a permit is required yet you allow them to proceed "at their own

risk". Not only are you allowing them to proceed at their own risk, you are placing the entire community of Mt. Judea at risk, including the nearby K-12 Mt Judea school.

The following information contained in an email obtained through a recent FOIA request underscores our concerns:

The Air Permit Branch has reviewed the submitted information and at this time cannot recommend approval of a test since there is not a reasonable certainty that emissions are accurately presented. In fact, the applicant states that one of the purposes of the trial is to determine emission rate for permitting requirements. Specifically:

- The unit is described alternatively as a “pyrolysis” and “plasma” process. The unit claims to operate on principles (electron flow through a plasma cloud) that are unfamiliar to this engineer and cannot be independently evaluated.
- The possibility exist that this unit actually combusts waste at some point in the process, thereby subjecting it to permitting requirements for incinerators
- Theoretical emission rates are calculated for some pollutants but they use assumptions that are not explained or independently verifiable.
- Emission test reports for this technology processing medical waste yields emission rates far different than the theoretical calculated rates. Some of these emission rates would indicate this unit is a major air pollution source when scaled to the requested rates.

- Many possible air emission constituents are written off wholesale without explanation.
- No information is provided on how air pollution control devices will be monitored.

Please explain why you do not have the authority and responsibility to properly regulate this project? Why are you allowing this experiment to proceed without sufficient data to assure its safety to the community?

We feel your tacit approval is an abdication of your responsibility to protect the well-being of all Arkansans as you are charged to do.

As you know, one of the primary reasons for public outcry over C& H was the lack of transparency, public notice and opportunity for comment. Now your department is once again allowing an untested, potentially dangerous technology to be installed, presumably to address weaknesses in the original NMP, and is doing so without transparency, notification or opportunity for public comment. We find this unacceptable. This, and any other waste management modifications, constitute a major modification in the C & H permit which requires that the permit be opened for public comment.

We respectfully request your response to our concerns by 4 pm, Wednesday, October 15.

Gordon Watkins
Buffalo River Watershed Alliance

Tuesday, October 7, 2014 7:31 AM
From: "Rheaume Thomas" <RHEAUME@adeq.state.ar.us>
To: "Murry Vance"
<mavance@plasmaenergygroup.com>Cc: "Rusty"
<ramiller@plasmaenergygroup.com> "Benefield Ryan"
<benefield@adeq.state.ar.us> "Jerry Masters"
<arkpork@yahoo.com> "jasonh_1995@yahoo.com"
<jasonh_1995@yahoo.com> "Harrelson Tammy"
<HARRELSON@adeq.state.ar.us> "Bates Mike"
<BATES@adeq.state.ar.us> "Porta Mike"
<PORTA@adeq.state.ar.us>Hide

Based on the information provided by you and/or on your behalf, the Department is unable to determine at this time if an air permit is required for your Plasma Arc Pyrolysis unit processing swine waste.

The Department recommends you conduct pilot testing prior to the trial on the C&H premises. However, should you choose to proceed directly with the trial on the C & H premises, the Department requests that you monitor air emissions and process parameters on a frequency sufficient to accurately quantify air emissions.

Please be aware that if you choose to proceed with the trial on the C & H premises, you do so strictly and entirely at your own risk and expense. If it is later determined that an air permit is needed, your company could potentially be subject to an enforcement action. This response in no way authorizes operations that would otherwise require an air permit

Thomas Rheaume
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