

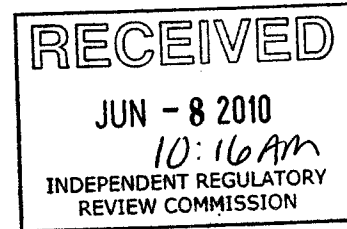
HART RESOURCE TECHNOLOGIES, INC
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June 7, 2010

2806

VIA ELECTRONIC MAIL

Independent Regulatory Review Commission
333 Market Street 14th Floor
Harrisburg, PA 17101



RE: Regulation #7-446 (IRRC #2806)

Dear IRRC Commissioners,

Hart Resource Technologies (HRT) and Pennsylvania Brine Treatment (PBT) operate three facilities in Western Pennsylvania that have processed oil and gas wastewaters for 25 years. From 1989-1993 we were also the only company in Pennsylvania to successfully produce a saleable crystallized salt product from oil and gas production fluids.

We ask that the Commissioners consider the following comments on 25 *PA Code* Chapter 95: Wastewater Treatment Requirements before the final-form regulation is adopted:

1. Discrepancy in Chloride Standards between Proposed Chapter 95 and Proposed Chapter 93:

As outlined in 25 *PA Code* Chapter 95.1(b)(3)(IV): "The discharge may not contain more than 250 mg/l of total chlorides as a monthly average". This limit is an end-of-pipe restriction, whereas the proposed 25 *PA Code* Chapter 93 sets a 1-hour average (CMC) criterion of 860 mg/l and a 4-day average (CCC) criterion of 230 mg/l, which are in-stream criteria. These two regulations are inconsistent and establish two different sets of criteria for discharges from oil and gas wastewater treatment facilities.

2. Scientific Justification:

- The US EPA currently has no national criterion for TDS. As of 2007, only 27 states have enacted watershed or state-specific criteria, and of those 27 states only 15 use the TDS criteria for the protection of aquatic life (Zipper, 2007).¹
Currently no state in the United States supports an end of pipe limitation for TDS as proposed in 95.1(b)(3)(III).

(1) Zipper, CE and Berenzweig, RJ. March 2007. Total Dissolved Solids in Virginia Freshwater Streams: A Report to Virginia Department of Environmental Quality (Draft).

- Illinois in 2006 proposed to delete their existing TDS standard of 1,000 mg/l because the standard “was found to be both ill-suited and unnecessary for the protection of aquatic life”.² They also stated that if “sulfate and chloride, alone or in combination, meet the proposed standards, toxicity from the other major ions comprising “total dissolved solids” is insignificant”.² In place of the TDS standard, Illinois proposed a sulfate (500 mg/l) and chloride (500 mg/l) standard that takes into consideration the constituents of the stream on a site by site basis. Industrial dischargers that could not meet the new regulations were allowed to pursue adjusted standards/site-specific standards relief.

Illinois came to this conclusion after extensive research of current literature, new aquatic testing, and the review of analytical data obtained from their 200 established stream stations utilizing 9 collections of data per year from each station.

- Iowa has also revised their standards for TDS, replacing their toxicity testing of in-stream TDS concentrations greater than 1000 mg/l, with standards for chloride, using the hardness and sulfate concentrations of the receiving stream to determine limits. They also conducted a state-wide TDS and chloride monitoring program to build a more extensive database to use when creating their economic justification for the regulation changes.
- PA DEP, in their Regulatory Analysis Form refers to only 4 aquatic studies, all done in the Western part of the State. This hardly constitutes a far-reaching review of current literature; completion of aquatic studies; or stream surveys justifying a TDS limitation.

3. Economic Justification:

The IRRC in their March 15, 2010 letter to the Environmental Quality Board, expressed the opinion that the EQB needed to submit a detailed fiscal impact study for the proposed regulation change. The Clean Streams Law in Section 5(a)(5) requires the EQB to consider “the immediate and long-range economic impact upon the Commonwealth and its citizens”. We have the following comments about the Regulatory Analysis Form-Cost and Impact Analysis that was submitted to the IRRC on May 17, 2010.

(2) Illinois Environmental Protection Agency. April 2006. Preliminary Technical Justification for Changing Water Quality Standards for Sulfates, Total Dissolved Solids and Mixing Zones.

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- Regulated Community Costs:

DEP lists an estimated cost of treatment for oil and gas wastewaters, however the upfront capital costs to build the type of advanced treatment facilities required have been ignored. DEP has also compared the cost of treatment development with the annual revenue that may be generated from the development of Marcellus gas reserves, however, the exploration and production companies who are generating the revenues are not the companies that will be building the treatment facilities. HRT and PBT generate less than \$10 million in revenue and our research has found that the capital costs will require approximately \$10-\$39 million for evaporation and \$59-\$64 million for crystallization. This regulation change greatly reduces further expansion for the smaller businesses that have the most experience in treating the fluids generated by the Marcellus development, as well as causing damage to conventional gas development of marginal wells by driving treatment costs much higher.

DEP states that since there are many variables affecting the non-natural gas industries there is no degree of certainty of the costs to these industries. Both the Pennsylvania Coal Association and the Electric Power Generation Association have presented fact-based information on treatment costs. We believe that DEP has not fully evaluated all the industries that will be affected by the rule change and has not evaluated the revenue loss from industries that will not expand or locate in Pennsylvania due to this regulation.

Illinois, in their Draft Justification of Changing Water Quality Standards, states that the “Agency has concluded that there is no technically feasible or economically reasonable way to remove sulfates or TDS from water”.²

- Local Governments:

The proposed rule change will prohibit POTW’s not currently accepting wastewaters from the oil and gas industries from doing so unless the fluids are first treated at a CWT to a level of 500 mg/l. We agree that POTW’s using a biological process do not effectively treat these wastewaters, however with the addition of pretreatment facilities that reduce metal contaminants, protect the biological activity, and greatly reduce the chloride concentrations by dilution, POTW’s could effectively be used for select oil and gas wastewaters. The income generated from this treatment could be effectively used to rebuild and refurbish existing POTW’s and also generate income to design more adequate facilities to meet new proposed Enhanced Biological Nutrient Removal regulations in the Susquehanna River basin.

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- State Governments:

DEP states that costs should not increase or decrease with the proposed rulemaking, however 95.1(b)(2) creates additional permitting in the form of a Source Reduction Strategy for the oil and gas industry.

95.1(c) creates a variance situation for other industrial dischargers that includes a watershed analysis by the Department.

95.1(a)(8) proposes to exempt industries already covered by EPA ELGs. DEP states in answer to a question raised by the PA Chamber concerning exemptions already granted from EPA that “these industries may be exempt, and will be reviewed upon formal written request on a case-by-case basis”.

All these additional permitting requirements, watershed analyses, and implementation guidance documents must be generated by an already overworked staff, and may require additional staff to review the permitting and exemptions on a timely basis.

We do not feel that the DEP has properly evaluated or presented enough scientific or economic justification to conclusively prove that an outdated TDS standard should be enacted that will have such far-reaching consequences for the business and private sectors of Pennsylvania. Thank you for considering our comments.

Sincerely,

Becky Snyder

Becky Snyder
Hart Resource Technologies, Inc
Pennsylvania Brine Treatment, Inc

2806

From: Becky Snyder-Hart Resource Technologies, Inc [hart8600@comcast.net]
Sent: Monday, June 07, 2010 5:00 PM
To: IRRC
Subject: Regulation #7-446 (#2806) Comments
Attachments: Comments to IRRC 06072010.doc

Please accept the following comments on the proposed 25 PA Code Chapter 95. Thank you.

Becky Snyder

