STATE OF ILLINOIS

Pollution Control Board

## John Therriault - Fwd: PCB 07-95 People v. AET Environmental Inc. and EOR Energy LLC

From:	Carol Webb	
To:	Therriault, John	RECENTER
Date:	10/20/2008 1:30 PM	CLERK'S OFFICE
Subject:	Fwd: PCB 07-95 People v. AET Environmental Inc. and EOR Energy LLC	OCT 2:0 2008

John, Please docket this email into COOL. Thanks, Carol

>>> "ART" <arthurclark@aetenvironmental.com> 10/20/2008 1:07 PM >>> Ms. Webb.

Lori DeVito the President of AET is out of town this week and therefore not available for the conference call. We have had a hard time getting an attorney due to certain actions by the AG. Our attorney Mr. Oneill is reluctant and suggests that we petition the board for waiver of the rule requiring attorney representation for a corporation. I have attached our previous settlement offer and have never received any comment or counter offer. Also attached is a previous email which shows that a settlement was requested by the AG (and an amount of something more than our offer was implied, we expected a counter offer). At this point we feel that the AG is simply trying to extort monies from us, since we broke no law, caused no environmental damage, and if anything, the AG should have gone after Rick and Charlie, if they did what they said. So why the immunity, and total lack of interest in them, and the lost interest in Kincaid P&P, USA Coal etc.? Are we an easier target?

In any case our attorney, Oneill, believes that we should be able to listen to the conference call even without and attorney present.

This case is simply the vindictive attack by Mike Cook, (he was the lead field investigator in prosecution of Luxury Wheels the owner of the acid, for alleged improper discharge of poorly treated water) since he could not get the US EPA or US Attorney to file charges, since there was nothing wrong, different from the norm but . innovative and in the spirit of the three R's of reduce, <u>reuse</u>, and recycle as encouraged by the IL EPA at its web site, and by the US EPA. Additionally the EPA does not regulate the methods used in oil and gas production.

It is of interest that the US EPA concluded that the acid was used in the production of oil and gas therefore okay. And amazingly after this conclusion, Mike Cook conveniently got Rick and Charlie to "admit" to putting the acid down the salt water disposal well (this was impossible, see attachment), rather than the production wells, but failed to prosecute them. Why? And note they never said that they were instructed to do this by AET, or EOR.

There is a complete lack of knowledge on the use of acids in the production of oil and gas, by the AG, as well as the IL EPA. Additionally when Lori and I met with the IL EPA several years ago, their attorney said "somebody did something wrong somewhere", and when ask who, what, where, the answer was "I do not know but someone".

This material was unused, direct substitution, and used and stored as a material. It was not dumped, rather taking months to be used in a judicious manner, like a product, not a waste. The owner, generator, offered if for reuse or continued use. It simply was a product. This entire case came from Mike Cook after meetings with the US Assistant AG and AET, where he was shown to be wrong (embarrassed) and then proceeded to intimidate Rick and Charlie to lie, and pushed the IL EPA to act incorrectly. He was moved out of US EPA.

Please let me know what you think and as we stated nearly a year ago, the actions of our contractors was their choice if true, not by our direction. And keep in mind that this action is from a reuse (continued use) six years ago. This material was a pure reuse or more correctly a continued use of an acidic material, not a waste.

Thank you for your time. Arthur Clark

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No virus found in this outgoing message. Checked by AVG. Version: 7.5.549 / Virus Database: 270.8.1/1732 - Release Date: 10/18/2008 6:01 PM



14 Lakeside Ln, Denver, CO 80212 303-333-8521 Environmental Services-Hazardous Waste Management- Bird-Aircraft Strike Hazard Management

Michael D. Mankowski Office of the Attorney General Environmental Bureau 500 South Second Street Springfield, IL 62706

Muilio 11-13-07

November 5, 2007

Ro: Complaint PCB 07-95

**Dear Sir:** 

AET Environmental and EOR Energy would like to propose a settlement for the above complaints.

Complaint Regarding AET Environmental, Source Environmental, Inc. (AET/Source) The following demonstrable facts and information are offered in support of settling the complaint against AET/Source.

1. AET/Source did not ship into Illinois, transport into Illinois, store in Illinois, or in any way handle hazardous material in Illinois. AET/Source does not appear on any document showing involvement in Illinois.

2. The shipper was Luxury Wheels of Colorado, the recipient was Kincaid P&P, and USA Coal of Illinois.

In consideration of the above, therefore, AET requests the dismissal of the complaint against AET in its entirety, i.e. to be released entirely from the above referenced complaint.

### **Complaint Regarding EOR Energy**

The following demonstrable facts and information are offered in support of settling the complaint against EOR Energy.

1. EOR intended to utilize the subject material, an excellent acid with many characteristics of an acid that works extremely well in the cleaning of its wells, in its oil producing wells to increase oil production.

2. EOR tested the acid for reaction on the metals of construction that were used in the wells. The acid cleaned the metals and did not damage them. Therefore, it was

determined that the acid would not damage the well casing, well tubing, well rods, or the down hole pump.

3. EOR had hired two contractors who were experienced in oil and gas production techniques, including acid cleaning techniques, to perform the work required to accomplish the above activity, i.e. acid cleaning of the production wells. These contractors had done work for EOR for the prior two years, being paid upon receipt of their invoice for maintaining and operating the EOR oil fields.

4. EOR understood from numerous telephone conversations that the two contractors were using the acid at a moderate pace, placing it down the casings of wells, following it with 300 gallons water, then circulating the acid up the tubing and back down the casing for several hours. The hoses and fittings in photographs taken at the site are fittings for introduction of the acid into the casing, not the type necessary for introduction of the acid into the tubing. Additionally as they knew, and in fact stated, the tubing has a check valve on the pump preventing the introduction of acid into the well via the tubing, a physical impossibility.

5 EOR saw an increase in oil production after the use of the acid. Thus, EOR believed that the treatment was working.

6. EOR also understands that the two contractors told EPA something different, that they had poured some of the acid down the brine wells. This statement is demonstrably false in that the brine wells in question at that time. Galloway and Rink, were under 750 psi and 6 psi gas pressure respectively during that time. The gas pressure was on the tubing of the well and the casing was full to the top, which was necessary for the MIT test. For the acid to be added to those wells, the contractors would have had to overcome 750 psi, which was enough pressure to blow acid all over themselves. The pressure would have never allowed them to place any of the acid in those wells. In addition to the physical impossibility, they themselves would simply never have done it.

7 EOR understands that the contractors lied, but does not know why they lied. There does not seem to be any good reason for them to admit to doing something other than what they were told to do. EOR suspects that EPA Region 8 CID agent Cook, who may have been upset that his research was leading to naught, convinced them to make these statements. Most likely Agent Cook did not realize that the wells were pressurized and could never have received any liquid into them.

8. EOR understands that Agent Cook was moved to Homeland Security shortly after AET complained about his activities.

9. EOR further understands that some of the concern regarding its use of the acid surrounds the fact of whether or not the acid was such a horrible threatening hazardous chemical that no treatment storage and disposal facility would dare to handle it. See the attachment for information that addresses this concern.

10. Furthermore, the Illinois EPA sponsors a web site IMES, (Industrial Materials Exchange System http://www.epa.state.il.us/land/imes/limes-listing.pdf), which lists a

similar acid, (IM:A01/8110), as an industrial material, not a waste material. The listing is for a previously used acid, composition 50% nitric acid, 25% sulfuric (vs. phosphoric), ammonium bifluoride, and previously used for cleaning aluminum parts. In contrast the acid EOR used was not previously used, rather simply tested for usefulness, and stored.

11. When one examines the IMES (<u>http://www.epa.state.il.us/land/imes/imes-listing.pdf</u>) site, there are many hazardous materials available for use, rather than disposal, many of which would have RCRA characteristics and therefore hazardous waste if disposed, but not so if used.

12. Why does the IEPA on the one hand sponsor the reuse of used hazardous materials, particularly a nitric, sulfuric, fluoride, aluminum cleaning acid, and in this case persecute the use of unused nearly identical acid?

In consideration of the above, and the information contained in the attachments, EOR suggests the following settlement.

EOR accepts no responsibility for the actions of the two contract workers. Both were well versed in the production techniques of those fields and had worked for several years in those fields prior to this acid treatment, and had performed well cleaning with acid previously. If they performed any illegal activity, it was not with the knowledge or at the behest of EOR.

EOR will accept some responsibility for hiring contractors who clearly do not tell the truth, who are less than reliable and possibly wrongly frightened by the authority figure of an EPA agent. Any use of the acid other than the treatment of oil production wells, they did on their own volition.

Since there was no environmental harm done, the material was clearly non-RCRA, the acid was intended to be used correctly, and since there is a need for trained workers in the oil and gas industry, EOR will donate \$2,500 to a fund to better educate and train employees in the secondary recovery oil and gas wells of Illinois, a fund designated by the Illinois EPA.

Upon this monetary contribution, the complaint against EOR will be dismissed, and the EPA and EOR will agree that there will be no further action by either party.

Sincerely,

Lori DeVito

Jim Hamilton

### Attachment A

- First, when a material is "used or reused as effective substitutes for a commercially available products", the material is not a waste when used as one would use the commercial material (see 40 CFP. 261.2 (e),(ii)) Therefore the material in question was not a waste, since it was an "effective substitute" for the 15-25% hydrochloric acid injected into oil wells and used as a production technique to clean or acidize oil wells. Remember that a very large percentage of oil wells in this type of limestone formation are initially acidized with 1500 to 5000 gallons of acid in order to "open up" the oil bearing formation. And of the 40,000 plus oil wells in Illinois, many are "acid fraced" and acid treated many times in order to stimulate production. Acid treatment of oil wells is common.
- Second, the acid material if disposed of, would not carry a D003. In order for a waste to carry a D003 it MUST fit the definition as stated in 40 CFR 261.23. The statement that the material was "reacting" is not a term used in RCRA since even iron metal is "reacting" i.e. rusting, reacting with oxygen The term is 'REACTIVE" and is defined in 40 CFR 261.23. This material was NOT (1) "normally unstable". DID NOT (2) "react violently with water...", (in fact was simply diluted with water), DID NOT (3) "form potentially explosive mixtures ." (in fact quite the opposite) DID NOT (4) "when mixed with water" gives off toxic gases.... WAS NOT (5) "a cyanide of sulfide containing.....", WAS NOT (6) "canable of detonation ......". WAS NOT (7) "readily capable of detonation......at standard temperature and pressure", AND WAS NOT (8) "a forbidden explosive......", (or any other explosive). In fact the material was described in patent # 5,669,980, and the manufacturer's technical data sheet as "inherently stable". The technical data sheet mentions that when treating large metal pieces at elevated temperatures, excessive gases may be produced, and if so, remove the metal and cool or add water to quench the reaction. Simply put the material would not be D003 if it were disposed. The statement in the complaint that totes were melting is irresponsibly false, and the simplest investigation would have shown it so. To imply that the material was extremely dangerous, to the point of not being able to be handled is incorrect. This concern has no basis in reality or truth and is irresponsible. See the attachment for further information.
- Third, the material was not a waste, but there has been discussion about the 10ppm chromium: thus, some discussion about that chromium is necessary. Chrome is used as a corrosion inhibitor in the oil and gas industry, especially in oil well treatments. See for example patent # 5,690,174, #5,836,392 where chromium is a corrosion inhibitor, or a cross linker, patent # 6,225,363 B1 where chromium ion is used as a corrosion inhibitor with glycol ether solvents, # 3,986,964 where chromium sulfate is used in drilling mud, and # 4,967,838 which teaches the use of "green phosphoric acid", technical grade, which is neutralized to make potassium phosphate solution and contains "at least 10 ppm (ranging

to over 2000 ppm), chromium hexavalent" to be effective as a corrosion inhibitor. This is only a minute example of the use of chrome in the oil and gas industry as a corrosion inhibitor especially in acid treatments. Therefore the presence of 10ppm chromium in the phosphoric, nitric acid solution would be an advantage. The presence of chromium would not compromise the acid mixture for use as an oil well cleaning solution. Further, if the chromium came from a RCRA empty tank, in 2002, that material was not RCRA hazardous, therefore its mixture with the acid solution would not be mixing a RCRA material with the acid The material had never been used in any production, and so the chrome could not have come from any plating operation. The chrome may have been a part of the phosphoric acid. Simply, the origin of the chromium is not known, but its presence does not make the acid a waste and therefore not a RCRA waste, it was a product to be used to treat oil wells.

- Fourth, glycolic acid is widely sold by DOW Chemical Company as an oil well treatment chemical. This was well known to the Illinois EPA and Oil and Gas Division. The mixture contained some glycolic acid.
- Fifth, Illinois EPA sanctions, promotes, and sponsors the (re)use of hazardous materials, previously used, or off spec hazardous materials, including an acid closely analogous to the material used and subject to this action. In fact the acid that the IMES, (<u>http://www.epa.state.il.us/land/imes/imes-listing.pdf</u>), lists as IM:A01/8110 is remarkably similar in composition and use, and seems to be fine with IEPA as a product.
- Sixth. It is not true that this material was so dangerous that no TSDF would take it for disposal. When the remaining totes of the material were sent for disposal in 2005, it was approved for disposal at Waste Management of Ohio. Pollution Control Industries of Indiana, and SET of Texas where it was finally sent.
- Additionally the mixture, prior to shipment to Illinois, was tested and shown to not corrode the materials of construction of the oil wells in Illinois, and in fact it was a very good material, the phosphoric acid has been shown to be better than hydrochloric by the US DOE, the nitric acid had the potential to loosen the oil deposits as has been shown to take place, patent# 3,292,192 which teaches the use of the anhydrous nitric acid, the orange gas, and the glycolic acid is widely used to remove scale deposits.
- Thus, the material was not a waste when shipped to, stored or used in Illinois. The material was to be used as a cleaner of oil production wells which was a legitimate use of the material.

EOR believes that the testimony of two independent contractors, hired to treat the oil wells, that they dumped the acid into injection wells is false. Firstly, and demonstrably true, is that the Galloway well had 750 psi gas pressure on tubing of the well at the time they said they added acid to the well, and the casing was full to the top with water, necessary for the MIT test. So for the acid to be added to the well the contractors would have had to overcome 750 psi, enough pressure to blow acid all over the place and the contractors and never get any in the well, much less a tote of 275 gallons. They lied, but why?

## Page 1 of



Bureau of Land

# Industrial Material Exchange Service

## A Free Confidential Material Exchange Program

Eggshells are used for tile pigment...dryer lint is used as casket stuffing...fish waste is used for asphalt blending...and horror movie sets are used as a Haunted House for Halloween...

What do eggshells, fish waste, lint and creaking doors have in common? All have been reused or recycled for new uses through an unusual Illinois EPA industry-oriented program.

The creative reuse of these materials demonstrates the basic premise of the Illinois Industrial Material Exchange Service (IMES), that one company's waste can be a valuable resource material to another. Acting as an information clearinghouse, directory, and marketing facilitator for reusable industrial materials, IMES deals with waste by-products, off-spec items, hazardous and nonhazardous materials, overstock, and damaged or unwanted materials.

## **IMES Documents**

- IMES Directory
- ▶ IMES Listing Form
- LIMES Response Form

New listings available: These listings are in addition to those found in the current IMES Directory.

IMES New Listings

A survey of IMES clients shows that the program has directly fostered material transactions between companies that generated more than \$204.4 million in cost savings. More than 2494 million gallons or gallon equivalents of material have been diverted from landfill disposal in the process.

IMES can help manage an industry's waste streams when other source reduction or pollution prevention applications are not possible or practical, when on-site treatment or disposal is too expensive, or when no in-house expertise is available for on-site waste treatment.

The process can work both when waste is routinely generated with properties and volumes that are predictable, or when waste is generated on a one-time only basis.

## **How Does IMES Work?**

IMES publishes a semi-annual directory that goes to 14,000 subscribers nationwide. It lists both materials that are available and materials industries are seeking. Request forms are included in the front of each directory. To respond, or to list a material, firms can send phone or fax requests to the IMES office. Copies of the most recent IMES directory can be obtained, or firms can be added to the mailing list, by calling 217-782-0450.

After a firm responds to a listing, IMES puts the potential user in contact with the generator, with the final transaction and transportation of materials left to the companies involved. Materials listings stay in the directory for a minimum of one year, unless the listing is withdrawn. If firms prefer to list their materials confidentially; IMES will not release a company name or phone number without permission.

Focus of the IMES program is on services to industrial clients, so the program does not have direct involvement with regulatory bureaus or the Illinois EPA's compliance programs, and does not allow access to its files, or discuss client companies' needs with Agency bureaus.

## **IMES Is Readily Accessible**

http://www.epa.state.il.us/land/imes/



Each listing assumes shipping by truck is available



Available Material Listings

Acids

Acetic Acid IM:A01/9229 99.5% acetic acid, APHA color 20-30, three-tank truck loads per month, minimum one tank load, sample, lab analysis and MSDS on request. Confidential Listing

### Acetic Acid

IM:A01/9230 85-92% acetic acid. water. acrylic acid solution, three tank truck loads now, bulk, 15,000 gallons per month, minimum one tank truck load, sample, lab analysis and MSDS on request. Confidential Listing

Acetic Acid Solution M:A01/0265 Obsolete material, approximately six years old, 60-70% placial acetic acid, 30-40% water, 2,500 gallons available one time only, sample and MSDS on request. Confidential Listing

Acid Mix

IM:A01/8110

50% nitric acid, 25% sulfuric acid, 25% H<sub>2</sub>O, one pound per gallon ammonium bifluoride, from aluminum parte cleaning, <2 pH. 2,000 gallons per week, drums, sample and MSDS on request.

Nashville, AR

### **Citric Acid**

### IM:A01/0264

40.67% citric acid, water, no flashpoint, stable, 1,485 gallons in 275 gallon totes, 1,450 pounds dry USP technical grade, available one time only, sample and MSDS on request. Confidential Listing

### Electro Polish Solution

IM:A01/0168 Obsolete, electropolishing solution, used very little prior to discontinued process, phosphoric acid with sulfuric acid trace amounts of iron, 715 gallons available one time only. sample and MSDS on request. South Relait IL

Electrolyte Solution iMi:A01/2386 13% H<sub>2</sub>SO<sub>4</sub> aluminum anodizing electrolyte solution. clear, colorless liquid, contains 1% AlSO4 and small quantities of leached metals, 330 gallons now available, 1000 gallons per week, lab analysis, sample and MSDS available on request. Marrinette, WI

Ferrous Chloride Solution IM:A01/8340 Ferrous chloride solution from pickling of steel, 3-5% HCl, 10-15% Fe in H2O, Mn, Cr, Cu, Zn, and Ni. <1 pH. 10,000 gallons now, 12,000 gallons per week, sample on request. Crawfordsville, IN

#### Ferrous Chloride Solution IM:A01/8230

Ferrous chloride solution from steel pickling, 20-25% FeCl<sub>2</sub>, 11-12% Fe, 2-5% HCl, in H<sub>2</sub>O, 25,000 gallons, bulk, no amount restrictions, lab analysis on request, Hennepin, IL

### Ferrous Sulfate

IM:A01/9033 Ferrous sulfate, heptahydrate, from pickle process

for cold drawn steel wire, 19% iron, 33% sulfate. 46% water. 50.000 pounds per week, sample and lab analysis on request. Wheeling, IL

### Fluoboric Acid

IM:A01/0337 Obsolete material, 15 gallons fluoboric acid 48%, high purity material in original, unopened container, available one time only, MSDS on request. Lexington, KY

### Flux

### IM:A01/2381

Hi-grade VOC free flux, product # 1075-EX-30, purchased 6/15/01. non-flammable liquid. available one time only one fifty-five gallon drum. MSDS on request. Auburn, IL

### Hydrochloric Acid

IM:A01/8342 Hydrochlarle acid solution, 1% HCI In H<sub>2</sub>O, Mn, Cr, Ni and Zn. pH 1-2. hulk, 10,000 gallons now, 25,000 gallons per week, sample and lab analysis on request. Crawfordsville, IN

### Hydrochloric Acid

IM:A01/8287 Obsolete, technical grade, hydrochloric acid, approximately 30% HCl, unopened, 30 kg container available one time only, MSDS on request. Confidential Listing

### Mach 73

IM:A01/8217 Obsolete material, Mach 73 m, glycolic acid 50% clear amber liquid, mild odor, pH of 10% solution, fourteen gallons available one time only. MSDS on request. Eau Claire, WI

### Mixed Acid

IM:A01/2425

Sulfurio cold mixed, 30-43% H2SO4, 3-8% NO3, 49-50% H<sub>2</sub>O, 1.25-1.65 specific gravity, 3.000 gallons every two weeks, sample, lab analysis and MSDS on request, Carthage, MO

### \*Muriatic Acid

IM:A01/7107

Obsolete material, muriatic acid with slight iron contamination, 4,000 pounds available one only. no amount restrictions, MSDS available. Hartford, IL

(Continued on page 14)

\* Indicates New Listing This Issue

**IMES Page 13** 

## ART

 From:
 Mankowski, Michael [mmankowski@atg.state.il.us]

 Sent:
 Friday, October 26, 2007 10:02 AM

 To:
 ART

 Subject:
 RE: AET EOR

Art,

I just got the copies of the filed answers and Dave's appearance, so the PCB part looks good for now. If we can work out a settlement than that is all that you should have to do on the PCB end. Since that end of it is now in order, I would encourage you to write a letter with a counter offer. My management is open to the idea and I hope that we can come to an agreeable settlement.

Thanks,

Mike

Michael D. Mankowski, AAG Environmental Bureau

This message and any attachments may contain confidential/privileged information protected by the attorney-client or attorney work product privilege. If you are not the intended recipient, please notify the sender immediately and delete the original message and any attachments. Thank you.

From: ART [mailto:arthurclark@aetenvironmental.com] Sent: Friday, October 26, 2007 10:57 AM To: Mankowski, Michael Subject: AET EOR

Mike

Should I prepare an offer to settle based on our conversation? Is there something I still need to do for the PC board? Thanks for your professional attitude in this matter. Art

No virus found in this outgoing message. Checked by AVG Free Edition. Version: 7.5.503 / Virus Database: 269.15.11/1093 - Release Date: 10/25/2007 5:38 PM

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