



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Dexter R. Matthews

Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

March 24, 2010

Michael Tucker
Metro Energy Corporation
3313 Bowers Store Road
Silk Hope NC 27344

Re: Comments on Revised Waste Tire T&P Application dated March 18, 2010 [DIN1031]
Metro Energy Corp.
Chatham County, North Carolina
Proposed/Application
Doc ID No. 10159

Dear Mr. Tucker:

Below are comments resulting from a review of the above referenced document. Follow-up responses must be submitted as revisions to your application either as separate replacement pages or as an entire revised document.

1. Section 1.6: Application text is accepted.
2. Section 1.7: Application text is accepted.
3. Section 1.8: The information does not include all the information required under State Solid Waste Rule .1106(d)(7). In addition, Section 3.13 indicates that approximately 5% of the tires you collect are expected to be 'trash/junk.' The required information for the disposal point for those tires is not designated.
4. Section 1.13: Please be aware that a permit will not be issued until an agreement is reached on the financial assurance amounts. The financial assurance cost estimates in the revised application are not acceptable and do not take into account the following considerations:
 - a. Calculations do not include charges for mobilization or demobilization of contractor's equipment.
 - b. Calculations do not include any costs of manual labor for general site cleanup.
 - c. Calculations do not include transportation and disposal costs for general solid waste.
 - d. Calculations assume that tire rims are removed prior to disposal.

- e. Calculations assume that all tires are passenger car tires and do not account for truck or off-road tires.
- f. Using backhoe equipment to load tires will achieve a density of less than 100 tires per ton. Also, the application does not indicate whether the trucks are open-top or trailers, which greatly affects density.
- g. The calculations assume 4-hour round trip times to and from the disposal point. The estimates indicate 1 truck and 1 driver involved in the transportation, which would take at least 20 hours to travel to and from the disposal point not including loading and unloading times.
- h. Calculations are based on 1 backhoe operator operating 8 hours loading 5,000 tires. This estimate assumes a continuous loading rate of more than 10 tires per minute and a truck always ready for loading. Loading tires at such a high rate will decrease the number of tires per ton and will increase the number of loads required. Also, the calculations do not consider off-loading, re-loading, moving or maintaining the backhoe. The estimate used in the revised application is unrealistic.
- i. If more than 1 truck but less than 5 trucks are used to transport waste tires to disposal, the calculations do not include time costs for drivers waiting to load at the site and unload at the disposal point, and the costs for the backhoe operator waiting between returning trucks.
- j. The federally-owned Turner-Fairbank Highway Research Center, which provides research service for the Federal Highway Administration, estimates weight density for tire shreds ranging from 24 to 33 lb/cubic foot. The weight estimates below for tire shreds is based on 30 lb/cubic foot. This estimate is considered conservative since your implied intention is to also produce crumbed rubber, which would add to the weight density of the tire shreds.

Unless you provide a certified professional estimate of clean-up and closure costs, because your costs cannot be considered complete as described above, the financial assurance for your operations will be based on actual clean-up costs the Division has on record of \$200 per ton. The financial assurance requirements, based on the increased amounts of tires and shreds contained in the revised application will therefore be.

For Whole Tires:	5,000 whole tires/90 tires/ton x \$200/ton =	\$11,200
For Processed Tires:	117 cu yds x 0.4 tons/cu yd x \$200/ton =	<u>\$9,400</u>
Total for Financial Assurance:		\$20,600

*Note: The calculations for tire shreds are based on the following factors:
 30 lbs/cu ft or 810 lbs/cu yd or 0.4 tons/cu yd*

Please note that if a permit were issued for the above quantities, that you would be prohibited from exceeding either quantity at any time.

- 5. Section 2.2: State Solid Waste Rule .1106(c)(2) requires that a 50-foot buffer be maintained between all property lines and scrap tire storage areas. Tires stored in a

container must comply with the rule. The verbiage in the revised application stating that the rule does not apply since the tires will be in containers is in error. The application text must be changed and the schematics must show a 50-foot buffer between storage areas and property lines.

6. Appendix A Schematic: Item 6 of your cover letter states that ‘if no crumb rubber is collected, none will be stored ...,’ which contradicts the text in Section 1.4 that states that processed material will be sorted in products including crumb rubber. The text in Section 1.4 also is a contradiction in that the text and schematics only refer to shredding equipment, which does not produce crumbed rubber. Also, the original application showed the storage of wood chips at the site, but is not shown in the schematic nor is it addressed in your cover letter. Please clarify whether wood chips will be stored at the site.
7. If a Solid Waste Permit to Construct is issued for the site, please be aware that evidence of a stormwater permit in effect or documentation that a stormwater permit is not required must be provided before issuance of a Permit to Operate.
8. If a permit is issued for the proposed operation, State Rule .0201(d) requires the permit be issued in 2 parts: A Permit to Construct and a Permit to Operate. Before a Permit to Operate would be issued, you would be required to demonstrate: (i) the conditions of the Permit To Construct were met; (ii) ownership or right-of-way to use the property as proposed; and (iii) compliance with other permitting agencies such as the NC Stormwater Program. If those demonstrations are then made and the Permit to Operate were issued, then you would need to comply with the financial assurance requirements prior to initiating operation at the site.

Cover Letter regarding the request to store up to 1,000 tires during construction: Without engineered plans demonstrating the need, use or incorporation of whole or processed tires in the construction of the site, the request is denied.

Thank you for your efforts and cooperation in this matter. If you have questions about the above comments or the permitting process, please contact me at 919.508.8498.

Sincerely,

Geoffrey H. Little
Environmental Engineer

c: Paul Crissman, DWM
Ed Mussler, DWM

Robert Hearn, DWM
Pam Moore, DWM

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March 19, 2010

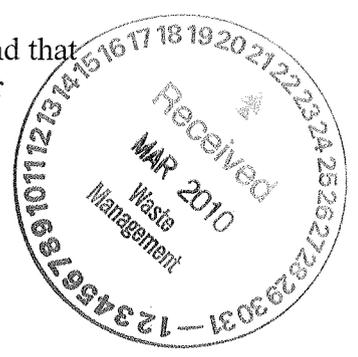
Mr. Geoffrey H. Little
Solid Waste Section, Division of Waste Management
NC DENR
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Dear Mr. Little:

Thank you for your response and comments regarding the permit application for the proposed site at 3313 Bowers Store Road, Siler City, NC. Metro Energy and DENR are partners in the environment for the good of all. Metro Energy Corp. is committed to making new things out of yesterday's trash.

I chose to submit a revised application instead of replacement pages and that revised application accompanies this letter. Please note the address for communications at this time is the administrative location at:

Metro Energy Corp.
11312 15 501, North
Suite 107-103
Chapel Hill, NC 27312



The points below relate directly to the comments in your letter dated March 16, 2010. These changes have been incorporated in the revised permit application in the package accompanying this letter.

1. Metro Energy Corp. will maintain required records as described in Section 3.15 and 3.16 of the permit application.
2. April 15, 2010.
3. Waste Management Transfer Station, Waste Treatment Road, Siler City, 27344.
4. My calculations resulted in a total for Financial Assurance = \$9,719. Please review the worksheets in Appendix C, Attachments 1 & 2 for documentation and explanation of financial assurance estimates based on criteria used by existing scrap tire processors in North Carolina and approved by NC DENR.

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