Questions for Koach Energy

Please return via email to:
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PROPOSAL BASICS

1. Exactly where would the facility be located?

2. How many tons per day of tires would be processed at the facility?

3. How many tons per day of plastics would be processed at the facility?

4. What is the total capacity of the proposed plant in tons/day of incoming feedstock?

5. What is the total capacity of the proposed plant in gallons/day of fuel produced?

6. Would Koach Energy be the long-term owner of the plant?

7. Would Koach Energy be the long-term operator of the plant?

8. Is Koach Energy a registered corporation? If so, in which state is Koach Energy incorporated? If incorporated in another state, does Koach Energy have a certificate of authority to do business in the Commonwealth of Pennsylvania? If so, under which exact name?

TECHNOLOGY DEMONSTRATION

9. Is there any facility exactly like the one proposed for Chester operating in the world at commercial scale? If so, please explain where these are located, who owns/operates them and how long they have been in operation.

10. Has plasma technology been used for tires or plastics on a commercial scale anywhere in the world?

11. Has Koach Energy ever built this same type of facility before (with the same feedstock, technology and on the same scale)? If so, please provide the name and location for each plant.

MOLDOVA FACILITY

12. Who owns the Moldova Facility?

13. Who operates the facility?

14. Does the facility take waste products commercially?

15. Is it operating non-commercially as part of another facility?

16. It is a demonstration plant?

17. What is the feedstock for the plant in Moldova?

18. How many tons/day of each of these feedstocks are processed?

19. What is the plant's capacity in tons/day of feedstock, and in gallons/day of fuel produced?

20. What is the plant's capacity factor?

21. Where, exactly, is it located?

22. Does its operation require permits from any Moldovan environmental agencies? If so, what name is it operating under?

23. When did it start commercial operation?

24. Is it currently in operation?

25. If the plant hasn't been operating continually since starting commercial operation, how many years of operational life does the plant currently have?

26. What air pollutants are tested for and how frequently?

27. Are you willing to make that air emissions testing data available?

28. Can we (or colleagues of ours in the region) get a tour of the plant?

29. How many tons/day of solid wastes are produced?

30. What is done with the solid wastes produced by the process?

31. How many tons/day of liquid wastes / effluents are produced?

32. What is done with the liquid wastes / effluents produced by the process?

POWERING THE PROPOSED FACILITY

33. How much energy is needed to power the process? Please describe the expected power sources, including amounts of electricity and the types and amounts of any fossil fuel inputs or other fuel sources.

34. Are any off-site steam sources being considered? If so, which one(s)?

AIR EMISSIONS

35. Would the facility require a DEP air pollution permit?

36. How many smokestacks would the proposed facility have?

37. Will any solid, liquid or gaseous streams produced by the plasma process be burned on-site – either by flaring or for energy production? If so, please explain which process effluents would be used and what the combustion method would be. If there are multiple sources, please explain each one.

38. If the number of smokestacks and combustion processed described in the previous two questions don't correlate, please explain in enough detail so that we can understand the process enough to have an understanding of what would come from each air emissions point source.

39. Will there be any metals or halogens in the materials being burned?

40. Will oxygen be present during any part of the plasma process and any subsequent combustion processes?

41. Please list all air pollutants for which monitored will take place and the frequency of monitoring (i.e. continuously, quarterly, annually, once at startup, never). If emissions of a pollutant will be calculated, rather than directly monitored, please denote the difference.

WASTE FEEDSTOCK

42. Which of the following feedstocks are possible to process in your proposed facility, and which are being considered? If we missed anything being considered, please spell it out in the "other" space at the bottom.

Feedstock	**Possible to Process**	**Being Considered**
Municipal Solid Waste (household and commercial trash)		
Scrap tires		
Plastics		
Sewage sludge		
Construction / Demolition Wood Waste		
Paper Mill Waste		
Other Wood Wastes		
Animal Wastes		
Electronic Wastes		
Agricultural Crop Residue		
Leaf waste and grass clippings		
Waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material		
Medical Waste / Infectious & Chemotherapeutic Wastes		
Waste Coal		
Coal		
Other fossil fuels		
Radioactive Waste		
Hazardous Waste		
Pharmaceutical Wastes		
Dredge Spoils		
Trees or Dedicated Energy Crops		
Waste Paper		
Other (please explain)		

43. How will tires be transported to the facility site? Will it all be by rail? All by truck? How many truck or train loads are expected per day?

44. Will tires be shredded on-site, or will they all be pre-shredded before being transported to the site?

45. Will any on-site shredding be done indoors, in an enclosed facility?

46. Will the facility be able to process whole tires?

47. How much storage capacity for tires will be on-site? What are the maximum and average amounts of tires (in tons) expected to be stored on site?

48. Have you considered the fact that scrap tires might be in short supply? A company is currently proposing the largest tire incineration plant in the nation in Erie, PA – to process 30 million tires/year (10% of the entire nation's scrap tire generation) – enough to affect the market of scrap tires available. Other industrial facilities in the region are also using tires for fuel, including 2-3 facilities in the Lehigh Valley (one of which just got permitted to co-fire tires). Given this competition, where will the scrap tires come from? Does Koach have any market guaranteed for its operations, or is there a chance that you'd be forced to seek out other feedstocks?

49. What types of plastics will be processed?

50. Will Koach Energy be making an effort to secure a plastics supply free of PVC?

51. Will there be a screening processes to keep out any types of plastic that are contaminated with metals or halogens? If so, what sorts of measures will be taken to prevent these contaminants from entering the process?

SOLID WASTES

52. How many tons of solid wastes will the process produce per day? Per year? How many tons per ton of feedstock coming into the plant?

53. Where will these solid wastes go? Will they be disposed of in a municipal solid waste landfill?

54. Will this solid waste be in the form of slag, ash or some other form (or forms)?

55. Which toxic substances will be tested for in the solid wastes produced?

56. How often will this testing occur?

57. What sorts of tests will be used? Will they be only leaching tests (like TCLP or SPLP) or will total content tests be used as well?

LIQUID WASTES

58. How much wastewater will be produced per day? Per year? How many gallons per ton of feedstock coming into the plant?

59. Will wastewater from the plant be discharged to the public sewer system (i.e. with toxins ending up in the DELCORA sewage sludge incinerator) or will wastewater be discharged to the Delaware River or some other medium?

60. Will wastewater be pre-treated prior to disposal?

61. Which toxic substances will be tested for in the wastewater produced?

62. How often will this testing occur?

WATER USE

63. Will the production process require water?

64. If water will be needed for the process, how much water will be required per day? per year? Per ton of feedstock? Per gallon of fuel produced?

65. Where will the water come from?

ECONOMICS

66. How much is it currently projected to cost to build this plant?

67. Will public subsidies of any sort be sought to finance or cover any cost of the plant (or to procure the fuel produced)? If so, please explain which sources of public funds are being considered?

68. Will waste supply contracts be sought from any governmental or quasi-governmental bodies? If so, will long-term supply contracts be sought? Will any contracts include "put-or-pay" clauses?

69. What price will the petroleum fuel be able to sell for without subsidies (in dollars per barrel, wholesale)?

TECHNOLOGY

70. Would the facility be using a transferred arc or non-transferred arc plasma process (or both)?

71. Please explain what temperatures will be reached throughout the process and how long the residence time will be for any gases or solid wastes at the 350-800^{o} F range. While in this temperature range, will syngas, other gases or solid wastes be in the presence of oxygen, halogens, copper, iron or zinc? What efforts will be made to minimize the residence time at this temperature range?

PROCESS INPUTS / OUTPUTS

72. In addition to any feedstocks or fuels described above, please list any other inputs to the process (acids, catalysts, etc.) and the approximate amounts needed per year.

73. In addition to petroleum product and wastes described above, what other chemicals or products will be produced by the process? Will hydrogen gas or methane be produced? What else? Please list approximate amounts produced per year and explain how these will be used or disposed of.

CHEMICAL STORAGE

74. How many storage tanks will be on-site?

75. How many will be above ground? How many below ground?

76. Please list which chemicals will be stored in each tank and what the capacity of each tank will be.

77. What are the estimated fugitive emissions of VOCs or other compounds that will leak from these storage tanks into the air per year?

78. Will chemicals be stored in transport cars on the railroad tracks?

79. Will chemicals be trucked out?

80. Will any chemical products be shipped to local oil refineries? If so, please explain which direction these shipments will take place while in Chester's borders.

81. In the case of an explosion or fire, how much liability insurance will Koach Energy carry?

82. Will liability insurance for explosions, fires, or leaks cover:

- Illness, injury, or death to workers or nearby residents, resulting from an explosion or fire?
- Replacement of damaged homes or vehicles?
- Clean-up of soil and/or groundwater contamination?
- Clean-up of Delaware River contamination?
- Damage from fires or explosions in trucks or trains transporting the fuel produced at the Koach Energy facility?
- Would injury or death of a HazMat worker be covered by the company's liability?

83. Could an explosion or fire at the plant or on the railroad tracks have any potential impact on the operations of the nearby oil refineries?

84. Will security guards be in place at all times?

85. How many HazMat teams are available in the area for an explosion and/or fire? Would the public be required to pay for HazMat responses to this facility?

LABOR

86. Is Koach Energy committed to using union labor in both construction and operation of the proposed facility?

87. How many jobs would be created during construction?

88. How many long-term jobs would be created?

89. How many of the long-term jobs require advanced degrees?

90. Will Koach commit to hiring some minimum number of its employees from local Chester residents?