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DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
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Energy, Environment, Economics (NICE³)
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October 1, 1997 through December 31, 1997

The Kansas Department of Health and Environment has been kept apprised of the on-going development of the infrared drying system by Catalytic Industrial Group. The attached technical report outlines the progress made to date. The target for installation of the commercial version appears to be on track for field testing at Lignetics, Inc., Doniphan, Missouri the last week in March, 1998.

The current schedule indicates that the project should be completed and final reports submitted by the end of the project period, September 30, 1998.

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Progress Report #3, D.O.E. NICE³ Project entitled "Energy and Waste Reduction in the Wood Fiber and Fuel Industry Utilizing a Long Wave Length Catalytic Infrared Drying System".

Report Dated: January 15, 1998

Implementation Date: April 7, 1997

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Following the testing of the Cat-Tec handling system (see Progress Report #2) dated October 23, 1997, detail design work commenced both at the Catalytic Industrial Systems (CIS) Kansas facility and at the Cat-Tec offices in Minneapolis for the mating of the heating and handling system elements of the catalytic infrared particulate dryer. A used equipment looped handling system designed to feed and recirculate the test material was procured and shipped to CIS in anticipation of the on-site testing.

Evaluation of the findings of the October test results continued into the first two weeks of November, which was approximately two weeks longer than anticipated by our proposed schedule. This analysis led our joint CIS-Cat-Tec design team to conclude that the unit to be provided to Lignetics for testing in April needed to have approximately 120 square feet of agitation bed and approximately 100 feet of infrared generation surfaces. The overall size was thus increased approximately 50% from the initial test unit described in Progress Report #2.

Final design was completed approximately ten days later than anticipated in the original proposal with shop drawings released to CIS for the heater element around December 15th rather than December 1. The agitation element drawings were released to the fabricator the 19th of December causing us to lose an estimated additional week due to the Christmas and New Year holidays. Fabrication of the Cat-Tec agitator system commenced on December

29 and is approximately 70% completed as of January 14, 1998. The agitation unit is expected to be shipped to Kansas for mating with the heating unit elements, including the insulated hood component by approximately February 1, 1998. This means we are running about 20 days behind our initial planned schedule submitted in the original proposal.

Work on the testing protocol initiated during mid November was put on hold as we re-evaluated the size changes called for as the result of our November testing review. Work is now scheduled to resume on this component of the project on January 19th and to be completed by February 6, 1998, approximately one week behind schedule. Full testing of the unit is expected to commence on February 16, 1998, with the shipment of the unit to Lignetics for field testing scheduled for the last week in March.