

**THE ECONOMIC IMPACT OF THE PROPOSED RENTECH, INC. SYNTHETIC
FUELS AND CHEMICALS PRODUCTION PROJECT ON ADAMS COUNTY,
MISSISSIPPI, THE STATE OF MISSISSIPPI, AND THE 75-MILE RADIUS OF THE
FACILITY INCLUDING PARTS OF EAST CENTRAL LOUISIANA AND WEST
CENTRAL MISSISSIPPI**

BY

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Executive Summary

This report assesses the economic impacts of a synthetic fuels and chemicals production facility project, proposed by Rentech, Inc., to be located in Adams County, Mississippi. The project involves building and operating a synthetic fuels and chemicals production facility capable of producing approximately 28,000 barrels per day (BPD) of fuels and other chemicals including Jet A Aviation fuel and naphtha, with captured carbon dioxide, and excess electricity as saleable by-products. The production process will utilize Rentech's proprietary and patented synthetic fuels technology that is an advanced, tested, and successfully demonstrated derivative of Fischer Tropsch technology. The Rentech technology allows the use of a broad range of carbon "feedstock" (i.e. inputs to the production process such as coal, lignite, and various forms of biomass) to produce synthetic fuels. In addition, the Jet A aviation fuel output from the Rentech Process is a cleaner burning fuel and is expected to find ready markets in government, military, and international applications.

Economic impact estimates in this report are based on capital investment and operating expenditure estimates provided by Rentech for three project phases, the Development Phase, the Construction Phase, and the Operations Phase. As with many projects of this magnitude, calendars for development and construction phases are somewhat flexible. The economic impact assessments presented here are based on the best calendar and expenditure estimates available at the time the analyses were carried out. To the extent that the development or construction phases might extend beyond the impact periods presented here, the economic impact assessments may be seen as conservative. Rentech's estimates for expenditures and employment were entered into the IMPLAN economic impact modeling simulation system to generate impact estimates regarding overall business activity, salaries, and new jobs in each project phase for Adams County, the State of Mississippi, and for much of west-central Mississippi and east-central Louisiana within, approximately, seventy-five miles of the proposed facility. The estimates presented reflect only the impact of expenditures in the designated geographic areas.

Development Phase expenditures (which include such activities as obtaining environmental permits, finalization of feedstock and off-take agreements, detail engineering and negotiations of construction and financing agreements) in Adams County were estimated at \$1,520,000 for calendar year 2009 and are expected to generate for Adams County \$1,917,869 in business activity and 30.5 new jobs. Although this phase is now projected to extend for three years, calendar year 2009 is the period in which the majority of the development expenses were expected to occur. These jobs are estimated to generate salaries of \$867,271 (including benefits, employment taxes, and other normal salary burdens). For the State of Mississippi, 2009 Development Phase expenditures are estimated at \$1,895,000 and are expected to generate for the State \$3,059,803 in new business activity and 40.3 new jobs. These Mississippi jobs are

expected to generate salaries of \$1,270,084 (including benefits, employment taxes, and other normal salary burdens).

Rentech's Construction Phase is expected to require three to four years. The analyses here are based on the assumption of three years. Construction Phase expenditures are estimated at \$4,500,000,000.00 including resources sourced outside of the State of Mississippi and the approximate 75-mile radius of the project. This includes estimated expenditures of \$461,456,693 within the State of Mississippi, \$103,907,7467 within Adams County, and \$220,639,0086 within the 75-mile radius. These estimates include \$30,135,000.00 in State and local taxes in Mississippi.

Rentech Construction Phase expenditures are estimated to generate over 3,411 annual jobs in the State of Mississippi. These jobs result from increased business activity due to Rentech expenditures during the construction phase including project employment and the provisions of goods and services to accommodate the needs of Rentech employees and project construction workers. These jobs are expected to be associated with annual salaries of approximately \$167,413,574 per year for a total of \$502,240,723 in salaries (including benefits, employment taxes, and related salary burdens) in Mississippi over the 3-year period. Additional economic benefits to Mississippi include increased business activity of \$656,153,517 for the 3-year period (including Rentech direct expenditures). For Adams County, Construction Phase expenditures are estimated to generate 987 full time equivalent annual jobs. These jobs are associated with estimated annual salaries of approximately \$41,148,772 in each of the three years of the Construction Phase, for a total of \$122,446,772 in salaries (including benefits, employment taxes, and related salary burdens) over the 3-year period. Added economic benefits include \$179,071,224 in increased business activity over the 3-year period (including Rentech direct expenditures). For the 75-mile radius of Adams County (including Adams County), Construction Phase expenditures are estimated to generate over 2,284 annual jobs associated with estimated annual salaries of \$93,732,808 in each of the three years of the Construction Phase, for a total of \$281,198,423 in salaries. Additional economic benefits include \$516,950,109 in increased business activity for the 3-year period.

Economic impact models of the Operations Phase were run separately, first assuming Illinois Coal would be used as feedstock, and then assuming the Mississippi lignite would be used. These estimates were generated for two periods, mid-2014 through mid-2024 and mid-2024 through mid-2054, to reflect the expiration of tax concessions in 2024. The same Rentech expenditure data were used for both periods and for both feedstock assumptions, with the exception of the added taxes to be paid after 2024. Rentech annual expenditures of \$698,528,500 in Mississippi are estimated for mid-2014 through mid-2024 and \$734,589,340 for mid-2024 through mid-2054. For Adams County, Rentech annual expenditures are estimated at \$684,004,250 and \$702,034,670 for the two periods respectively. For the 75-mile radius, Rentech expenditures are estimated at \$695,029,250 for mid-2014 through mid-2024 and \$713,059,670 for mid-2024 through mid-2054.

Assuming Illinois coal is used, the Rentech Operations Phase is expected to generate an increase in annual business activity in Mississippi of \$319,522,137, projecting to \$3,195,221,370 for the 10-year period from mid-2014 through mid-2024. During this same period, Rentech

operations expenditures are expected to generate 2,115 jobs in Mississippi, in addition to direct Rentech employees. These jobs are estimated to be associated with annual salaries of \$100,009,079 projecting to \$1,000,090,790 for the 10-year period. For the period mid-2024 through mid-2054, with Illinois coal used, Rentech expenditures in Mississippi would generate an estimated increase in annual business activity of \$363,040,461, projecting to \$10,891,213,830 over the 30-year period. Associated with this increase are 2,667.7 jobs with annual salaries of \$122,666,542, projecting to \$3,679,996,260 over the 30-year period.

With regard to Adams County, and assuming Illinois coal as feedstock, Rentech operations expenditures for the period mid-2014 through mid-2024 are estimated to generate an increase in annual business activity of \$144,477,861, projecting to \$1,444,778,610 over the 10-year period. For the same period, Rentech expenditures are estimated to generate 1,352.6 full time equivalent annual jobs with salaries totaling \$66,549,799 annually, projecting to \$665,497,990 over the 10-year period. Similarly, within the 75-mile radius of Adams County, including Adams County, business activity is expected to increase by \$449,257,457, projecting to \$4,492,574,570 over the 10-year period. Associated with this increase in business activity, it is estimated, would be 2,980.1 new jobs generating annual salaries of \$146,572,192, projecting to \$1,465,721,920 over the 10-year period.

Annual economic impacts are estimated to be higher for the period mid-2024 through mid-2054 as compared to mid-2014 through mid-2024, due to the increased taxes to be paid after 2024, as the tax agreement which allows Rentech to pay only one third of the ad valorem taxes ends ten years after production begins. For this period, and still assuming Illinois coal, it is estimated that Rentech expenditures in Mississippi would generate an increase in annual business activity of \$363,040,461, projecting to \$10,891,213,830 over the 30-year period. Associated with this increase are 2,667.7 jobs with annual salaries of \$122,666,542, projecting to \$3,679,996,260 over the 30-year period. For Adams County alone, Rentech Operations Phase spending is estimated to generate \$160,284,009 in business activity, projecting to \$4,808,520,270 over the 30-year period. Associated with this increase in business activity are 1,592.60 jobs to which are attached \$160,284,009 in annual salaries, projecting to \$4,808,520,270 over the 30-year period. Similarly, in the 75-mile radius of Adams County, Rentech Operations Phase expenditure impacts (with Illinois Coal) are estimated at \$472,721,821 in business activity, and 3,278 jobs generating annual salaries totaling \$158,530,642, projecting to \$14,181,654,630 over the 30-year period.

Comparisons of these impacts with the corresponding impacts based on the Mississippi lignite indicate that the economic impacts on the designated areas would, with one exception, be greater if Mississippi lignite were to be used. The exception is the number of jobs that would be created in the 75-mile radius of Adams County (including Adams County) in Phase 2. This reduction is offset by higher job creation in Adams County and in Mississippi.

For the State of Mississippi, it is estimated that, under the Mississippi lignite assumption, the annual business activity benefit would be \$731,411,976 and 5,057.2 full time jobs equivalent jobs would be created, generating total annual salaries of \$197,815,280, projecting to \$1,978,152,800 over the 10-year period mid-2014 through mid-2024. In Adams County, it is estimated that during the same period annual business activity benefit would be \$178,400,621

and 2,271 full time equivalent jobs would be created. These jobs would be associated with total annual salaries of \$80,191,533, projecting to \$801,915,330 in salaries over the 10-year period. In the 75-mile radius of Adams County (including Adams County), annual business activity benefit is estimated to be \$467,820,830, and 3,133.6 full time equivalent jobs would be created. These jobs would be associated with total annual salaries of \$150,985,639, projecting to \$1,509,856,390 over the 10-year period.

With regard to the mid-2024 through mid-2054 period, for the State of Mississippi, under the Mississippi lignite assumption it is estimated that the annual business activity benefit would be \$774,930,300 and 5,120.8 full time equivalent jobs would be created, generating total annual salaries of \$220,472,743, projecting to \$6,614,182,290 in added salaries over the 30-year period. For Adams County, it is estimated that during the same period the annual business activity benefit would be \$194,206,769, and 2,263.20 full time equivalent jobs would be created. These jobs would be associated with total annual salaries of \$90,115,869, projecting to \$2,703,476,070 in salaries to be paid over the 30-year period. In the 75-mile radius of Adams County (including Adams County), the annual business activity benefit is estimated to be \$491,285,194, and 2,994.8 full time equivalent jobs would be created. These jobs would be associated with total annual salaries of \$164,944,089, projecting to \$4,888,322,670 in added salaries to be paid over the 30-year period.

Based on the data provided by Rentech and the United States Government and IMPLAN data on which the analyses reported here are based, and based on the widely accepted IMPLAN input-output modeling approach to estimating economic impacts of business ventures, the proposed Rentech-Adams County facility holds substantial promise for greatly enhancing business activity and employment opportunities throughout Mississippi, Adams County and the 75-mile radius of Adams County. However, the current analyses are based on many assumptions (provided in the Appendix), and most notably on the assumption that throughout the Operations Phase demand for production output will be stable and at expected levels. We see no reason to question these assumptions. Overall, where assumptions were necessary, analyses were based on reasonable and conservative assumptions so that estimated impacts would be conservative.

The report also provides estimates of local, State and Federal taxes to be generated in each phase of the project. Considering all phases of the Project, under the assumption that Illinois coal would be used throughout the Operations Phase, it is estimated that approximately \$1,292,079,596 in taxes would be generated in Adams County, approximately \$2,911,375,707 in the 75-mile radius, and approximately \$2,199,387,401 in the State of Mississippi. Under the assumption that Mississippi lignite would be used it is estimated that \$1,402,374,042 in taxes would be generated in Adams County, \$2,925,130,930 in the 75-mile radius, and \$4,305,702,821 in the State of Mississippi.

Two important caveats should be noted. First, this study is based on projected Rentech spending in the designated geographic areas only. It does not capture the total effect of all Rentech project related spending; only the portions of spending that are expected to occur within the designated areas. This applies as well to leakages to the economic systems of the designated areas. To capture the full national impact of the proposed Rentech-Adams County, Mississippi project, additional IMPLAN modeling would be required at the national level. Although located

in Adams County, Mississippi, this is a project of national scope and the full national impact should be assessed.

The second caveat is that while the IMPLAN models capture any spin-off businesses and jobs created as a result of Rentech expenditures, given the magnitude of this project, the possibility of further potential benefits of new businesses being created and moving to the area still exists. Given the Mississippi River port facilities of Adams County, the technical nature of the project and its long-term life, and access to significant higher education and trades education facilities, the possibility that the Rentech project might act as a catalyst to further economic development, independent of Rentech, should not be overlooked. Such firms might take the form of general business support firms, or might be research and development firms drawing on the expertise associated with the facility. Expanded demand for port facilities, rail services, and highway commercial transportation associated with the input and output flows of Rentech production may be reasonably expected to lead to enhancement of those area resources over time. With enhancement of such resources, and an increasingly skilled industrial workforce resulting from the Rentech experience, Adams County, Mississippi may be expected to become an even more attractive destination for other industrial firms seeking to expand to new sites in the United States.