

Assignment #2 – Pickins Mining Case

Assigned Class 3 – Due 11:55pm on Sunday Week 5

75 Points – two page paper

Pickins Mining

Pickins Mining is a mid-sized coal mining company with 20 mines located in Ohio, West Virginia, and Kentucky. The company operates deep mines as well as strip mines. Most of the coal mined is sold under contract, with excess production sold on the spot market.

The coal mining industry, especially high-sulfur coal operations such as Pickins, has been hard-hit by environmental regulations. Recently, however, a combination of increased demand for coal and new pollution reduction technologies has led to an improved market demand for high-sulfur coal. Pickins has just been approached by Middle-Ohio Electric Company with a request to supply coal for its electric generators for the next four years. Pickins Mining does not have enough excess capacity at its existing mines to guarantee the contract. The company is considering opening a strip mine in Ohio on 5,000 acres of land purchased 10 years ago for \$5.4 million. Based on a recent appraisal, the company feels it could receive \$7.5 million on an after-tax basis if it sold the land today.

Strip mining is a process where the layers of topsoil above a coal vein are removed and the exposed coal is removed. Some time ago, the company would simply remove the coal and leave the land in an unusable condition. Changes in mining regulations now force a company to reclaim the land. That is, when the mining is completed, the land must be restored to near its original condition. The land can then be used for other purposes. As they are currently operating at full capacity, Pickins will need to purchase additional equipment, which will cost \$46 million. The equipment will be depreciated on a seven-year MACRS schedule. The contract only runs for four years. At that time the coal from the site will be entirely mined. The company feels that the equipment can be sold for 60 percent of its initial purchase price. However, Pickins plans to open another strip mine at that time and will use the equipment at the new mine.

The contract calls for the delivery of 450,000 tons of coal per year at a price of \$65 per ton. Pickins Mining feels that coal production will be 770,000 tons, 830,000 tons, 850,000 tons, and 740,000 tons, respectively, over the next four years. The excess production will be sold in the spot market at an average of \$82 per ton. Variable costs amount to \$26 per ton and fixed costs are \$3.9 million per year. The mine will require a net working capital investment of 5 percent of sales. The NWC will be built up in the year prior to the sales.

Pickins will be responsible for reclaiming the land at termination of the mining. This will occur in Year 5. The company uses an outside company for reclamation of all the company's strip mines. It is estimated the cost of reclamation will be \$5.5 million. After the land is reclaimed, the company plans to donate the land to the state for use as a public park and recreation area. This will occur in Year 6 and result in a charitable expense deduction of \$7.5 million. Pickins faces a 38 percent

tax rate and has a 12 percent required return on new strip mine projects. Assume a loss in any year will result in a tax credit.

You have been approached by the president of the company with a request to analyze the project. Calculate the **payback period, profitability index, net present value, and internal rate of return** for the new strip mine. You need to show all your calculations. Should Pickins Mining take the contract and open the mine? Explain in detail, showing calculations, so the instructor can follow your thoughts.

You may also include an Excel spreadsheet if you would like to show the calculations that way (in addition to the paper part).

Students will be graded on their ability to cite examples from the text or websites (except Wikipedia). Students are to follow the guidelines for two page papers (which means all papers will have three sections: Introduction, Analysis and Conclusion). Place the answers to the **questions in the analysis (you can number them which would help the instructor grade it)** and make certain you have all the details for the calculations so the instructor can follow your thoughts. All papers are to use APA standards and have at least three citations.

You must upload your file to Blackboard under Week 3 Assignments. Go to the Assignment, scroll down to "Attach Local File" and click Browse to select YOUR file, then hit SUBMIT.

Evaluation Criteria for: Papers			
Elements of Paper- - Individual Assignments 1, and 2, 75 points each	WD "A" 75 to 67.5 Points	Dev "B" 67.4 to 60 Points	NSW "C or lower" 59 to 52.5 Points or lower
Introduction (10%)	Provides an interesting introduction to the work. Clearly states the purpose of the work.	Provides a somewhat clear introduction to the work. Somewhat explains the three to five main points of analysis	Provides no clear direction for the paper. Does not explain the three to five main points of analysis to follow.
Analysis (50%)	Clearly and fully states the problem and the recommendation. Makes a clear recommendation for the future. Connects	Somewhat describes the problem and the recommendation. Makes an unclear recommendation. (Or	Provides no real clarity or recommendation. Does not make a clear recommendation or

	to concepts presented in the texts and class discussion.	may leave one or two of these out). And somewhat connects this to the research, and the texts.	show how this connects to the research, text.
Conclusion (20%)	Connects to the introduction in an interesting way. Is short and encompasses all of the main points in the paper.	Brings in new ideas that are not highlighted in the paper. Somewhat connects with the introduction and the analysis sections of the paper.	Brings in new ideas that are not highlighted in the paper. Does not connect with the introduction and analysis sections of the paper.
Grammar, Speech Patterns, Punctuation and APA (20%)	Clearly uses proper grammar, APA for in text citations and for all references. The paper is interesting and easy to read.	Has more than three errors in APA, grammar and or punctuation.	Has more than four errors in APA, grammar and or punctuation.

N S W = Needs Significant Work

D = Developing

WD = Well Developed