

ROLE INFORMATION FOR TWIN LAKES MINING COMPANY

Your negotiation team, consisting of members of the top management group of the Twin Lakes Mining Company, has the authority to enter into any agreement that it deems to be in the best interest of the company. Twin Lakes has several mines in northern Minnesota and Canada; the Tamarack operation is second in both "productivity" and contribution to corporate profit. Your negotiating team includes the top person from the Tamarack operation, along with others from corporate headquarters in Duluth, Minnesota.

Most of the problems that were described in the "Background Information" have existed for a long time. Officials of the company have met with city officials several times to discuss these problems. Although you agree with community concerns, you frankly think that the city has overstated the problems in order to get you to pay for public improvements. Hence you have agreed to remedy several of the most obvious concerns in the past, but have not had to incur major costs up to this point. Now that the state and federal agencies have mandated a cleanup, things have changed considerably. Some major improvements will have to be made in order to keep the Tamarack operations running.

You are committed to keep the Tamarack mine and plant open if possible, but not at all costs. You do not want to spend large sums of money to keep this operation running. Some of the newer mining operations in other areas have revealed rich deposits, but will require large investments to gain access. If the costs of continuing the Tamarack operations are too high, you could close this mine and plant and invest in other operations. You want the city to help with the improvements, especially because they will benefit the city as well as the company. In addition, everyone involved knows that keeping the Tamarack area operations running is very important for the Tamarack economy. Naturally, you would like to settle as cheaply as possible.

Several options for each of the issues have been discussed in the last few meetings between the city of Tamarack and the Twin Lakes Mining Company. Both parties have agreed on which options for each issue are the most feasible. A detailed explanation of each issue, including the available options, is provided in this confidential memorandum. In addition, a point system has been devised so that all of the issues can be rated on a common metric, to assist you in negotiating. The point system allows you to combine several interests - minimizing expenses and maximizing current and future revenues, while incorporating opportunity costs and legal considerations - into a single "currency." Each option has been assigned a point value to indicate the quality of that option to you. Within each issue, an option with a high point value is a better outcome for you than options with lower point values. Across the five issues, more important issues are assigned a higher maximum level of points than less important issues. The more total points you gain, the better the outcome is for you. Your task is to try to earn as many points as possible in this negotiation.

1. *Site of Next Mine.* There are five locations that would be profitable for you to mine, but they vary widely in their relative attractiveness. They are all projected to bring back a positive return on investment. The Allen Road Site contains the largest iron ore deposit of the five, and has by far the highest profit potential. The ore located at this site is concentrated as well as abundant, making it a very attractive site. Your company does not come across mining sites with this kind of profit potential very often. Mining the ore from this site could make the Tamarack area the most productive and profitable region in the company. The Buffalo Bridge Site, the Clearwater Lake Site, and the Devil's Pass Site, in order of desirability, are three other sites that you are interested in. These do not have ore deposits as large as the Allen Road Site, and are in more

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remote locations. Based on the testing conducted on these sights, they do not compare favorably with the Allen Road Site, but they would be profitable. The Eagle Falls Site has the lowest potential of the five sites under consideration, but it would still bring a positive return on investment. Starting up a new mine would have the added advantage of bringing production at the Tamarack plant to near full capacity, achieving further economies of scale. The company only has enough resources at its disposal to invest in one of these mines. Because the city of Tamarack either owns some of the land at potential sites, or owns land that provides access to a potential site, an agreement must be reached with the city concerning which site will be mined. The point values for these mining sites are:

- Allen Road Site 100
- Buffalo Bridge Site 40
- Clearwater Lake Site 30
- Devil's Pass Site 20
- Eagle Falls Site 0

2. *Air Quality - Road Maintenance.* Unlike several of the other issues, which are one-time expenses, this issue involves a continuing expense. The paved roads will require a far greater amount and a different kind of maintenance than the current dirt roads do. Although the mining trucks do tend to tear up the roads, you do not think it should be an ongoing cost of business to maintain roads that are used primarily by tourists, based on the number of vehicles on the road. The options are similar to those for paving the roads, although this issue is more important to you because it is an ongoing expense. If your company is going to operate in this area for an extended number of years, it is important to establish a precedent that the city takes care of the roads. The options, and their point values, follow:

City maintains all roads	80
Company maintains roads on company-owned land / City maintains other roads	60
Company maintains roads it has constructed / City maintains others	40
Company maintains all roads it currently uses / City maintains others	20
Company maintains all roads	0

3. *Air Quality - Paving Dirt Roads.* You have already agreed to make significant investments to reduce dust around the plant. The major problem with the city concerns reducing road dust by paving the dirt roads around the outskirts of the city. An increasing number of tourists are using the dirt roads that need to be paved, many of which are owned by the city. Your company has been instrumental in constructing many roads throughout the region. Several of these are now used more by tourists than by the company's trucks. Your trucks currently use most of the dirt roads around the city. There are some dirt roads, however, that you have used in the past but no longer need to use. The mining trucks obviously stir up a lot of dust because of their size, but smaller tourist vehicles vastly outnumber the mining trucks, and account for what you feel is a substantial portion of the dust. Although getting the roads paved is now a necessity for your company because of the air pollution, it will also be a nice improvement for the city, both as a practical and an aesthetic matter. All of these roads have to be paved for your company to stay in business in the Tamarack region. The options for paving the roads that have been discussed prior to this negotiation, and the point values for each option, are:

• City paves all roads	60
• Company paves roads on company-owned land / City paves other roads	46
• Company paves roads it has constructed / City paves others	32
• Company paves all roads it currently uses / City paves others	16
• Company paves all roads	0

4. *Tax Rate on Company Land.* You have been arguing with the city constantly about the tax rate for company-owned land, and feel that their rates are ridiculous. You believe the basic problem is that the rate on the company land is very similar to rates on private residential land, when in fact you argue that it should be considerably less. The city wants to increase your tax rate, as the taxes you pay represent a major portion of their revenue base. You know that the city wants to expand its tourism industry, and you suspect that they will use your tax dollars to fund this growth. This scenario is clearly unacceptable. You would ideally like to see the city reduce your tax rate by 4%, putting it in line with rates on company property in similar cities. The options on the table and their point values are:

• Reduce tax 4%	40
• Reduce tax 2%	28
• Maintain current tax	18
• Increase tax 2%	10
• Increase tax 4%	0

5. *Restoration of Consumed Mines.* Your company has met its legal obligation by filling the consumed mines and putting enough rejected ore or rock in place to decrease the likelihood of erosion. There are two further levels of restoration above the current level ("legal restoration") that are typically discussed. Partial restoration refers to planting enough vegetation to further reduce the risk of erosion and to make the land blend in more naturally with the rest of the surrounding country. In the mining industry, this is sometimes referred to as "descarring" the land. Full restoration, as the name implies, refers to planting enough vegetation to bring the land back to very near its pre-mining state. There are several consumed mines in question, some of which run along main roads, while others are further back in the country. You realize that the consumed mines are not as attractive as the surrounding area, and that this may have some indirect effect on tourism. You are trying to run a profitable business, however, and feel that meeting the requirements of the law should be sufficient. Although the city may realize increased revenues because of the prettier landscape, the only benefit accruing to the company from further restoration would be heightened goodwill in the eyes of the city, making it at best an uncertain investment. The options for restoration by the company and the associated point values are given below:

• No further restoration by company of consumed mines	20
• Company partially restores mines near tourist roads	16
• Company partially restores all mines	12
• Company fully restores mines near tourist roads / restores other mines partially	6
• Company fully restores all consumed mines	0

Your company wants to maintain its operations in the Tamarack area. However, you do not want to incur high costs in meeting the environmental cleanup demands required for continued operation. You have mining operations in other locations that are competing with the Tamarack site for company resources. There are high opportunity costs associated with money

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spent on the Tamarack operations. You want to reach the highest quality outcome possible. Your objective for this negotiation is to try to earn as many points as you can.

Because there are opportunity costs associated with the money that may be allocated by your company in this negotiation, and because the city has been reluctant to help the company in the past, you have decided that you need to reach an agreement that yields at least 132 points, or you will break off negotiations and invest in other operations. An outcome of less than 132 points would indicate a poor overall investment, and the company could achieve higher returns from other investments. Of course, this number represents a minimum for you, and you certainly hope to surpass this number. You have to gain 132 points or more from the final agreement or you will not settle with the city. The final settlement must include an agreement on one option for each of the five issues. If this does not occur, your company will shut down its Tamarack operations.

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TWIN LAKES MINING COMPANY – CONFIDENTIAL PAYOFF SCHEDULE

Issues:	Points:
<i>Site of next mine:</i>	
Allen Road Site	100
Buffalo Bridge Site	40
Clearwater Lake Site	30
Devil's Pass Site	20
Eagle Falls Site	0
 <i>Air quality - Road maintenance:</i>	
City maintains all roads	80
Company maintains roads on company-owned land / City maintains others	60
Company maintains roads it has constructed / City maintains others	40
Company maintains all roads it currently uses / City maintains others	20
Company maintains all roads	0
 <i>Air quality - Paving dirt roads:</i>	
City paves all roads	60
Company paves roads on company-owned land / City paves other roads	46
Company paves roads it has constructed / City paves others	32
Company paves all roads it currently uses / City paves others	16
Company paves all roads	0
 <i>Tax rate on company land:</i>	
Reduce tax 4%	40
Reduce tax 2%	28
Maintain current tax	18
Increase tax 2%	10
Increase tax 4%	0
 <i>Restoration of consumed mines:</i>	
No further restoration by company of consumed mines	20
Company partially restores mines near tourist roads	16
Company partially restores all mines	12
Company fully restores mines near tourist roads /restores other mines partially	6
Company fully restores all consumed mines	0

DO NOT LET THE OTHER PARTY SEE THIS SHEET AT ANY TIME!

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