

# [Agro-chem, inc. essay sample](https://assignbuster.com/agro-chem-inc-essay-sample/)

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Agro-Chem, Inc. is a regional producer of agricultural chemicals based in Houston Texas that needs help making a lease versus purchase decision. By understanding the material presented, we will be able to come to a decision. However, after reviewing the information presented, there are a few problems that need to be investigated before finalizing our recommendation. Agro-Chem, Inc. chose to go with the financial manager’s idea of using a discount rate of 14% (average risk) to figure out the present value costs of leasing and purchasing even though the assistant treasure suggested a 12% (low risk) discount rate. Agro-Chem, Inc. brought in the company’s CPA to help settle the debate but this only led to further confusion and disagreement concerning the appropriate discount rate which concerns us and should be taken into consideration. In addition it concerns us that the salvage value is unclear for the end of the fourth year. The probabilities of the equipment’s residual values, which are pretty extreme, are 0. 25 which concludes that the situation could vary greatly. Another problem is that Lonestar’s executives think that the equipment’s residual value will be larger than expected as a result of possible expansion. This is a risk factor that has to be analyzed because relocating will affect the final decision. Due to these issues, we have come up with solutions to fix these problems as well as a final decision concerning the lease versus purchase decision.

Background Information:   
To prevent the use of certain fertilizers and pesticides that do not meet safety standards, Texas officials have proposed new regulations. The chemicals just stated were banned because they were considered a threat to Texas’ aquifers. Due to this ban and new standards, Agro-Chem, Inc. created a new pesticide which needs equipment to start production. The IRR for the project has low risk of 25% so it would use a 12% after tax cost of capital as mentioned in the problem statement. The main decision is whether or not Agro-Chem, Inc. should lease or purchase the equipment. Since Agro-Chem, Inc. is planning on relocating after the current lease is up, the equipment is not expected to be used for more than four years even though its expected life is eight years. Because of this, the market value is zero and by the end of the four years the equipment value will be above the stated price. If Agro-Chem, Inc. decides to buy, they will use marketable securities funds to pay cash for the new equipment. If not, Lonestar will purchase and lease the equipment for four years for $475, 000 per year. If Agro-Chem, Inc. purchases the equipment, Lonestar will lend $1, 500, 000 earning 12% interest before taxes. Our job is to analyze the material and come up with a final decision of whether the equipment should be leased or purchased.

Description of Alternatives:   
Agro-Chem Inc has 2 possible scenarios that they must consider. One if to lease the equipment and the other is to purchase the equipment. The risk of the project should not be much of a factor here because of its generally accepted low risk. When purchasing the equipment you must take the initial $1, 500, 000 needed to buy the equipment plus the $75, 000 per year that you would need to pay for the service contract into consideration. If Agro-Chem did elect to buy they would pay for the equipment by liquidating securities and paying cash instead of getting financed at the same rate as their usual 3-5 year loans. If they decided to lease then the $475, 000 annual lease payment, which includes the service contract, would be taken into consideration. If they did lease then LoneStar would buy the equipment and use it as an alternative to lending. Therefore, if LoneStar did not write the lease then they would lend out the 1, 500, 000 and earn 12% before taxes. There are then 3 different scenarios that also must be considered. These are the inclusion of the cancellation clause, the operating vs. capital lease, and the possibility of the company not relocating after 4 years.