

# The Sagardian Brothers Farm

Located forty miles west of Fresno, CA, The Sagardia Brothers Farm covers 150 acres of rolling hills. These beautiful hills are lined with rows of almond trees. However, the landscape created irrigation problems for Sagardia Brothers Farms – that is, until Valley Acid, Inc. of Stratford, CA offered an alternative.

## The Situation

Several issues were hampering the growth of the almond trees. The pH levels in the water were too high and there was an issue of bad water penetration. Previously, Sagardia Brothers Farms used a chlorine pump to keep the pipes clean and prevent algae buildup. However, chlorine is bad for the water, and toxic for the trees. Additionally, the water ran off the hills and onto the roadways. Even though micro sprinklers were used, there was still run-off. This was due to high bicarbonates in the water, not allowing for good penetration into the soil. Since water levels are monitored in California, farmers are allowed a certain amount of water per year. When that level is reached, the districts shut off the water supply.

## The Grundfos Solution

After the 2007 almond harvest was completed, David Rose, Manager of Valley Acid, Inc., suggested the Grundfos DME dosing pump as part of their package unit to solve the pH level issue. In addition to the DME pump, they installed an enclosure for the pump, and a tank. On this particular unit, they also installed solar panels. The solar panels were needed to provide power to the pump, which was also an energysaving option. After David took a sample of the pH levels in the field, which averaged about 8.5, he set the Grundfos DME pump to dose just the right amount of acid to bring the pH levels down to 6.5. The DME also assists with taking bicarbonates out of the water, allowing for better water penetration.

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TOPIC:

The Sagardian Brothers Farm

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LOCATION:

USA

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COMPANY:

The Sagardia Brothers Farm

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### The Outcome

With the demand for lower water pH and better water penetration, Valley Acid solved the problems for Sagardia Brothers Farms. By installing this system, the amount of water used was lowered, saving them both water and money. Sagardia Brothers Farms monitor their water usage monthly, and the use of the Grundfos system has helped to regulate water usage. “Although we do weekly service checks of the pumps, the Grundfos DME is totally maintenance-free and easy to use.” said David Rose, Manager of Valley Acid, Inc. “The guess-work is taken out of it because I can put in the exact amount of chemical I need, resulting in a better mix of acid at the point of injection. There are no calculations and no trial and error. They are so accurate and reliable – we love them!” Now, the rolling hills of almond-lined trees can take in the water and penetrate the land efficiently. With the DME pump, the lower pH levels now help to ensure a hearty almond harvest in August.