



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Daniela T. Riedelsheimer	Project Number J0926
Project Title Comparing the Contamination Rate and Turbidity Level of Different Wood Ashes in Water	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my science project is to compare the contamination rate and turbidity level of different wood ashes in the water. I want to determine what type of pollutants would cause more of an environmental hazard at a quicker rate than others. Out of all the wood ashes that I'm comparing, the oak ash will contaminate the water the quickest. After 24 hours the oak wood will have the highest amount of turbidity.</p> <p>Methods/Materials I used five different types of wood to conduct this experiment. I put a measured amount of wood ash on the surface of water in the cylinder and timed how long it would take to sink to the bottom. To measure the turbidity of the ash in the water, I used three cups for each type of ash and poured each ash in the cups and stirred the ash in the cups. I waited over a 24 hour period and then measured the turbidity level with a flashlight shining through the cup and measured the distance of light passing through the dirty water on to a piece of paper.</p> <p>Results The oak ash took the longest amount of time at 4 minutes and 7 seconds. The almond ash took the least amount of time at 7 seconds.</p> <p>My investigation on the turbidity level of wood ashes over a 24 hour period showed that the ash that had the highest level of turbidity was birch. The ash that showed the least amount of turbidity was pine.</p> <p>Conclusions/Discussion In conclusion I learned that density of wood is a factor along with how hot the wood burns. I noticed that out of all the ash that was burned, oak ash was very fine and powdery. I concluded that perhaps oak wood burned very hot. Perhaps that was why the oak ash took so long to drop down to the bottom of the cylinder. We must be concerned about our water being contaminated by carbon, chemicals, oils etc. If our water is contaminated, this is a threat to plant and animal life, including our own life.</p>	
Summary Statement To determine what types of pollutants would cause more of an environmental hazard at a quicker rate than others.	
Help Received My father burnt the wood for me and my mother helped type the report.	