



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Ellie I. Paul	Project Number J0916
Project Title Which Natural Material Filters Polluted Water Best?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To successfully reach my goal, I had to confirm which of selected natural materials filtered contaminated water the best.</p> <p>Methods/Materials I took the approach to pollute water with gasoline, transmission fluid and motor oil. I poured a measured amount through five halved two-liter bottles that were individually filled with sand, backyard dirt, potting soil, gravel, and leaves. I tested the polluted water both before and after filtering for pH, chlorine, alkalinity, cyanuric acid level, and turbidity.</p> <p>Results The outcome of all this was not truly what I expected! The potting soil resulted with the prime results, suggesting that potting soil may be a preferable and eco-friendly ground cover for places where urban runoff may infiltrate into the earth.</p> <p>Conclusions/Discussion Conclusively, my hypothesis that the sand would have the best results was almost wholly wrong! It came out with some of the most catastrophic numbers, and the water that had been poured through it was cloudy, sandy, and had sand floating around in it.</p>	
Summary Statement Petroleum product pollutants are filtered through sand, backyard dirt, potting soil, gravel, and leaves.	
Help Received Dad took pictures, helped measure pollutants, pour polluted water, and advised.	