KENTUCKY YMCA YOUTH ASSOCIATION
**KENTUCKY UNITED NATIONS ASSEMBLY**
# United Nations Proposal

**Proposal # 29**

**Proposed by Netherlands**

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**School:** Academy of Louisville

**City:** Louisville

**Committee: H**

**Action on Proposal**

____ ☐ Passed ____ ☐ Defeated

An act to build water purification systems using recycled compact disks to make sewage water drinkable for countries without access to clean water

**Be it hereby enacted by the General Assembly of the United Nations**

Justification Clause: 3.4 million people die each year from water-related diseases. That is almost three times Louisville's entire population. These numbers add up to approximately 30,000 children dying every day. We aim to aid countries without clean water by mass-producing our prototype system. Our system can provide clean water with only a zinc oxide-coated CD, a UV light source, and a solar panel. Zinc oxide nanorods, when under UV light, grow on your typical CD, like the millions already produced for music and data storage. When water is slowly dripped on a spinning CD, zinc oxide nanorods filter out bacteria by trapping and killing them. The system can filter 7.03 gallons of water in just one hour, which is the equivalent daily need for up to fourteen people. The disks are durable and able to spin quickly. With such a cheap and effective method at hand, there is no excuse for allowing anyone else to die from lack of access to clean water.

Section 1: The Netherlands will fund the research and development with supervision and inspections provided by the United Nations Department of Sustainable Development, Human Settlements and Energy (UNDSDHSE).

Section 2: The only expense for a system will be the solar panel that powers a UV light and the CD spinner because everything else is donated, recycled, or readily available as natural resources. The cost per system would be approximately $220, including a $180 solar panel which can last up to 40 years. A $20 UV black light would provide the most efficient source of light, but the sun could be used as an alternate source if needed. Finally, the system requires a $20 CD spinner encased in a protective shell and shock-absorbing foam.

Section 3: While the United States' household energy bill averages $169 per month, the majority of the cost of providing sanitary water for approximately 168 people each day is a one-time cost for the solar panel followed by minor replacement costs of UV bulbs and CD spinners. After the initial cost of $220, monthly maintenance of the system would range from $20 to $40 per month.

Section 4: Production of systems will start directly following UN approval with the first systems in operation by June 2014. Because all parts of the system are readily available, production and delivery can begin immediately.