

Environmental innovation. A wastewater treatment in schools.

นำเสนอเมื่อ : 16 ต.ค. 2552

Innovation, environmental water treatment machines in schools.

"The work of Mr. Sup degree Osda high school students information about Integration Dis a 6 year school honor Princess Srinakarin Et invented" innovation environment ".

Sup brother Degree Identify projects that piece. Due to see their water and waste water disposal in schools arising from the use. Canon's kitchen and hall boarder. The daily volumes. Be left to the sewer. Water to the school. Causing water and. Affect the environment. There are ideas to solve the problem. By finding ways to bring these wastewater treatment water to change water into the well. Use the other again.

Then sit back thinking ways. Which to study the science classroom would be to try filtering water. The use of natural materials such as sand, charcoal, carbon materials as stone and gravel to help filter waste from the water. Is thought to be the movement of these devices and artificial wastewater treatment in a school.

When the concept has been designed and prepared a set wastewater. And water delivery system to automatically change the water as well water through the system. Filters trap fat using natural materials. Sedimentation and biological treatment. (Microbial substances EMC), which will help make water cleaner and smell down.

For major equipment to manufacture treatment devices. And water delivery system consists of automatic water pump of a switch 2 of 2 Loklai set bail leaves 1 medium large steel box, 6 cards 1 x 1 inch 3 lines of PVC pipe 4 shares 3 P line pipe joints. V 15 C of the wires, corrugated plastic sheets Gabriele coconut charcoal sand pebble wall pipe clog water valve microbial substances EMC. Cable sheaths, hoses, fire some whites.

The invention is a method that is not much trouble. And materials used are easily available. The first step to cut the steel box and connected similar to a base of the stairs. For the water tank to drop. When a base structure would be finished aluminum cylinder wall 5 cards to cut waste. And drilling under the tank to the middle of PVC pipe size to 4 per share in a sewer. Then directly penetrate the right side of the tank leaves the tank next 2 to 3 cards left in the tank leaves 4 and leaves at 3 to 6 leaves the tank on the penetration of the tank to pump water into the pump.

Followed by a PVC pipe cut to the lengths 155, 110, 70, 50 and 30 cm respectively, then with water valve. And top with the drill hole at the bottom of it and then leaves at 2, 3, 4 and 5, respectively, the height of the pipe. The bottom end of the pipe connection between the tank units 2, 3, 4, 5 to be connected to a pipeline length of 150 cm water pipes to bring water back to water if the new filter. not clean enough.

Then the switch to the Loklai together in any area of the tank units 1 and 6 and leaves at the end of the automatic switch to pump water into two separate parts. Is that the automatic switch to

pump waste water clarifier. And automatically switch the pump well water clarifier.

And finally creating a package EMC automatically. The pipeline to the EMC ditch water tank of the final application. When the water main using a computer to work for EMC mixed water.

The operation of the machine is. Water used to flow together to the water pipeline. To the filter tank to the machine. Then the water will flow through the filter layer 4 by the first floor will filter and trap fat garbage that comes with water. The use of coconut fiber layer 2, 3 and 4 will be gravel and sand, charcoal resolution, respectively. The water will flow from the tank to tank fire to capture fat.

When water flows to the treatment tank trap fat. Will flow through the pipe hole for water droplets to water filtration tanks to increase. Oxygen to water. For this filter tank is 2 layer by layer 1 to layer 2, is a stone panel detail. The water from the filter in this class will flow into the tank to the filter layer. Tier 3 is the filter tank, which water flows to the floor, it will flow by pipe to the sedimentation tank. To dust the remaining fraction is silt. And water from this tank. Will flow into the tank last. EMC is a combination tank and water delivery by water flowing into the tank to the final application to switch the functionality of the system to send e-M. If hot water. EMC will be down more tanks. If water pressure slowly by. System will be sent EMC has slowed. The EMC will flow into the pipe leaves the final tank of water to mix with water.

Then all the water will flow sedimentation tank to send water down the system automatically. Live performance Loklai switch. The higher the water level is one machine will pump. In contrast, when the water level down to the pump will stop itself. The water will flow to pump out the water pipeline to be used to benefit different.

All the details of Mr. Sup degree of innovation, information about Integration Osda a high school student Dis year 6 school honor King Srinakarin Et invented "innovation environment".