Match the stage of treatment with its description by placing the letter of the definition in the space

**Water Treatment**

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| \_\_\_\_\_ Ozone | **B)** The first step in the treatment process is removing water from Lake Ontario. The pipe is big enough to drive an SUV through. The pipe runs about 2km out into Lake Ontario |
| \_\_\_\_\_ BACC Biologically Activated Carbon | **J)** Clean, safe and reliable |
| \_\_\_\_\_ Membrane Filtration | **A)** Process of water treatment - Ozone, Biologically Activated Carbon, Membrane Filtration and UV |
| \_\_\_\_\_ Raw Intake Pipe | **C)** \_\_\_\_\_is used to disinfect the water and also kills the bacteria and breaks down large particles. |
| \_\_\_\_\_ UV Light | **F)** During this stage, small particles and microorganisms are removed by ultra-filtration |
| \_\_\_\_\_Drinking water must be kept… | **H)** Controls mussels and provides primary disinfection. We add this to our drinking water to make sure that water stays clean as it travels through pipes to get to your home. |
| \_\_\_\_\_ OBM2 | **D)** Water is filtered by gravity through a carbon bed with active biological growth to remove organic material |
| \_\_\_\_\_ Chlorination | **E)** \_\_\_\_\_is where filtered water passes through a lighting unit which uses the \_\_\_\_\_ rays to inactivate microorganisms like bacteria, so they can’t make people sick |
| \_\_\_\_\_ Fluoride | **G)** Water is sampled from various stages of the treatment process to get tested 4 times a day, for over 150 parameters and sent to an independent laboratory for testing. These laboratories must be certified by the Ministry of Environment. |
| \_\_\_\_\_ Lab Testing | **I)** We also add a small amount of \_\_\_\_\_to our drinking water to help keep our teeth strong and healthy. |

Match the stage of treatment with its description by placing the letter of the definition in the space

**Wastewater Treatment**

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| \_\_\_\_\_Secondary Clarifiers | **B)** Removes materials that could damage or clog equipment, such as garbage, rags, dental floss, food, wipes, grit |
| \_\_\_\_\_ Biosolids | **F)** \_\_\_\_\_ (Sodium Hypochlorite) is added to the secondary clarifier to kill any remaining bacteria. \_\_\_\_\_ (Sodium Bisulphite) gets added after to remove the chlorine in the water, since water with chlorine in it cannot be sent to Lake Ontario. |
| \_\_\_\_\_ Chlorination & Dechlorination | **J)** The treated water is now discharged into Lake Ontario through a pipe extending 1.5km offshore. The pipe lays 70m below the surface of water |
| \_\_\_\_\_ Primary Settling Tanks | **G)** Stabilized sludge is referred to as \_\_\_\_\_ |
| \_\_\_\_\_ Aeration Tanks | **I)** The ash slurry produced from the incineration process is pumped to \_\_\_\_\_ for onsite storage |
| \_\_\_\_\_ Final Outfall | **A)** Is made up of sanitary sewage. All the water that gets poured down the drains at homes, schools, and businesses in Peel eventually end up at our wastewater treatment plants. |
| \_\_\_\_\_ Headworks | **H)** Is where all the sludge gets heated, mixed in an oxygen-free tank. Sludge is mixed and heated to 35-37 degrees in the digesters.  Digester gas that is generated is collected and used as fuel to power the facility. |
| \_\_\_\_\_ Municipal Waste | **C)** Are large tanks where sludge settles and sinks to the bottom and scum (oils, grease) floats to the top. The sludge and scum are then pumped to the biosolids facility for processing. |
| \_\_\_\_\_ Anaerobic Digestion | **D)** During this stage, the remaining water (effluent) flows by gravity to the \_\_\_\_\_ tanks. Oxygen is pumped into the tank which allows good bacteria to live and grow. The good bacteria eat the waste. |
| \_\_\_\_\_ Ash Lagoons | **E)** Microorganisms sink to the bottom of the tank and are removed. The wastewater is now very clear at this point where the water flows over weirs. |