

Wastewater Treatment Overview

Name _____

<http://www.indy.gov/eGov/City/DPW/Environment/Wastewater/Pages/home.aspx>

1. How many treatment plants does Indianapolis have?
2. What company runs Indianapolis' water treatment facilities?
3. We are going to the Belmont treatment plant. What is the flow capacity (per day) of this facility?
4. How much water do the facilities treat each year combined?
5. Describe the collection system for Indianapolis.
6. How many Marion County properties have private septic systems? How is the city addressing this?

<http://www.indy.gov/eGov/City/DPW/Environment/Wastewater/Pages/united-water.aspx>

7. How many residents does the City of Indianapolis-United Water Partnership serve? How many businesses?
8. What are the city's responsibilities? What are United Water's responsibilities?

How Wastewater Treatment Works...The Basics

Intro

1. What is the purpose of primary treatment?
2. What is the purpose of secondary treatment?

Primary Treatment

3. Describe what each part of primary treatment is designed to remove.

screen	
grit chamber	
sedimentation tank	
Pumps	

Secondary Treatment

4. What is the goal of secondary treatment?
5. Trickling filter and activated sludge are both processes used to move the effluent from sedimentation tanks to another facility. Describe how a trickling filter works.
6. What is the benefit of the activated sludge process?
7. After sewage leaves the primary treatment tanks, it is pumped into an aeration tank. What is it mixed with then? Why?
8. What happens to the partially treated sewage after it leaves the aeration tank?
9. What is done during the disinfecting process?

Other Treatment Options

10. Describe the advanced waste treatment techniques that are in use or under development.

Blue Plains Virtual Tour

<http://www.dcwasa.com/about/virtualtour/index.html>

Process	Materials Used	Pollutants Removed	Effect
Preliminary			
Primary			
Secondary			
Nitrification/ Denitrification			
Filtration and Disinfection			