


Construction in Photos

Aerobic Digester 2017

Water Resource Recovery Department
Village of Ashville
Ashville's Water Resource Recovery Facility
Part A - Job No: 60440011

Presentation Available on Line at:
www.ashvilleohio.gov



Ashville's WRRF Project

Vision Statement

Remembering our rural heritage, Ashville will be a vibrant and friendly community, offering an enhanced quality of life achieved through planning, progress and collaboration.

It will be a welcoming place where people want to live and businesses prosper.

Ashville's WRRF Project

Construction Aerial Photo

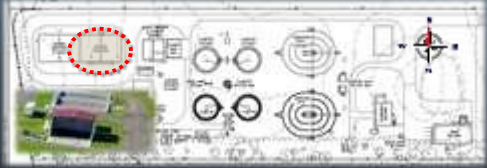
From November 2016, April, May & November 2017



Ashville's WRRF Project

Construction in Photos

An aerobic digester is a biological wastewater treatment. Once sediments and substances such as oil are removed from wastewater in this treatment stage, aerobic treatments are used to break down organic matter through the use of oxygen. Aerobic biological processes use natural microbial colonies and molecular oxygen to decompose organic substances in the wastewater. The microbes feed on undesired biological substances in the water, creating aggregates or "flocks" of organic substances and microorganisms that settle to the bottom of the container. This sludge is stable and can be disposed of easily. Aerobic treatment is part of a multistage water treatment process.



Aerobic Digesters

Ashville's WRRF Project

Construction in Photos



- September 7, 2017
- Crew working on the last sections of aluminum handrail at the Aerobic Digester as another crew works on moving the pile of topsoil.

Ashville's WRRF Project

Construction in Photos



- August 10, 2017
- Crew continue to install the Aluminum stair and handrail platform on the South end of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- August 9, 2017
- Crew installing the Aluminum stair and grating platform on the South end of the Aerobic Digester tanks.

Ashville's WRRF Project

Construction in Photos



- August 9, 2017
- One crew along with another crew performing an operational check on the Aerobic Digester Sludge Pumps.

Ashville's WRRF Project

Construction in Photos



- August 8, 2017
- The East tank Air Diffusers in operation as the crew runs a 4-hour operational testing on one of the two Aerobic Digester Blowers.

Ashville's WRRF Project

Construction in Photos



- August 8, 2017
- Crew starting to install the Access Platforms on the South end of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- August 8, 2017
- Crew installed the Air Diffusers in the Post Air tank.

Ashville's WRRF Project

Construction in Photos



- August 7, 2017
- Crew installing the Air Diffusers in the West tank of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- August 7, 2017
- Crew wiring the Aerobic Digester sludge pumps.

Ashville's WRRF Project

Construction in Photos



- May 11, 2017
- Crew starting to work on the 4" DI piping for the Aerobic Digester Sludge Pumps.

Ashville's WRRF Project

Construction in Photos



- May 23, 2017
- Crew grinding to roughen the concrete floor of the Aerobic Digester for the installation of the five inches thick concrete structural support slab.

Ashville's WRRF Project

Construction in Photos



- May 24, 2017
- Crew has finished grinding the concrete floor in the East half of the Aerobic Digester for concrete structural support slab.

Ashville's WRRF Project

Construction in Photos



- May 31, 2017
- Crew installing rebar for the 5 inches thick Structural Support Slab in the East half of the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 1, 2017
- Crew poured 42 yards of 4500 psi w/air concrete for the 5 inches thick Structural Support Slab in the East half of the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 5, 2017
- Crew pouring the 54 yards of 4500 psi w/air concrete for the 5" structural support slab in the East half of the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 6, 2017
- Crew pouring 54 yards of 3000 psi grout on the floor of the East half of the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 7, 2017
- Crew finishing the 55 yard grout pour on the floor of the West half of the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 16, 2017
- Crew backfilling and compacting soil between the Aerobic Digester and the Solids Handling Building.

Ashville's WRRF Project

Construction in Photos



- June 21, 2017
- Crew installing the Aerzen Blowers for the Aerobic Digester.

Ashville's WRRF Project

Construction in Photos



- June 26, 2017
- Crew working on installing the sump pump in the Aerobic Digester Sludge Valve Vault.

Ashville's WRRF Project

Construction in Photos



- June 30, 2017
- Crew installing the pump base and discharging piping for the Sludge pumps in the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- July 3, 2017
- Crew installing the 6" telescoping valve and DI piping for the East half of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- July 5, 2017
- Crew has completed installing the 6" telescoping valve in the East half and are now working on the valve in the West half of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- July 12, 2017
- Crew has installed the first 20 ft. section of SCH-80 PVC discharge piping from the Scum Pump Station to the Aerobic Digesters.

Ashville's WRRF Project

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- July 13, 2017
- Crew installing the 2" SCH-80 PVC discharge piping from the Scum Pump Station to the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- July 14, 2017
- Crew continuing to work with Crew on installing the 2" SCH-80 PVC discharge piping from the Scum Pump Station to the Aerobic Digesters.

Ashville's WRRF Project 

Construction in Photos



- July 31, 2017
- Crew installing the aluminum grating platform for the Aerobic Digester sludge pumps.

Ashville's WRRF Project 

Construction in Photos



- August 1, 2017
- Crew working on the grating platform and air piping at the Aerobic Digesters.

Ashville's WRRF Project 

Construction in Photos



- August 2, 2017
- Crew getting ready to start installing the Air Diffusers in the Aerobic Digesters.

Ashville's WRRF Project 

Construction in Photos



- August 3, 2017
- Crew installing the Air Diffusers in the Aerobic Digesters.

Ashville's WRRF Project 

Construction in Photos



- August 3, 2017
- Crew wiring the motors and control panels of the Aerobic Digester Blowers.

Ashville's WRRF Project 

Construction in Photos



- August 4, 2017
- Crew has completed installing the Air Diffusers in the East tank of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- August 7, 2017
- Crew installing the Air Diffusers in the West tank of the Aerobic Digesters.

Ashville's WRRF Project

Construction in Photos



- August 7, 2017
- Crew wiring the Aerobic Digester sludge pumps.

Ashville's WRRF Project

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- August 8, 2017
- Crew installed the Air Diffusers in the Post Air tank.

Ashville's WRRF Project

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- August 8, 2017
- Crew starting to install the Access Platforms on the South end of the Aerobic Digesters.

Ashville's WRRF Project

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- August 8, 2017
- The East tank Air Diffusers in operation as the technician runs a 4-hour operational testing on one of the two Aerobic Digester Blowers.

Ashville's WRRF Project

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- August 9, 2017
- One crew along with another performing an operational check on the Aerobic Digester Sludge Pumps.

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- August 9, 2017
- Crew installing the Aluminum stair and grating platform on the South end of the Aerobic Digester tanks.

Ashville's Water Resource Recover Facility Project Planning Timeline 2015 - 2017

3 1/2 Year or 42 Months

WRRF Plan Implementation

a. 9 months submit detailed design plan (d) and a complete and approvable Permit to Install (PTI) application for the new WWTP, an application for an NPDES permit, and an anti-degradation addendum.

- Correct any deficiencies within 30 days of notification by letter from Ohio EPA
- b. 16 months commence construction of the new WWTP in accordance with the approved PTI
- Within 7 days of commencing construction notify the CDO
- c. 40 months of the effective date of these Orders, Respondent shall complete construction of the new WWTP in accordance with the approved PTI
- Within 7 days of completing construction notify the CDO
- b. 60 days of completion of construction of the new WWTP, the WWTP shall attain operational level and shall meet the final effluent limitations in Respondent's NPDES permit.
- Within 7 days of attain operational level and meet final effluent limitations notify the CDO

Timeline Begins June 16, 2014

- June 2014: Design B PTI Submitted
- June 2015: Design B PTI Submitted
- March 4, 2015: Design B PTI Submitted
- March 21, 2016: Part A Construction Begins
- June 2016: Part A Construction Begins
- January 2, 2017: Part B Construction Begins
- January 2017: Part B Construction Begins
- September 2017: Construction Completed
- September 16, 2017: Construction Completed
- November 15, 2017: Plant Opens





THANK YOU AECOM, FIELDS, AND PETERSON

ASHVILLE
Vision Statement