

RP Constructors Overhauls Railway System for World's Largest Gelatin Manufacturer

When the world's largest gelatin manufacturer needed its entire railway system reconstructed, RP Constructors stepped up to successfully complete the job, while minimizing downtime. Gelita USA Inc. contracted RP Constructors to overhaul the entire system and collaborate with another firm to get the job done. The project was a starting point for a long-term working partnership between Gelita, RP Constructors and CEC, RP Constructors' in-house engineering firm.

In 2017, Gelita USA Inc. retained RP Constructors/CEC for an analysis of its existing rail system, comprising more than 3,000 feet of linear track, along with reconstructing all rail at the facility. Gelita's manufacturing facility is in an area with an existing infrastructure and the reliable availability of raw materials. An updated railway system helps the company capitalize on this prime location.

RP Constructors and CEC worked in a design-build capacity to develop staging plans that allowed the work to continue, without impacting daily operations. In the end, Gelita received an entirely updated rail system that allows the company to move products and keep up with its increased production capacity.

RP Constructors completed an analysis of the existing rail system and rated its condition. RP constructors then collaborated with another construction company, Rhinehart Railroad Construction, from Baltimore, Md., in a design-build capacity to reconstruct all rail at the facility.

RP Constructors developed detailed staging plans to minimize downtime for the facility, as it needed to continue operations during construction, reusing as much of the original ballast and track material as possible, and completely replacing older pieces. Our advantage of working alongside another company in stages kept the project moving forward without disrupting operations.

CEC Ensures Compliance for Wastewater Treatment Improvements

The plant utilizes several wastewater treatment lagoons that were constructed more than 20 years ago, far outliving their useful design life. Because the discharge is into the Missouri River, Gelita must obtain an NPDES Permit issued by the Iowa Department of Natural Resources. Gelita has developed a close partnership with Iowa DNR to upgrade the system, so compliance is essential.

CEC provided design, permitting, and a large amount of ancillary work for this enormous undertaking - Gelita's wastewater facility generates an approximate organic loading equivalent to a community of 300,000 people; it generates 2 to 3 million gallons of wastewater per day.

CEC took DNR NPDES Permit limitations into account to develop improvements to the project in two phases. CEC also provided an expedited timeline to reduce the impact on Gelita's daily operations.

CEC excels at wastewater pretreatment and final tertiary treatment evaluation and design. Our value is our experience and our ability to work within mandated regulations, keeping companies compliant, and on schedule. RP Constructors' experience as civil contractors - we've constructed miles and miles of sanitary/ process sewers, lift stations, and more, makes us a unique, valuable partner.

Services We Provided

- Topographic survey
- Drainage improvements
- Construction
- Concrete paving improvements
- Approximately 3,000 linear feet of track
- Rail design and layout (horizontal and vertical)



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