

## REWORLD™

**Reworld™**  
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Location:  
Indianapolis,  
Indiana, USA

EPC:  
Orbital  
Engineering

Raw Material:  
Quicklime

Reworld™ is a leader in sustainable waste solutions, providing innovative and environmentally responsible services to a global community. Reworld is committed to advancing zero waste initiatives and supporting sustainability goals through state-of-the-art technologies that reimagine, reduce, reuse, recycle, recover, and renew. As part of Reworld's mission to reimagine waste, the Indianapolis Resource Recovery Facility supplies approximately 50% of the steam used in downtown Indianapolis' district heating system.

### SITUATION

Lime silo collapsed onsite due to structural degradation. The customer needed to completely rebuild silo and lime system in order to resume normal operations. They were looking for a partner that could help them get running quickly and efficiently.

### FULL OVERVIEW

This site had an equipment failure when their lime silo collapsed due to aging and structural degradation from steam and moisture that was present in the slaker room. The inability to utilize their lime system and prepare slurry slowed operations and added extremely high costs for an alternate, temporary slurry preparation system during downtime.

So, not only was a replacement system needed, but engineering expertise was necessary to ensure that the issues causing the degradation in the first place were resolved, preventing future issues.

### CHALLENGES

- **Need to Resume Operations Quickly**  
The plant was not able to run at full operational capacity and needed to get operations back quickly.
- **Unique Issue Degrading the System**  
Engineering expertise was needed to design a system that understands potential problem areas and works to avoid those potentially catastrophic problems moving forward.
- **Needed a Trusted Partner**  
Reworld needed someone they could trust to solve their unique problem while also building a system that worked for their site.





## SOLUTION

The experts at Carmeuse Systems came on-site at this location of the silo collapse to get a firsthand understanding of the issues that the customer was facing so that a solution could be reached quickly.

Carmeuse Systems was able to provide several design/engineering options that could both replace the failed system while also preventing the same issue from happening in the future. The Applications Team took the time to walk the customer through the various options to find a solution that worked best for them and fit within their budget.

The team stayed in close communication with key stakeholders inside Reworld during the system design selection. Representatives from the Applications team spoke with local operations and engineering, narrowed down to a design that worked for Reworld, and then moved to discussions with Reworld's project management team. The Sales team worked closely with procurement in tandem to ensure that there was clear communication between all parties to ensure a solution was reached quickly and efficiently. Establishing open lines of communication made it possible to find a solution that could be installed quickly and fit the unique needs of the customer.



## ONGOING SUPPORT

When Carmeuse Systems commissions a new system, the team provides support for the systems through the entire lifecycle. Representatives from our engineering team provided training to the operators on site as they became familiar with the new system and continue to stay in close contact as questions arise. Programming modifications were implemented to better meet customer needs and enhance operator visibility into system operations.

## OUTCOMES

The applications and engineering teams at Carmeuse Systems provided a unique design that removed the slaker room from inside the skirt of the silo, thus minimizing the chance of moisture/wear on structural steel.

Carmeuse Systems is well-known expert in lime and limestone, supplying raw material into Reworld locations where it is geographically possible throughout the Reworld fleet of locations as both a lime supplier and a lime handling systems provider. This trusted, long-standing relationship allowed the two teams to work together to solve the problem at hand.

