

Activated Carbon Manufacturer

Location:
Southern USA

Reagent:
Hydrated Lime

This company was using quicklime to neutralize a waste stream. They wanted to change from quicklime to hydrate and replace an existing lime slaking system and silo that showed signs of degradation. Carmeuse was able to provide an End-2-End solution for both the system and raw material.

SITUATION

This site had an aging modular quicklime handling system with the most time-sensitive issue being a silo that was leaning and had the attention of the local government environmental department. The purpose of the system was to neutralize a byproduct waste stream and so, a replacement was needed quickly to ensure that the system could be run safely and effectively while ensuring compliance with all government regulations.

Additionally, the customer wanted to switch to a solution that would be 'easier' to maintain, a hydrated lime system. This meant the customer would also need a new reagent provider to source hydrated lime, as they had historically used quicklime. This challenge left them with a unique situation to find both a new hydrated lime supplier, while also ensuring that their current quicklime system could be updated to effectively and safely handle hydrated lime.

CHALLENGES

- **Aging Lime System**
The current system was showing signs of significant degradation leading to inefficiencies and future hazardous conditions.
- **Changing Reagents Being Handled**
The system had historically used quicklime and now needed to be updated to effectively utilize hydrated lime.
- **Needing Expertise**
The customer needed experts in hydrated lime and the systems needed to handle them as this reagent was never used before. They were looking for a trustworthy partner.



SOLUTION

Carmeuse Systems is an End-2-End provider of both lime & limestone products, along with being experts in lime handling systems. We were uniquely qualified to support the customer transitioning products and updating their systems to support this change effectively.

For this project, Carmeuse was able to provide the following services to help address this organization's specific needs.

- Sourcing of high-quality hydrated lime from our network of Carmeuse plants
- Design, Engineering, and Commissioning of a pre-engineered hydrated lime slaking system
- Project Management support and customer service
- Built a System with the following Components:
 - 4800ft³ silo
 - Hydrated Lime Slaking System in a Box
 - ◇ Storage
 - ◇ Slaker
 - ◇ Mix Tank



OUTCOMES

Carmeuse Systems was able to build, install, and commission a new hydrated lime system that ran efficiently and suited the customers' unique needs. Our expertise in lime and hydrated lime allowed us to provide a seamless transition from quicklime to hydrated lime. The system has been commissioned and it now running with no issues to support the wastewater treatment necessary at this location. The local government has also been informed that a new system is in place that is being run safely and efficiently.