

2020 CIP

CONTINUOUS IMPROVEMENT PROJECT

OBJECTIVE: To reduce water waste during the reverse osmosis process in the sheetfed and web pressrooms by replacing outdated and inefficient current reverse osmosis (RO) system with new and more efficient system. This will impact the sustainability of the company by reducing our impact on the use of a natural resource - water. Our operations will become more efficient as we will have ample supply of RO water as needed.

TARGET: To reduce water waste during the reverse osmosis process by 35% per year.

INDICATORS:
Reduction in the amount of water flushed down the drain while creating reverse osmosis water for the fountain solution systems for both the sheetfed pressroom and the web pressroom.

ACTION PLAN: Beginning in January 2020, we will replace the current reverse osmosis system in the sheetfed and web pressrooms with a more efficient system. At the same time, we will replace the current water softener system with a new model. This project will take several days to complete. Once complete, the new reverse osmosis membrane will have an average membrane rejection of 98% meaning that only 2% water will be water waste during the reverse osmosis process. This plan should save more than 35% of the wastewater used annually to produce reverse osmosis water for the pressrooms.

PLAN MODIFICATIONS:
Modifications to the action plan will be made by the SMS team as necessary.

PROJECT LEADER: Doug Yeager, COO will have the overall responsibility for the project.

RESULTS: Results and any changes to indicators will be reported upon project completion based on the average number of gallons of water required on a monthly basis in the sheetfed and web pressrooms. This information will be communicated to stakeholders via the company website as well as social media outlets.

Results of 2020 Continuous Improvement Project

INDICATOR MEASUREMENTS: Indicators for this project include the total number of gallons of water used to create the needed fountain solution for the sheetfed and web pressrooms along with the rejection rate of the old system compared to the rejection rate of the new system.

INDICATOR RESULTS: Total number of gallons of water used for the year to create fountain solution for the sheetfed and web pressrooms was 45,500 gallons. In order to create 45,500 gallons of fountain solution at the new rejection rate of 98%, we would have used a total of 910 gallons of water. The old reverse osmosis system had a rejection rate of 50%. The old system would have used a total of 22,750 gallons of water to produce 45,500 gallons of fountain solution.

FINAL RESULTS:

- 21,840 less gallons of wastewater used during the reverse osmosis process
- 48% decrease in the amount of water wasted during the reverse osmosis process
- Total of 21,840 gallons of water saved for the entire year.