

Rochester Meat Company Project

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Company Background

- Located in Rochester, MN
- Founded in 1971
- Merged with Holten Meats in 2007
- Produces over 60 million lbs. of beef products a year



Incentive to Change

- **Biochemical Oxygen Demand (BODs)**

- 128 mg/L above domestic strength

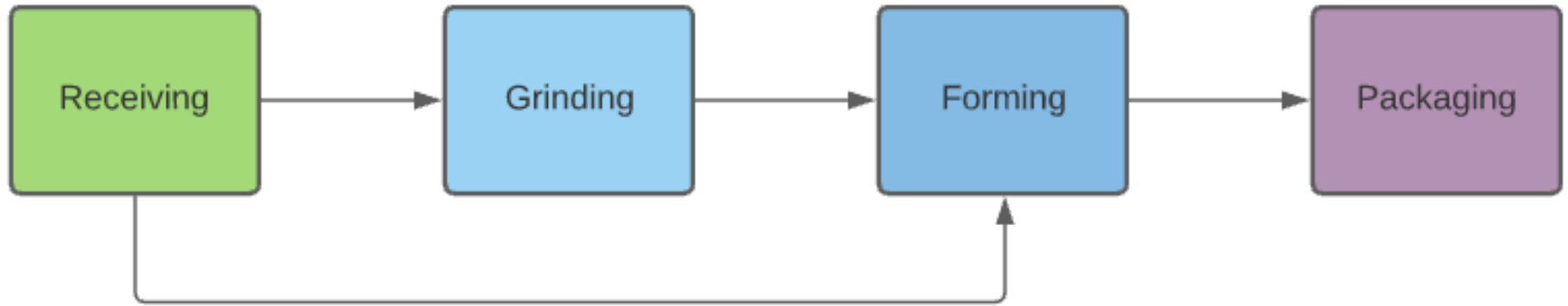
- 33% reduction needed

- **Total Suspended Solids (TSS)**

- 137 mg/L above domestic strength

- 34% reduction needed

Process



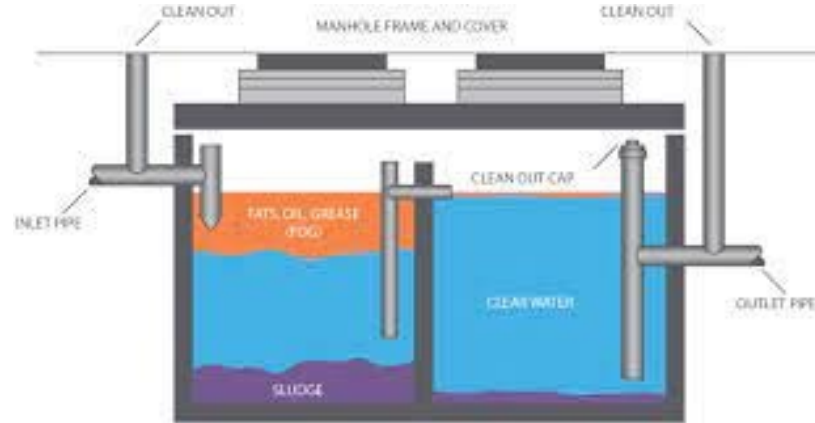
Observations

- Reports showed 50 lbs. / day reduction needed to reach domestic strength
- Equipment in place to prevent wasted product
- Sanitation process



Brainstorming & Research

- Researching grease traps
- Changing Procedures
- Collecting data → 94 lbs. of product collected



Primary Recommendation

Implement dry cleaning procedures and additional training

- Signs with reminders
- Conveying the value to managers
- Implementing further training

STOP

**ALL MEAT SHOULD BE
PICKED UP BEFORE
SANITATION BEGINS
INCLUDING PRODUCT
ON THE FLOOR**

NOTICE

**LEAVE DRAIN STRAINERS
IN PLACE AT ALL TIMES
DISPOSE OF CONTENTS
PROPERLY AND RETURN
STRAINER TO DRAIN**

Additional Recommendation

- **Opportunity:** single pass cooling water
- **Solution:** recirculating water chillers
 - Saves 3 million gallons of water a year (18%)
 - Easy to retrofit



Solutions

Recommendation	Annual reduction	Total cost	Annual savings	Payback period	Status
Implement dry cleaning process	137 mg/L TSS 128 mg/L BODs	\$0	\$13,500	Immediate	Implementing
Switch to LED lights	246,000 kWh	\$0	\$24,600	Immediate	Implemented
Fix compressed air leaks	18,600 kWh	\$0	\$1,860	Immediate	Implementing
Fix production door gaps	101,350 kWh	\$3,200	\$10,100	2.2 months	Recommended
Install recirculating water chillers	2,900,000 gallons	\$22,700	\$13,500	1.7 years	Recommended

Personal Benefits

Meaningful Experience

- Problem Solving
- Creative thinking
- Broader understanding

