Acme Chemical Company

Chemistry For the 21st Century



Improving Production Efficiency & Sustainability

Kevin Maxwell, Production Manager

3 Goals of Acme Chemical

- Reduce inputs of chemical materials by 20%
- Implement latest technologies into the manufacturing process
- Reduce material costs, pollution and associated wastes.

Research & Development

- The Research Development Department will be working exclusively with production to make improvement to the chemical process conducting research on utilizing chemicals that are sourced from biomass instead of petroleum sources, which are renewable and potentially better for the environment.
- Can we eliminate steps in our process?

<u>Implementation of Better Technology</u>

- Leaner manufacturing, that costs less, produces more, and creates less waste
- Train Technicians and Operators how to optimize the use of new technologies
- Maximize resource and labor inputs
- Outsource waste to companies with sustainable commitments

Environmental Safety & Pollution Control

- Increasing our monitoring and equipment of pollution and wastes
- Make sure HAZMAT policies are carried out correctly
- Ensure that all breaches in EPA standards are reported and shut down the effected equipment immediately until it is repaired and working properly.

Required Reporting Program

- Employees will be held accountable for reporting all leaks, spills, and malfunctions to their appropriate supervisor
- Disciplinary actions will be made for those who fail to do so.
- It is the responsibility for all employees to report any issues, large or small to your facility manager

Meet & Exceed EPA Standards

- EPA guidelines and procedures will be introduced into daily routines
- Inspections will be held twice daily by the Environmental Safety and Pollution Dept.
- Departments will be subject to yearly bonuses for following procedure or disciplinary action if breaches occur

Reducing Wastes

- Obtain higher yields from less resource inputs
- Re-use waste products if possible
- Treat waste to become more environmentally friendly
- Ensure wastes are disposed of properly

Reinvest Savings

- Achieve savings of 20% annually (\$540,000 + USD) through efficiency, loss prevention, and employee safety.
- Savings from leaner manufacturing will be reinvested in R&D to ensure Acme remains at the top of the chemical industry.
- 10% of annual profits (\$270,000 USD) will be reinvested in improving and maintaining machinery and chemical resources.

Conclusion

- Reduce Costs, Wastes, and create more efficient manufacturing processes.
- Implement latest technologies
- Introduce Renewable Resources into the Chemical Process
- Meet & Exceed EPA standards
- Reinvest Savings back into the Manufacturing Process

Thanks for Listening!

"No problem can be solved from the same level of consciousness that created it."

-Albert Einstein

