



Texas Petrochemicals LP

The Leading Producer of C₄ Based Chemicals

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Texas Petrochemicals L.P.

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Company Information

TPC has the largest butadiene and butene-1 extraction capacity in North America. In addition, TPC is one of North America's largest producers of isobutylene and derivatives of isobutylene such as polyisobutylene, di-isobutylene, and isobutylene concentrate.



Manufacturing



- 257 acres along the Houston Ship Channel built in mid-40s
- Rated capacity of 1.2 billion lbs/year of BD
- 5 Fired Boilers with steam generation capacity of 1.8 MMPPH
- 3 Waste Heat Boilers with capacity of 700 MPPH
- Fuel Gas requirements of about 40,000 MMBTU/Day
- Power production capacity of 36 MW



Facilities & Assets

- I Houston Production Facility
- I Port Neches Production Facility
- I Baytown Production Facility and Terminal
- I Lake Charles Terminal



Products

- I The family of products made by TPC are generally known as C4 olefins
- I These products are produced at TPC by various processes including
 - Fractionation
 - Absorption
 - Reaction
 - Extractive Distillation



Products

- I Butadiene (BD)
- I Butene-1 (B1)
- I Isobutylene (IC4)
- I Di-isobutylene (DIB)
- I Polyisobutylene (PIB)
- I Alkylate
- I Methyl Tertiary Butyl Ether (MTBE)



Energy Management Strategy

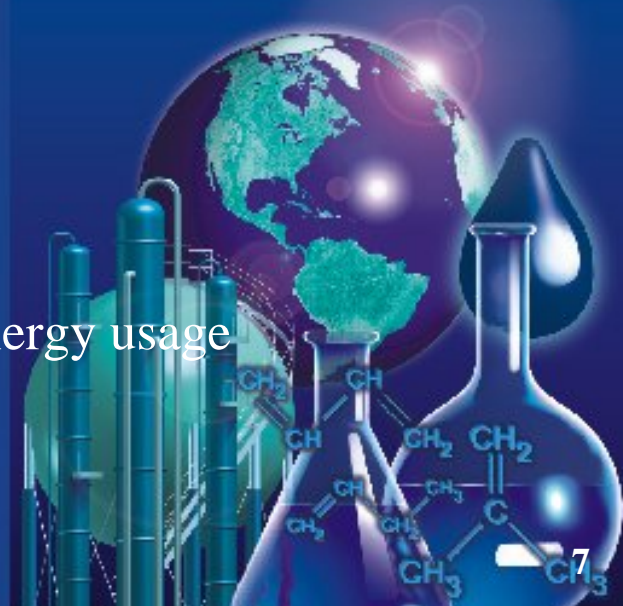
I Energy Management System

– Personnel

- x Created Mfg Optimization group with a manager and two engineers; rolled process control group into this group as well
- x Focus of this group is energy and process optimization
- x Direct accountability to SVP of Operations

– Reporting

- x Daily Energy Report with Steam Balance
- x Daily Review of KPIs and Process Targets
- x Multi-variant regression model for plant energy usage



Energy Certification Program

- I What characteristics of the proposed program would advance TPC's Energy Management Program?
 - Needs to emphasize continuous improvement vs. absolute performance
 - Companies need to be re-certified over time



Energy Certification Program

- I What would be potentially problematic?
- If the auditing process were so cumbersome and the benefits were not worth the costs of certification
 - If the program lost site of its intent which is to lower energy intensity
 - If data were used in a way other than for this certification program (i.e. if data were used in a negative way by regulatory agencies)



Energy Certification Program

- I What incentives would make the proposed program attractive to your company and widespread among industry?
 - Favorable press releases through local, state and national media regarding companies reaching certain levels
 - Tax credits for documented energy efficiency expenditures

