# Ameracan REF-FUEL Opportunities Analysis

# Need Visit In formation Gathering

## OSHA Star Program

Hempstead is one of 400 OSHA STAR Sites. Get info

They are required to mentor other companies

It is employee driven and based on pride

## Plant Basis Design

Hempstead Deutsche-Babcock Anlagen (DBA) mass burn roller grates

Niagara- DBA

CE Mass- RDR

Delaware- O’Connor Combustor

## Strategies

### Make it work

Keep plant polished

High Availability

Build trust based on openness and doing what is right

### Innovative Technology

Combustors

Pollution Control

Automation

### Creative Business System

#### Long Range Approach

Build relationships

#### Own large plants

Tax-exempt Bonds keep investment to a minimum and strengthen community relationship.

Keep plants in A1 condition

#### Keep plants base loaded

Town guarantees

Manage waste flows

Move waste around

TransRiver Marketing

Plants are in close proximity to each other and to BFI landfills. They work as one team.

#### Elevate Throughput

Special project waste

TSD Central

Bonus

## Constraints on Throughput

Inside the box thinking

State permit limits on solid waste

State air permits limit steam flow

Local concern for truck traffic

Community ignorance of need for best practices for global warming

Community ignorance of responsibility (NIMBY)

## Stakeholders

Waste haulers

Electricity buyers

Scrap metal dealers

Neighbors

Employees an families

Investors

Tour groups

Politicians

Solid waste activity committees

Town Departments of Sanitation

EPA

Suppliers

## Environmental

Environmental are programs modeled on safety

#### Environment has Bonus driven goals

RATA calibration range should not be based on utility methods

Each method should be looked at to make sure a similar approach didn’t result in a miss application of a method developed for another industry to waste combustion.

##### COMMITTEES

Where will EPA go with new regulations? What? When? How much?

F-Factor not appropriate for waste burn

## Bonus Plan

### Throughput

Factors related to increase in bottom line.

### Productivity

Not defined.

### Environment

Several factor including improving on average, staying above 1/2 LCL and beating UCL. Control limits set a 1 standard deviation. Each incident

### Safety

Not defined.

# Needs Identified Based on Visit to Hempstead Plant

## Needs and Opportunities

Global warming long range strategy

New environmental rules strategy

Total annual tonnage limit increase

Permit de-bottlenecking

Community Education

BFI partnering

### Duke benchmarking AMES TO ANDREW

Partnering with other like minded companies to achieve common sense EPA regulations

Product development to make ash a by-product not a waste

Environmental database system coordination

Brainstorming ways to make environmental requirements an ally and not a constraint

#### Creative re-permitting process

Make environment a strategic advantage.

CAE more proactive on dumb regulatory requirements

# CAE Analysis of Needs and Opportunities

## Mission

## Strategy

## Throughput

## Productivity

## Environment

## Safety

## Bonus

# CAE Unsolicited Proposal Ideas

## Process Improvements

Pegasus Nueral Network

Nox reduction

Outage elimination

## Meeting with other Q Companies

## Data Management

## Year 2000

System Audit

## CEM Upgrades

## NOX Optimization

# CAE Needs

## Long range project scheduling

## Ref-Fuel Metrics

### Air Emissions Permit Limits and $/Ton

#### NOX

#### Particulate

#### SO2

#### VOC

#### Semi Vols

#### Aromatic

### Air Emission Controls

### Throughput

#### Special Waste Factors

### Productivity

#### Electricity @ 50%

#### Tipping

#### Scrap Metal

### Ash

### Tipping

### BTU/Ton

### Electricity

See Metrics Spreadsheet Attached