



CAR Project Showcase

N₂O Abatement at Nitric Acid Plants

April 13, 2011



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LSB

Baytown, TX

ELDORADO
Chemical Company
Agricultural Products

First listed CAR Secondary Project

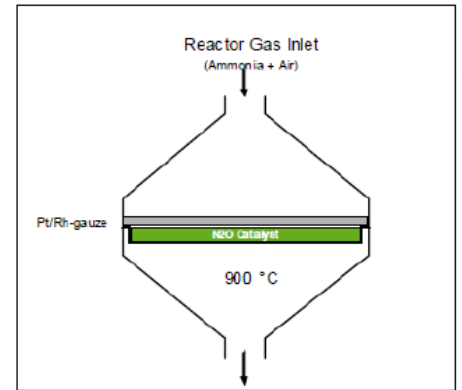
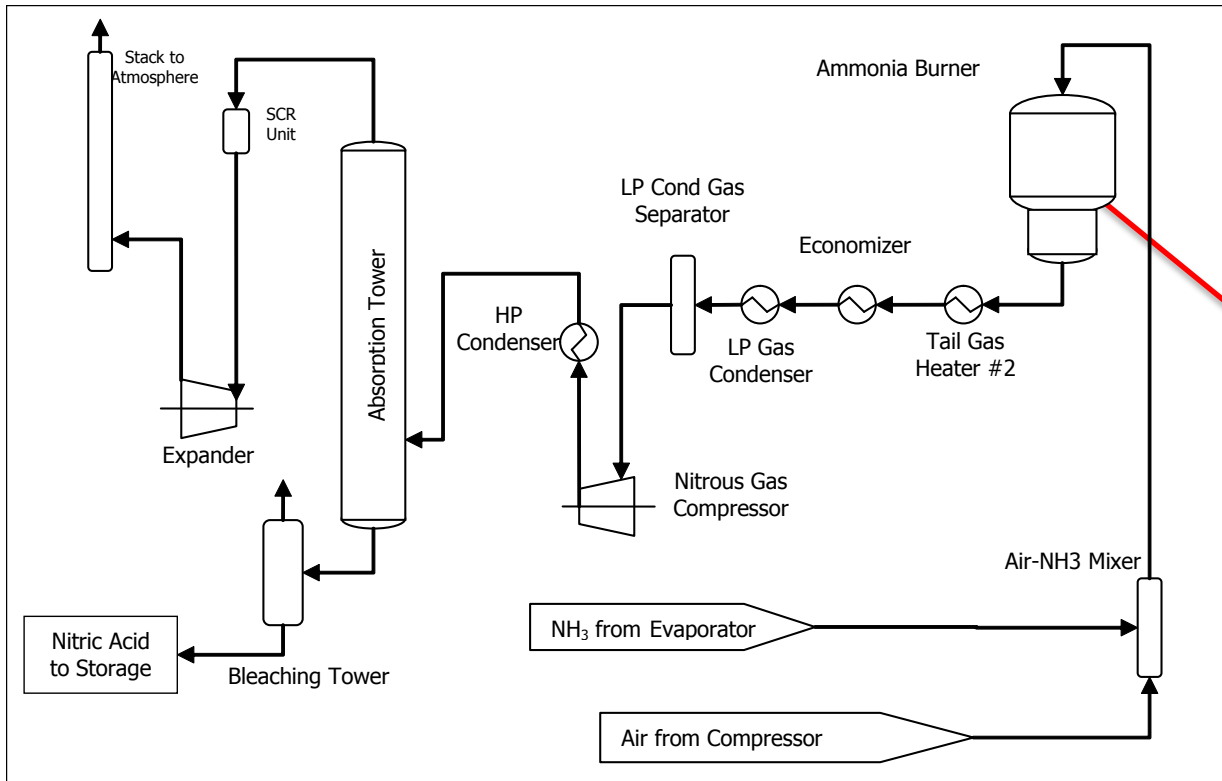


- **El Dorado Nitrogen Project – Baytown Texas**
 - ❑ Dual Pressure Plant
 - ❑ Secondary Abatement Catalyst
 - ❑ BASF Catalyst Selection
 - ❑ Typical Campaign Length: 6-9 months
 - ❑ Historical Campaigns: 4/28/06 to 2/17/09
 - ❑ Baseline Campaign: 11/01/09 to 6/27/10
 - ❑ Project Campaign Started: 7/1/10
 - ❑ Project Verifier – Ruby Canyon Engineering

- **Project Schedule**

- ❑ September 2009 : ClimeCo engaged to evaluate FTIR CEM and perform N₂O RATA. RA exceeded Part 75 Requirements
- ❑ November 1, 2009: Baseline campaign starts
- ❑ December 2, 2009: CAR Protocol v1 issued
- ❑ June 10, 2010: Baseline verification (on-site) begins
- ❑ June 27, 2010: Baseline campaign ends
- ❑ June 29-30, 2010: Installation of BASF catalyst
- ❑ July 1, 2010: Project campaign begins
- ❑ October 2010: mid campaign verification – 198,000 CRTs issued
- ❑ May 2011: end of campaign 1 verification – 265,000 CRTs (TBI)

Project ID: CAR639



**EDNLP Ammonia Oxidation Reactor (Burner)
Position of N₂O Secondary Abatement Catalyst**

Installation (June 29 and June 30th)



Summary

- ❑ BASF Catalyst demonstrating an N₂O Destruction Efficiency (DE) greater than 85%.
- ❑ Generated approximately 450,000 CRTs from July 1, 2010 to March 21, 2011
- ❑ Project was shadowed by CAR and included a baseline verification (at ClimeCo's request). Recommended step prior to installation of secondary catalyst.
- ❑ Excellent team effort by LSB Chemicals, CAR and Ruby Canyon.

REMC East Dubuque, IL



First listed CAR Tertiary Project



Advisory Services

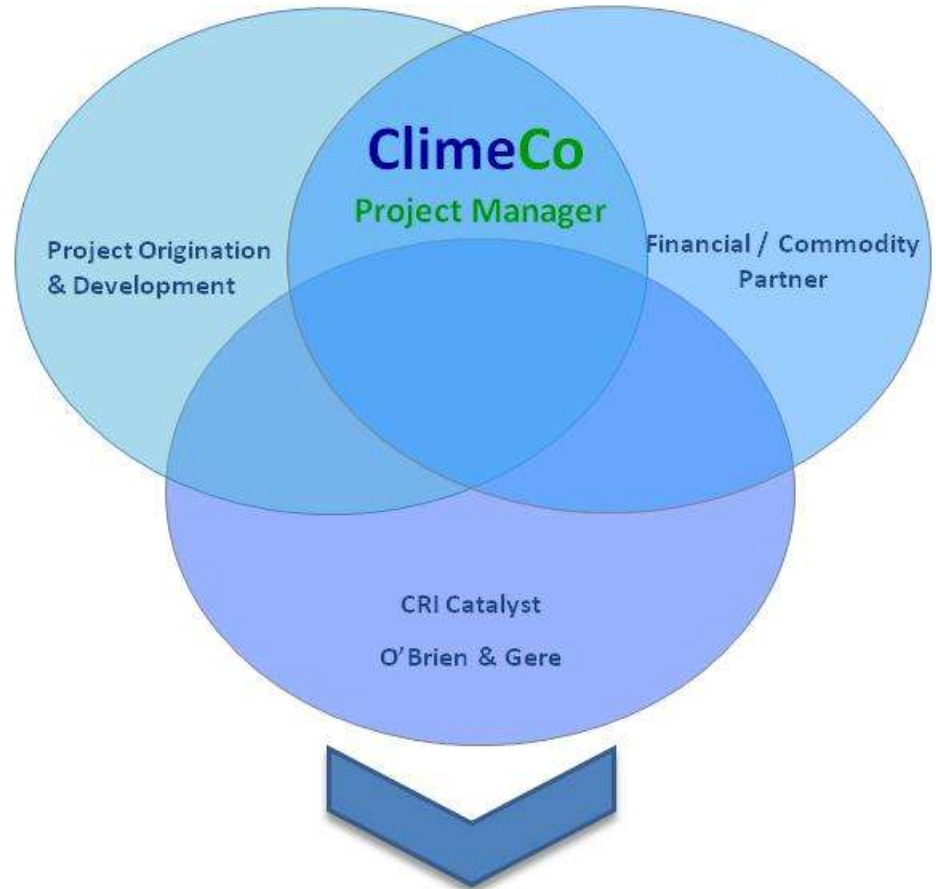
- Technology Review / Selection
- CEM analysis, Part 75 Consulting
- Financing alternatives evaluation

Project Development

- CAR project development
- Engineering (via partnership)
- Project management and monitoring
- Project finance structuring

Monetization

- Commercialization of CRTs
- Hedging strategies
- Top-notch trading through global partner



Sustainability and Clean Air

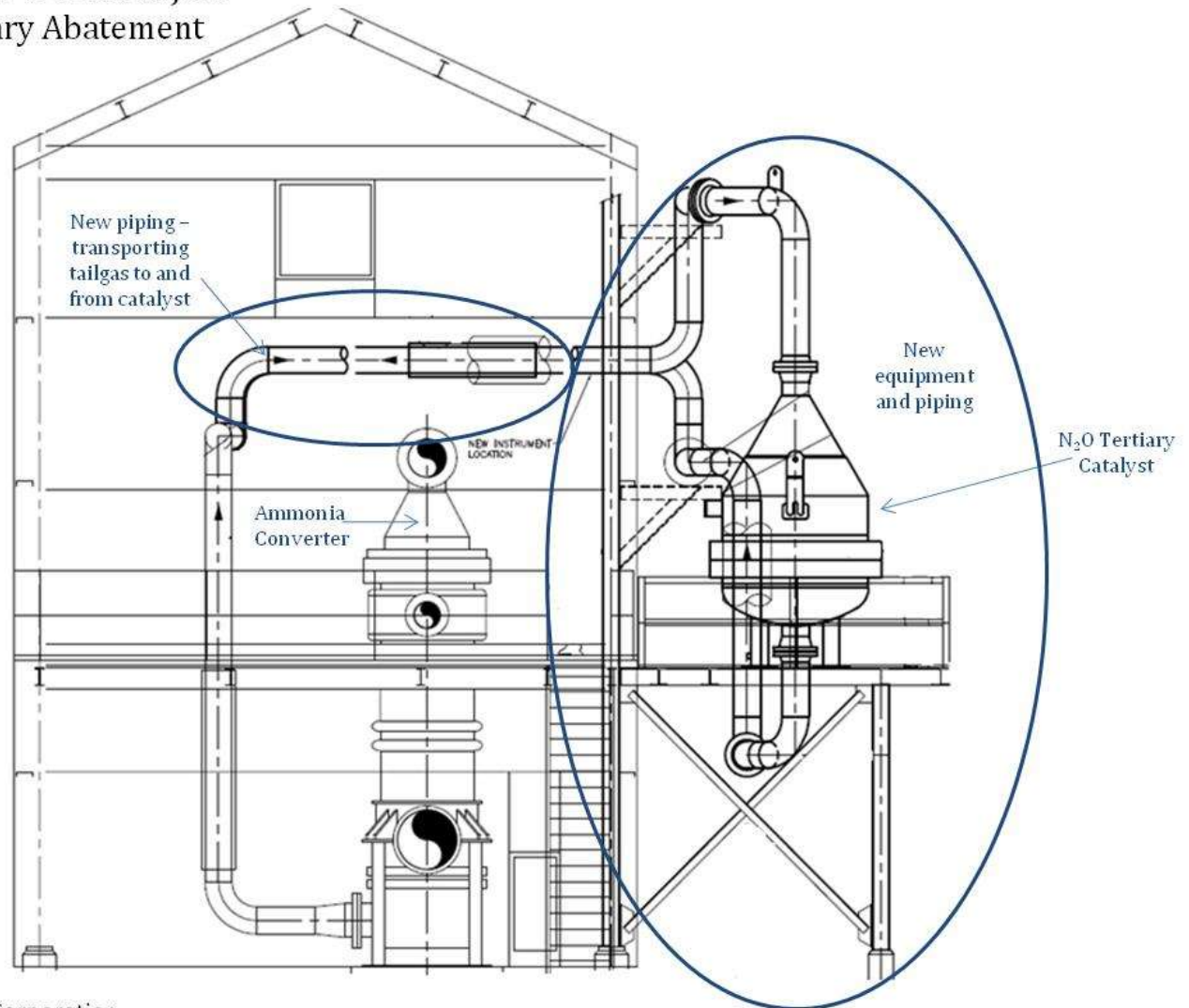
- **REMC Project NAP 1 – East Dubuque, Illinois**
 - ❑ Medium Pressure Plant
 - ❑ Tertiary Abatement
 - ❑ CRI Catalyst
 - ❑ Typical Campaign Length: 4 months
 - ❑ Historical Campaigns: not required
 - ❑ Baseline Campaign: Simultaneous to Project
 - ❑ Anticipated Start Date: 7/1/11
 - ❑ Project Verifier – TBD

- **Project Schedule**

- ❑ May 2010- : ClimeCo engaged to evaluate CEMs and perform technology assessment (secondary vs. tertiary)
- ❑ May through December, 2010: Technology evaluation, financial investment structuring, Joint Development Agreement (JDA) development
- ❑ December 21, 2010: JDA executed, engineering and system fabrication commences
- ❑ March 21, 2011: Construction drawings issued
- ❑ April, 2011: Construction to commence
- ❑ July 1, 2011: Anticipated project start-up

REMC – First US Tertiary Project

REMC – NAP 1 CAR Project
N₂O Tertiary Abatement



Summary

- ❑ ClimeCo served as Project Manager for all engineering, N₂O monitoring, and CAR development services.
- ❑ Process from initiation of advisory work to system start up – 14 months.
- ❑ First verification planned for January 2012 for vintage 2011.
- ❑ Excellent team effort by Rentech and our project partners O'Brien & Gere and CRI

CLIMECo

The Low Carbon Technology Company

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