

BAAQMD Authority To Construct – Cogen Project

BACWA Air Committee Meeting

March 14th, 2018



San José-Santa Clara
Regional Wastewater Facility



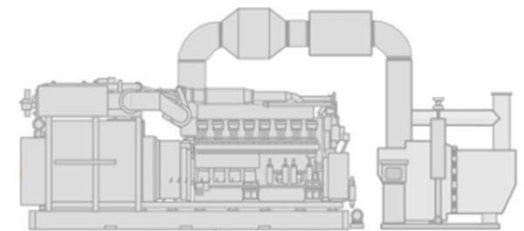
Environmental Services

Site Plan & Project Location



Project Description

- Electrical Power Generation
 - 4ea 3.5MW CAT Model CG260-16 Gensets (14 MW Total)
 - 5th Generator in Future
- Hot Water Generation
 - Utilized Heat Generated by Engines
 - 2ea 12.5 MBH Boilers
 - Space for One Additional Boiler



BAAQMD: ATC PERMIT PROCESS



San José-Santa Clara
Regional Wastewater Facility

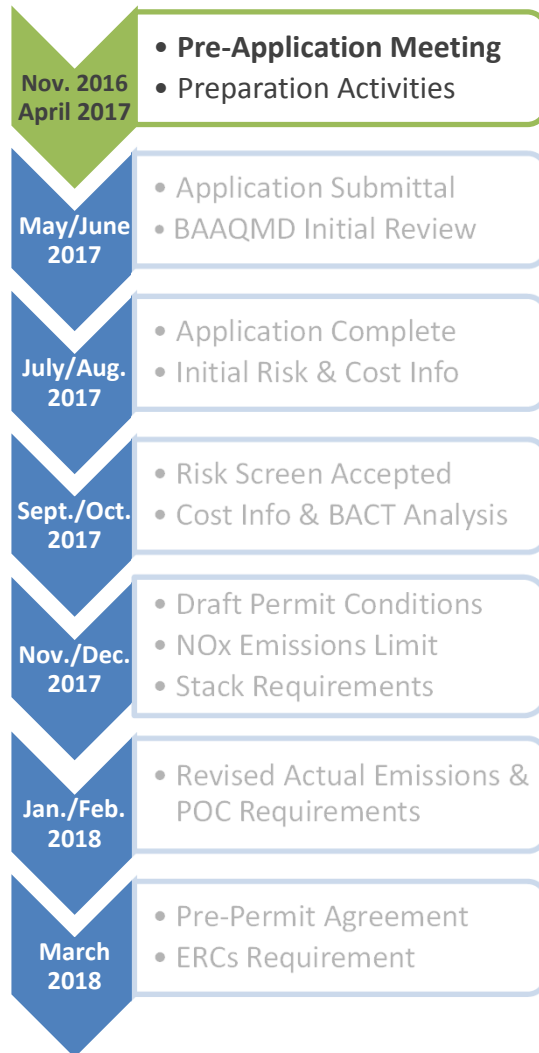
CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY
Environmental Services

Cogen Project: ATC Timeline

Nov. 16/April 17	May/June 2017	July/Aug. 2017	Sept./Oct. 2017	Nov./Dec. 2017	Jan./Feb. 2018	March 2018
<p>11/2016: Pre-Application Meeting with BAAQMD</p> <p>4/2017 Decision Making and Preparation for ATC Application</p>	<p>5/10/17: Application Submittal to BAAQMD</p> <p>6/9/17: Initial Questions from BAAQMD</p> <p>6/26/17: Response to Initial Questions</p>	<p>8/4/17: Application Deemed Completed and Submitted for Risk Screen</p> <p>8/8/17: BAAQMD Requested Cost Information for BACT Analysis</p>	<p>9/7/17: Risk Assessment Passed; Request for Detailed Cost Information</p> <p>9/28/17: Detailed Cost Information for BACT analysis and CEMS Provided</p>	<p>11/14/17: BACT Determination Complete</p> <p>11/14/17: First Draft Conditions</p> <p>11/21/17: BAAQMD Questioned Emissions Inventory</p> <p>11/30/17: BAAQMD Enforcement Allowed Earthwork and Concrete Work</p> <p>12/20/17: Revised Emissions Calculations Sent</p>	<p>1/3/18: BAAQMD Requested Revised Calculations</p> <p>1/19/18: BAAQMD Requested Revised Calculations</p> <p>1/23/18: BAAQMD Accepted Revised Emissions Inventory</p> <p>1/24/17: BAAQMD Will Not Issue ATC Without POC Credits</p>	<p>3/1/18: Groundbreaking Ceremony</p> <p>ATC To Be Issued???</p>



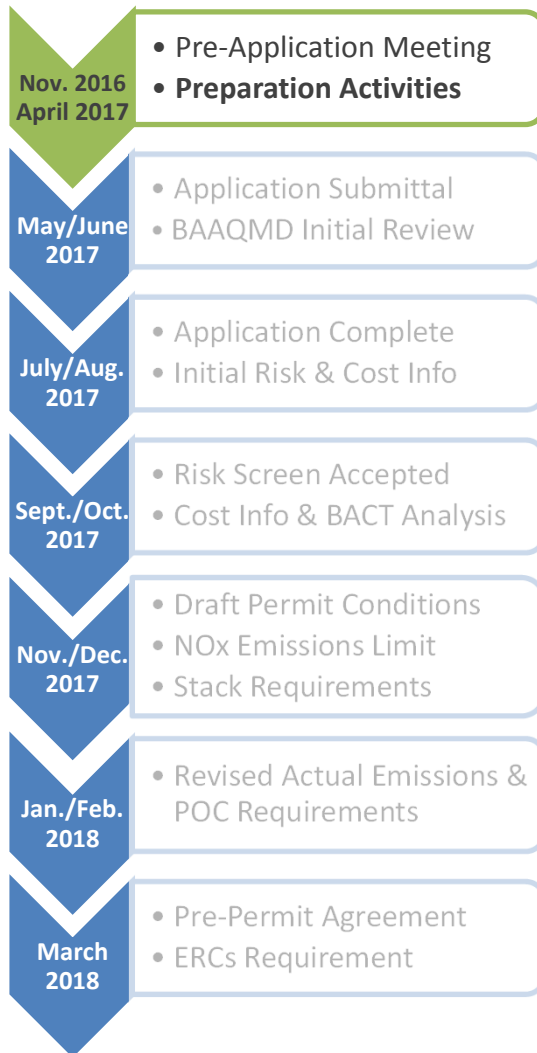
Pre-Application Meeting



- BACT to be based on Published BAAQMD Guidance
- CEMS would probably be required
- No Net Emissions Increase Expected
- Application Review Would Take 3-4 months



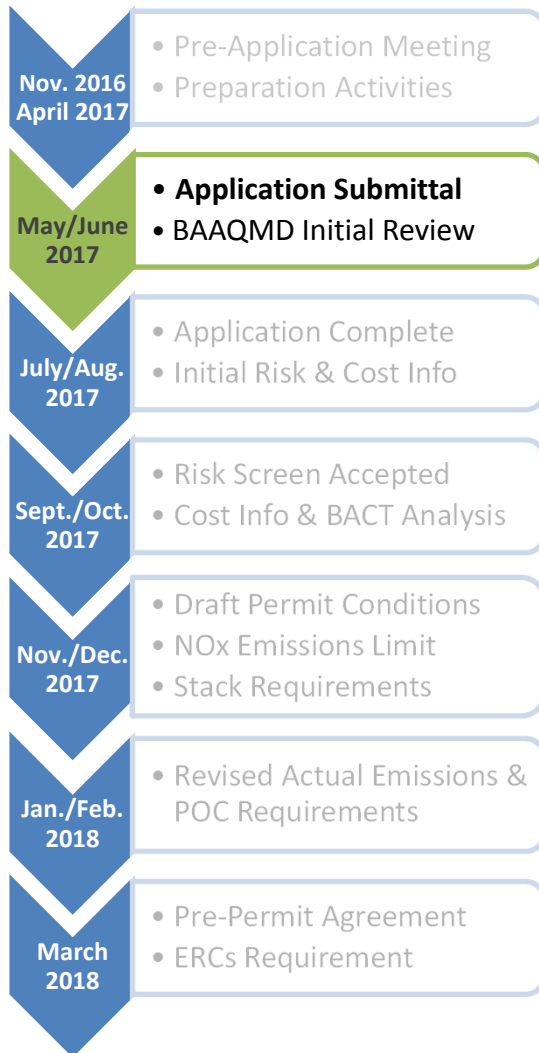
Preparation Activities



- **ESA Prepared Draft Application**
 - Initial Draft Reflected CEQA Approach
 - Two Months to Refine Draft
- **Topics Discussed**
 - Baseline Emissions
 - Operating Scenarios
 - Monitoring Requirements



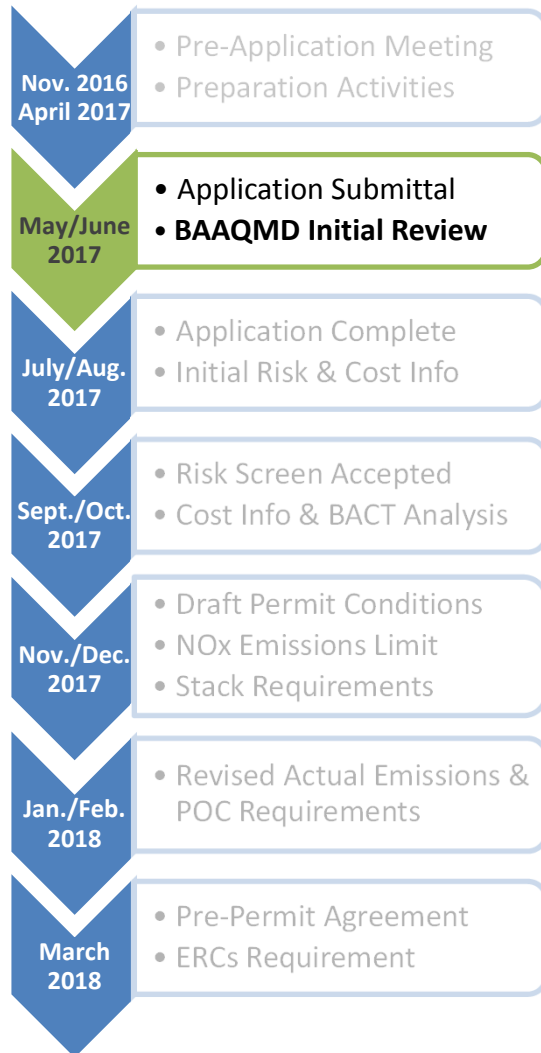
Application Initial Submittal



- Application Submitted (5/10/17)
- Proposed Conditions from ZWED
- No CEMS – Periodic Monitoring Only
- BACT Limits from Published Guidelines



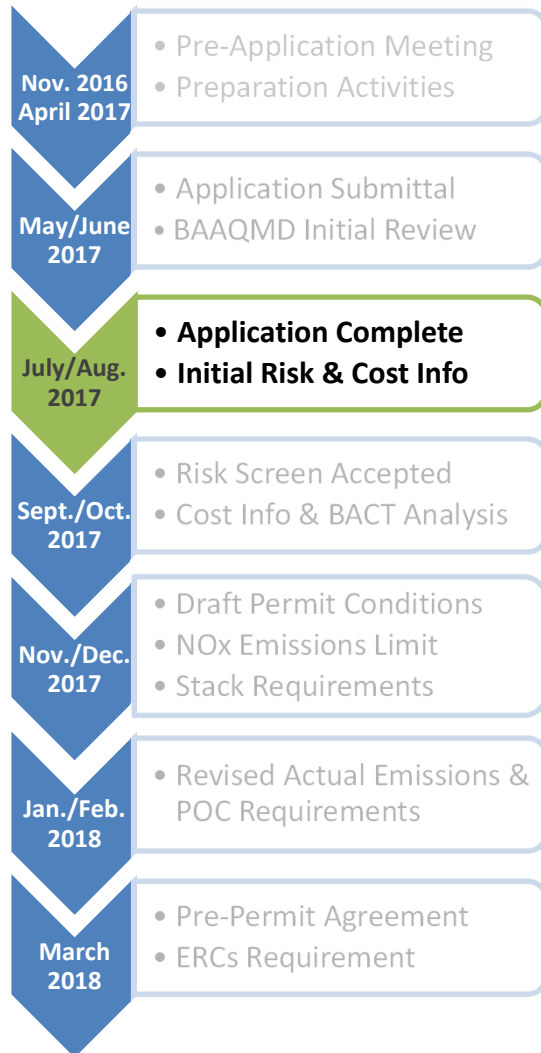
Initial Review



- No Initial Concerns; Positive Feedback from BAAQMD
- First Round of Questions
 - Detailed Calculations for H₂S
 - GHG Emissions
 - Start-up Emissions
 - Fugitive Digester Gas Mitigation Plan



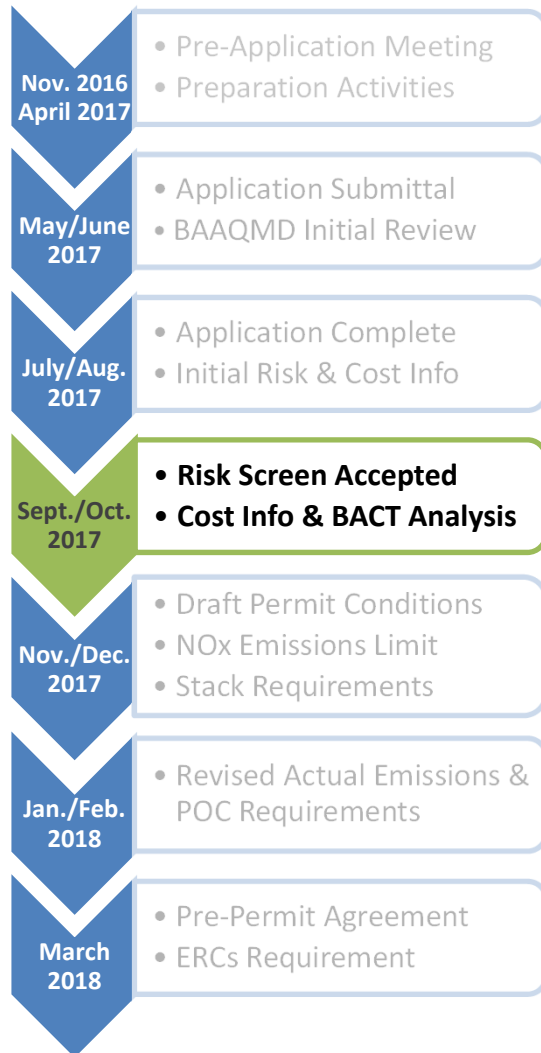
Application Complete



- Application Complete (8/4/17)
- Risk Screen Initiated
- First Request for Emission Control Cost Information



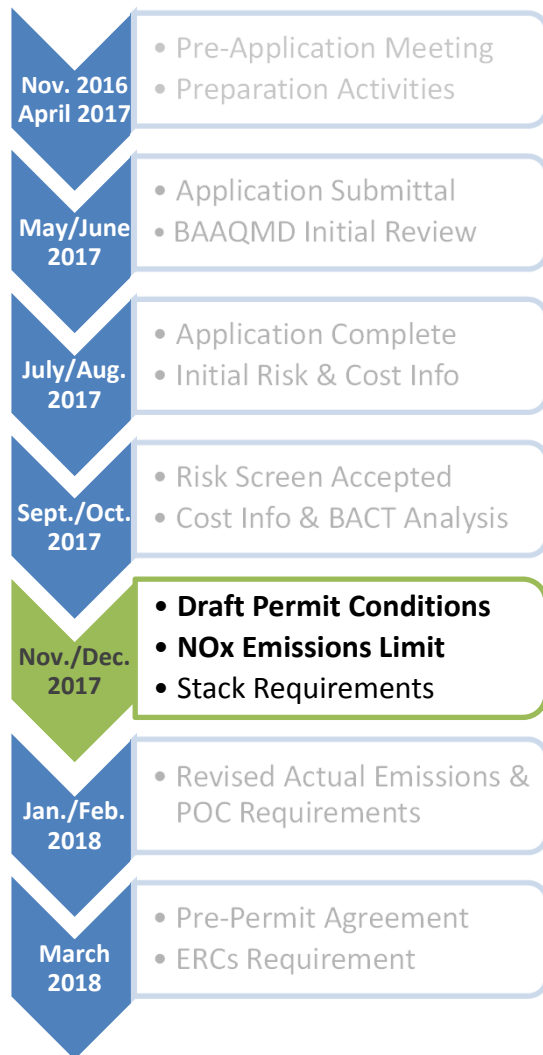
Risk Screen and BACT Analysis



- Risk Screen Completed (9/7/17)
- BACT Questions
 - Two Requests for Cost Information
 - Standard was Changes to Lowest Achieved Limits
- Low NOx Limit – 11 ppm



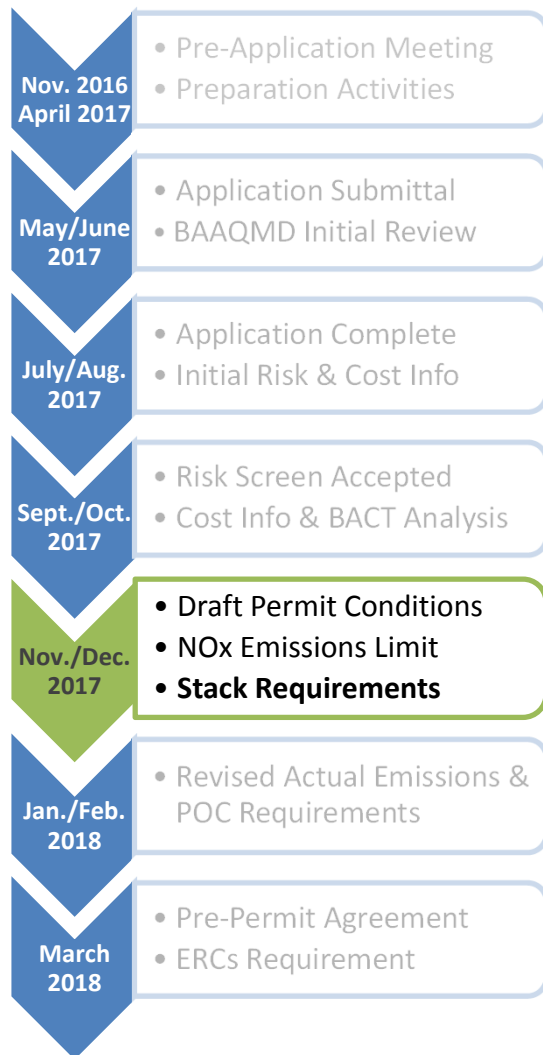
Initial Conditions and Limits



- Annual Combined Heat Input Limit
- NO CEMS!!!
- Monitoring Requirements
 - Source Tests Every 8760 Hours
 - Portable Analyzer for NOx and CO Every 720 Hours
- City agreed to meet SCAQMD NOx Limit (11 ppm)



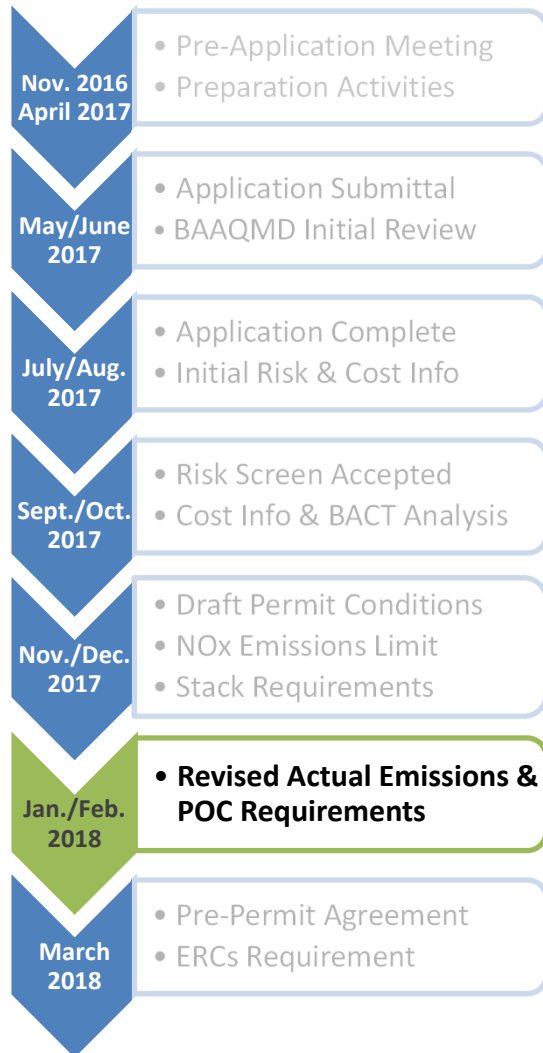
Stack Requirements



- Larger Ports (6”) and Longer Stack Required for New PM2.5 Test Method (Method 202A)
- Draft Required 8 Upstream Diameters and 2 Downstream Diameters
- BAAQMD accepted compromise of 6 Upstream Diameters
- Sampling Platform Required



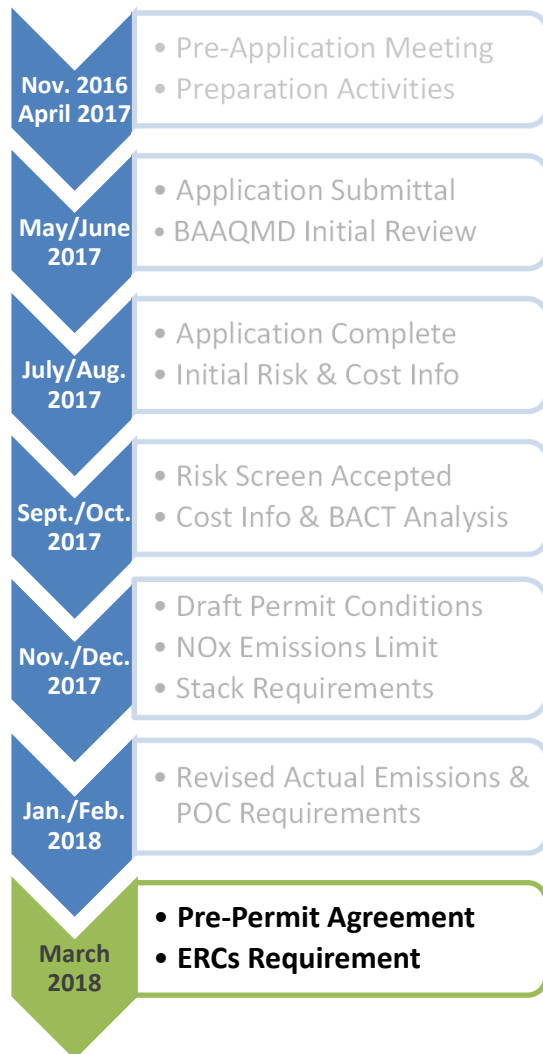
Baseline Emissions/POC Offsets



- BAAQMD Inventory Showed High Existing Emissions
- BAAQMD Rejected Their Inventory After Review of Application
- Recalculation of Emissions Showed POC Shortfall
- ATC Delayed Until POC Emission Reduction Credits Supplied



Pre-Permit and ERCs



- Enforcement Relief
 - BAAQMD Allowed Pre-Permit Earthwork and Concrete Work
 - Issued at Discretion of Enforcement
 - Reduced Impact of ATC Delay
- ERCs Purchase Agreement In Place





Lessons Learned

- BAAQMD Process is Slow
- Recent Precedent Can Be Misleading
- Nothing Is Final Until Permit is Issued
 - Guidance Can Change
 - Management Questions Staff Decisions
- Meetings and Management Contact Help

