



BEYOND MANAGING RISK – PROVING COMPLIANCE

May 11, 2006

- Electric Generation Project Scope
 - Demonstrate compliance across silo'ed divisions and information systems
 - Assure all applicable federal, state, local, and internal policy requirements are being met
 - Tie evidence of task completion with every report
 - Manage over 10,000 tasks easily and effectively
 - Prove that implementing a compliance tool alleviates countless hours of extra work
- Compliance Management System (CMS) Project
- CMS using Enviance



Electric Generation Compliance Program

Industry Best Practices & Enablers

Business case development allowed for external review of industry leading practices and the supporting key enablers that we have incorporated into the Compliance Program.

<h3>Connect to the Business Process</h3> <ul style="list-style-type: none">• Integration Quality & Transparency• On-going Process Improvement• Link to Business Planning Cycle• Link to Strategic & Financial Risk Management	<h3>Leverage Technology</h3> <ul style="list-style-type: none">• Commitment & Assurance Tracking Systems• Audit Reporting• Workflow / Data Mining capability
<h3>Metrics & Performance</h3> <ul style="list-style-type: none">• Monitoring compliance metrics• Understanding the cost of compliance (Cost of non-compliance & maintenance)	<h3>Change Management & Culture</h3> <ul style="list-style-type: none">• Climate of transparency & integrity• Training on compliance policies• Incorporation of compliance in performance evaluations

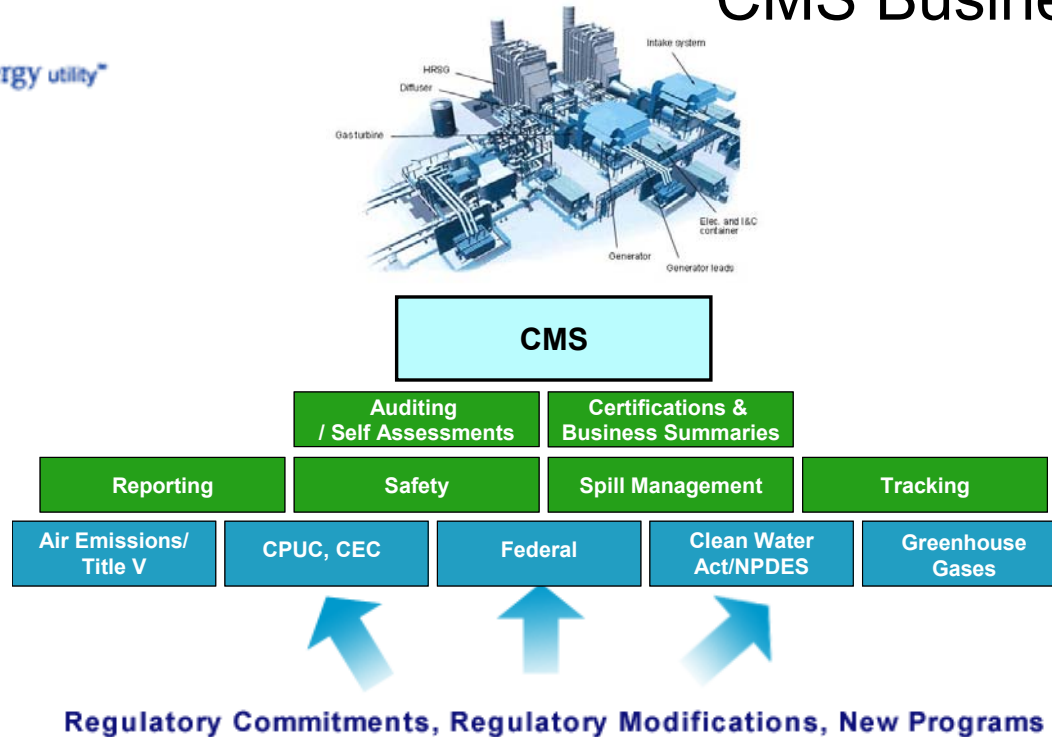


Compliance Requirements Inventory

The Compliance Inventory was assembled and confirmed during the business case work that allowed for correct scoping and planning of CMS Project implementation activities.

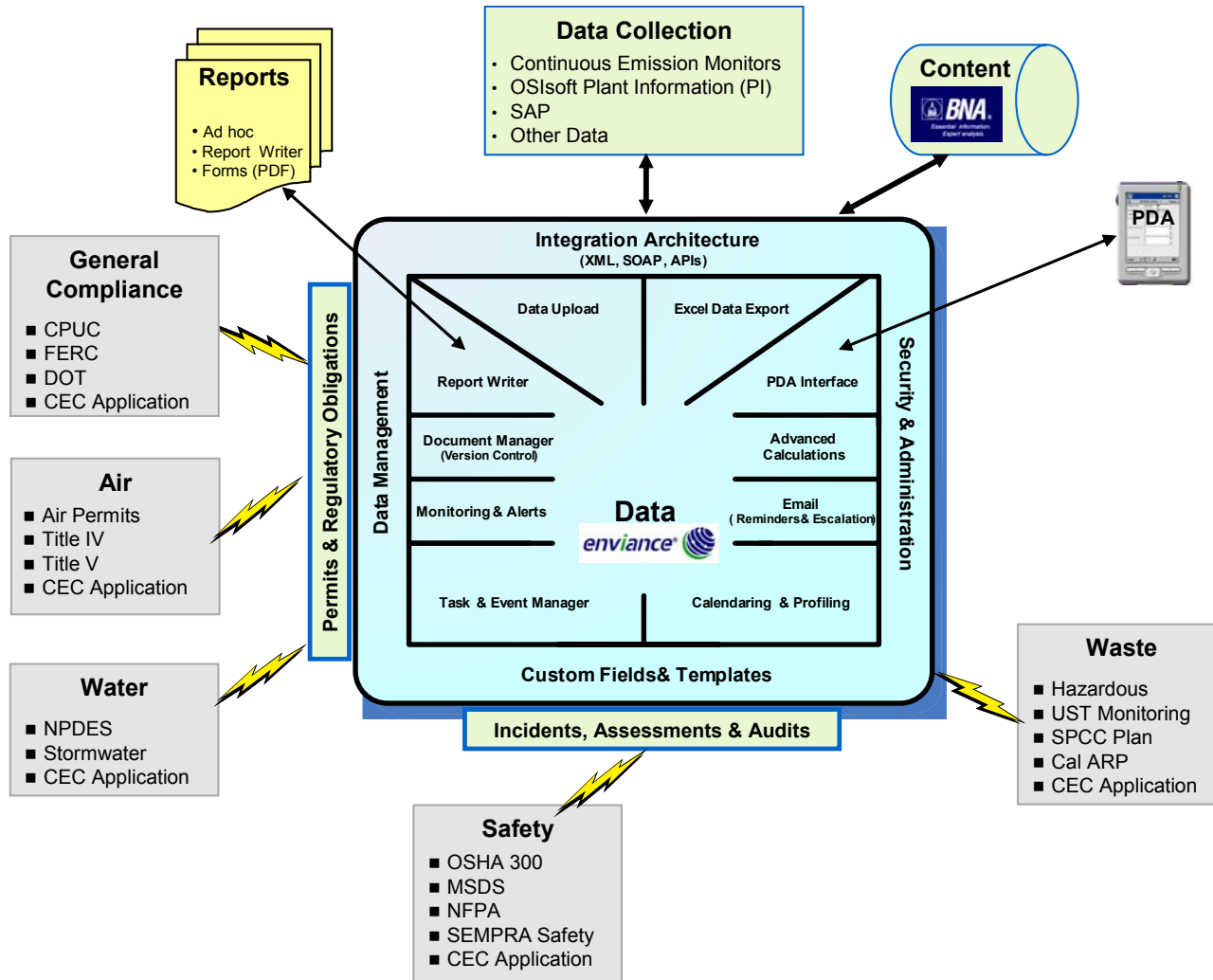
Compliance Area	Regulation	Responsible Agency / Organization	Regulated Activity	Miramar	Palomar	Priority	Document Status
2 Air	CEC Application For Certification (01-AFC-24)	California Energy Commission (CEC)	Guidelines for plant construction	X		A	Decommissioned
	Authority to Construct Air Permit	SDAPCD	Rule 10, 20, 21, and 1200 of SDAPCD Rules and Regulations, Miramar (981360)	X	X	A	Decommissioned
	Title IV Acid Rain Permit	SDAPCD	40 CFR 72	X	X	A	Decommissioned
	Title V Operating Permit	SDAPCD	40 CFR 70	X	X	A	Decommissioned
	Solvent & Abrasive Permits	SDAPCD		X	X	A	Decommissioned
	California Accidental Release Prevention (CalARP) Program	Cal EPA	Program to prevent accidental releases of regulated substances that potentially pose the greatest risk of immediate harm to the public and the environment	X	X	A	Decommissioned

Compliance Area	Regulation	Responsible Agency / Organization	Regulated Activity	Miramar	Palomar
2 Air					
	CEC Application For Certification (01-AFC-24)	California Energy Commission (CEC)	Guidelines for plant construction		X
	Authority to Construct Air Permit	SDAPCD	Rule 10, 20, 21, and 1200 of SDAPCD Rules and Regulations, Miramar (981360)	X	X
	Title IV Acid Rain Permit	SDAPCD	40 CFR 72	X	X
	Title V Operating Permit	SDAPCD	40 CFR 70	X	X
	Solvent & Abrasive Permits	SDAPCD		X	X
	California Accidental Release Prevention (CalARP) Program	Cal EPA	Program to prevent accidental releases of regulated substances that potentially pose the greatest risk of immediate harm to the public and the environment	X	X



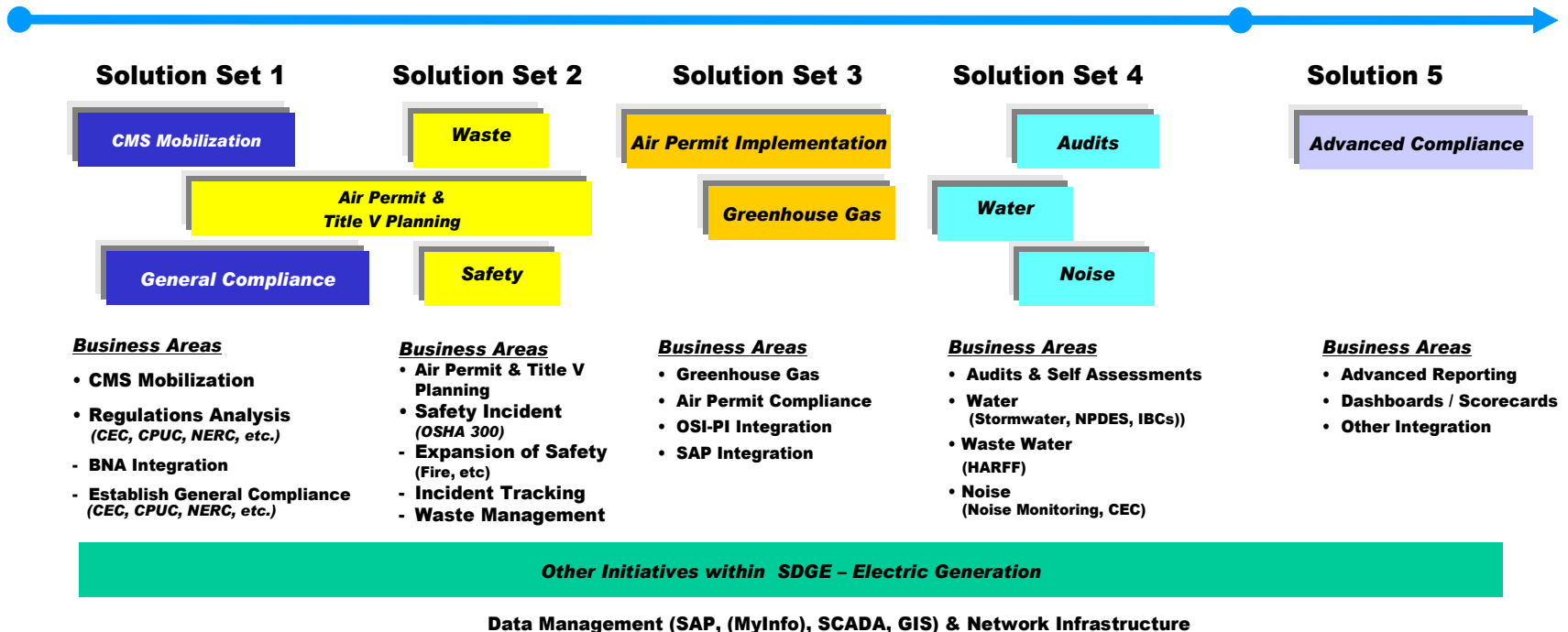
- An inventory of compliance obligations that is centralized, managed and tracked with on-demand reporting for compliance certification.
- Processes are disciplined and systematic.
- Compliance documentation, tracking and escalation is automated through the solution to ensure:
 - ▶ Positive confirmation of compliance.
 - ▶ Automatic notification and escalation of obligations.
 - ▶ A single tool for compliance internal and external reporting

Compliance Management System



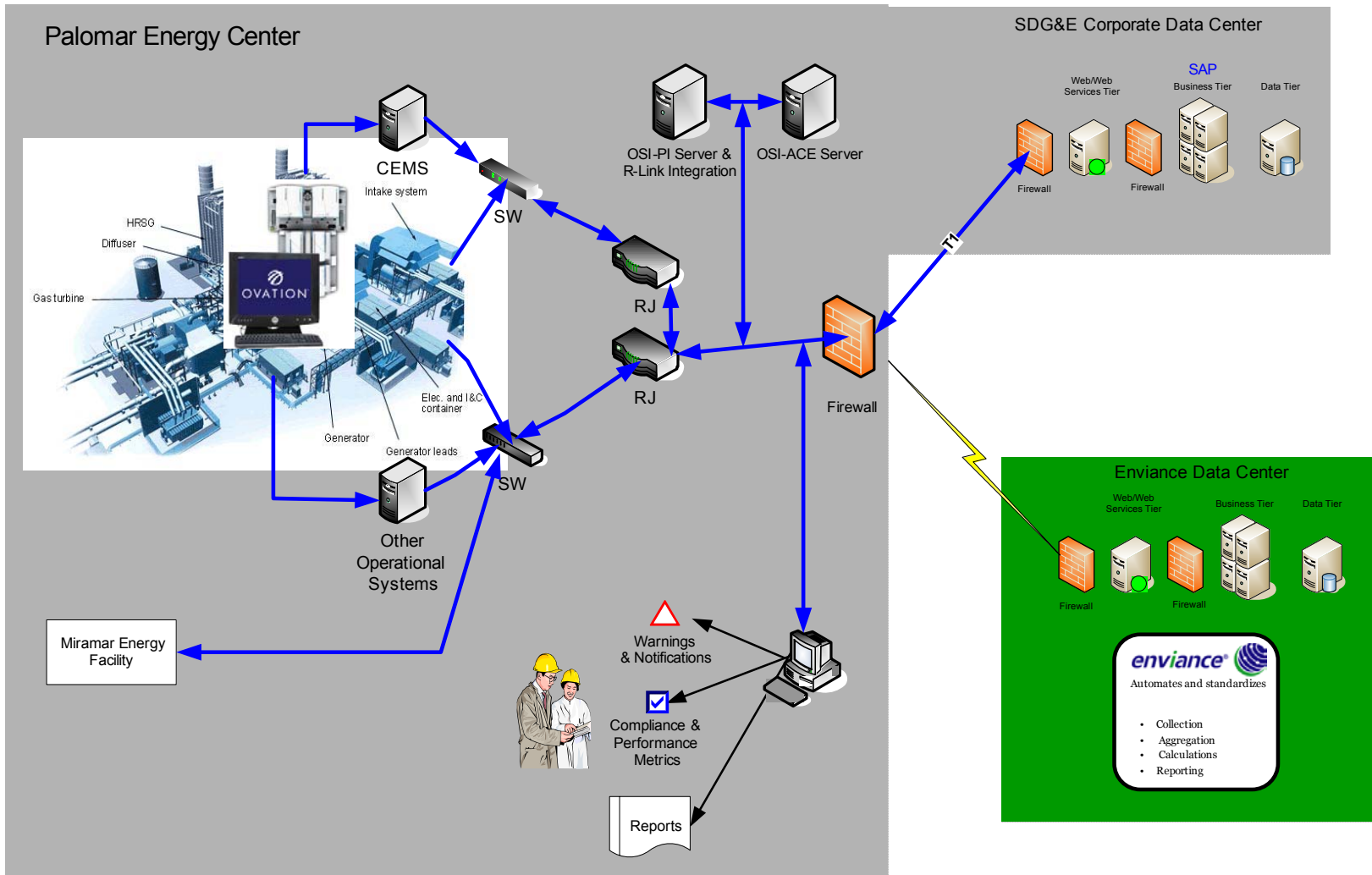
CMS Phased Implementation Stages

Business Requirements were organized into “Solution Sets” and an accelerated implementation schedule developed to support business requirements



System Architecture

SDG&E – Electric Generation Compliance Management System (CMS) Conceptual System Architecture





CMS Process Basics with Enviance

- A compliance commitment (or incident) is entered into CMS as a requirement with an associated “task” and assigned for completion.
 - Integration with Emissions Monitors and other operational systems will trigger task actions based on operating condition
- Automated e-mail notifications and escalating notices (if necessary) are generated prior to the actual due date.
- Tasks are completed and closed.
- Comprehensive and summary reports are generated for operating personnel and management.

Calendar

Monthly View

Daily, Weekly or Monthly Calendar View

June 2004 Go
Today

May	June 2004						Jun
NO	Su	Mo	Tu	We	Th	Fr	Sa
	30	31	1	2	3	4	5
W	6	7	8	9	10	11	12
W	13	14	15	16	17	18	19
W	20	21	22	23	24	25	26
W	27	28	29	30	1	2	3
W	4	5	6	7	8	9	10

June 2004						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1 <input checked="" type="checkbox"/>	2	3 <input checked="" type="checkbox"/>	4	5
6	7 <input checked="" type="checkbox"/>	8	9 <input checked="" type="checkbox"/>	10	11	12
13	14	15	16	Task Information Task Assignor: rvenier@demo.enviance.com Task Name: Wastewater Constituent Exceedance Description: Verify exceedance value. If valid, submit exceedance report to the Wastewater M... Task Due on: 6/9/2004 3:30:00 AM Sub Tasks: No Object: ABC Corporation\San Diego Facility\Wastewater Discharges\Outfall 001 Benzene		
20	21	22	23			
27	28 <input checked="" type="checkbox"/>	29	30			
4	5	6	7			
8	9	10				

Hover or Drill Down to Specific Requirement Tasks for analysis or completion



System Models

- SDGE-Miramar (MEF) [0]
- SDGE-Palomar (PEC) [8]
 - Annual Air Emission Inventory [3]
 - Annual Criteria Pollutants [1]
 - Annual Toxics [0]
 - Cooling Tower [3]**
 - Assessments, Incidents, Deviations and Insp
 - Noise Complaints [0]
 - Emission Factors and Global Variables [5]
 - Abatement Devices [0]
 - Abrasive Blasting [0]
 - Cooling Tower [4]
 - Oil-Water Separators [0]
 - Turbines - Natural Gas [0]
 - Fees [2]
 - Logs, Throughputs, Data [5]
 - Regulated Equipment and Sources [8]
 - COOLING TOWER [0]
 - GASOLINE CONDENSATE AST [0]
 - OIL WATER SEPERATOR [0]
 - UNIT 1-COMBUSTION TURBINE [0]
 - UNIT 1-CONDENSATE AST [0]
 - UNIT 2-COMBUSTION TURBINE [0]
 - UNIT 2-CONDENSATE AST [0]
 - WATER WASH DRAIN AST [0]
 - Requirements-Compliance [8]
 - SDGE Training Requirements [15]
 - SE - Environmental Compliance Management Pla
 - SE - Environmental Credit Management [4]
 - SE - Serious Incidents [2]

Applicable Requirements

+ SEARCH

Displaying Items Under: /Sempra Energy/SDGE-Palomar (P
Emission Inventory/Cooling Tower

Page: 1 of 1 1

Select	Name ▲	Custom Field Template	#
<input type="checkbox"/>	PM10 Annual Emissions	-	0
<input type="checkbox"/>	PM10 Daily Emissions	-	0
<input type="checkbox"/>	PM10 Hourly Emissions	-	0

Page: 1 of 1 1

Requirement Source

Requirement Template
Emission Factors

Authority Type
Other

Effective Date
1/1/2000

Media
Air, emissions

Level 1
None given

Specific Citation
None given

Created On
5/16/2003 12:37 PM

Agency
None given

Expiration Date
None given

Level 2
None given

Periodicity
1 time(s) per Year

Description

Description

The annual Particulate Matter less then 10 microns (PM10) emissions for the Palomar Energy Center (PEC) Cooling Tower.

UOM

tons/year

Precision

2

Calculation Description

The annual Particulate Matter less then 10 microns (PM10) emissions for the Palomar Energy Center (PEC) Cooling Tower.

Calculation Definition

[Sempra Energy\SDGE-Palomar (PEC)
\Logs, Throughputs, Data\Cooling Tower\Annual Water Circulation Rate]*
([Sempra Energy\SDGE-Palomar (PEC)
\Emission Factors and Global Variables\Cooling Tower\Drift Data\100]*

Task Assignment & Completion

Task Manager

+ SEARCH

SEARCH RESULTS ... UPDATE TASK STATUS AND QUICK COMPLETE TASKS

Select multiple tasks and right click to see global edit/complete/dismiss options.

Page: 1 of 14

1 2 3 4 5 6 7 8 9 10 ...

Results per Page: 10

Select	Type	Name	Task Due	Status Change Date	Comments	Status
<input type="checkbox"/>		Conduct and Document EVUAR202 Training	3/31/2006 8:00 AM	3/25/2006 8:30 PM		0%
<input type="checkbox"/>		Demonstrate Compliance with 40 CFR Part 75	3/31/2006 8:00 AM	3/25/2006 8:30 PM		0%
<input type="checkbox"/>		Develop Construction and Operational Security Plan	3/31/2006 8:00 AM	3/25/2006 8:30 PM		0%
<input type="checkbox"/>		Extended startup Frequency and Duration data	3/31/2006 8:00 AM			
<input type="checkbox"/>		Halt Earthwork Upon Adverse Soil Conditions	3/31/2006 8:00 AM			
<input type="checkbox"/>		Shutdown Frequency and Duration Data	3/31/2006 8:00 AM			
<input type="checkbox"/>		Submit CO Three-Hour Rolling Average Data	3/31/2006 8:00 AM			
<input type="checkbox"/>		Submit Daily Cooling Tower Water Flow Data	3/31/2006 8:00 AM			
<input type="checkbox"/>		Submit Fuel Consumption Data	3/31/2006 8:00 AM			
<input type="checkbox"/>		Submit Quarterly Operational Reports	3/31/2006 8:00 AM			

TASK COMPLETION OR DISMISSAL Save || Cancel

Task Name Develop Construction and Operational Security Plan **Created By** Kelly Hunt **Due Date** 3/31/2006 8:00 AM

Description
Initial-The Palomar Energy Center (PEC) Owner must ensure that a site specific Security Plan and Vulnerability Assessment for the operational phase must be developed and maintained at the project site. The Palomar Energy Center (PEC) Owner must notify the CPM in writing that the Plan is available for review and approval at the project site.

Documents:

Object Name
Sempra Energy\SDGE-Palomar (PEC)\Requirements-Compliance\Other CEC\X-Construction and Operational Security Plan-COM08

Page: 1 of 14

1 2 3 4 5 6

Save

Dismissed

Completion Status

0%

Completion Date

3/25/2006 8:30 PM

Time To Complete

hrs.

Cost to Complete

\$

Comments

Save

Cancel

Report Manager

REPORT DATA LAST UPDATED 03/25/2006 08:55 PM

+ SEARCH

Add Folder | Add Report | Current Folder Permissions






Displaying Items Under: /Sempra Energy/SDGE - Electric Generation/Palomar (PEC) Reports

Last Action: None

Page: 1 of 1

1

Results per Page: 10

Select	Name ▲	Description
<input type="checkbox"/>	 Palomar Compliance Requirements	Sitewide CMS
<input type="checkbox"/>	 Palomar Dismissed Task Detail Report	
<input type="checkbox"/>	 Palomar Overdue Task Detail Report	
<input type="checkbox"/>	 Palomar Task Report	Palomar CMS
<input type="checkbox"/>	 Palomar Task Status Report	Palomar Task

Facility Name	Unit Name	PDI Name	Requirement Name	Requirement Description	Requirement Compliance Statement	Requirement Active Date	Re
SDGE-Palomar (PEC)	Requirements-Compliance	Air Quality	C-Fugitive dust during construction AQ-SC04	No construction activities are allowed to cause visible emissions at or beyond the project site fenced property boundary. No construction activities are allowed to cause visible plumes that exceed 20 percent opacity at any location on the construction site. No construction activities are allowed to cause any visible plume in excess of 200 feet beyond the centerline of the construction of linear facilities.	The on-site AQCOMM conducted a visible emission evaluation at the construction site fence line, or 200 feet from the center of construction activities at the linear facility, each time he/she saw excessive fugitive dust from the construction or linear facility site. The records of the visible emission evaluations are maintained at the construction site and provided to the CPM in the MCR.	03/31/2006	2<
SDGE-Palomar (PEC)	Requirements-Compliance	Air Quality	K-AQ34 Replaced by AQ-SC11-AQ34	CEC condition AQ-34 was replaced by AQ-SC11 in the final determination.	Compliance with AQ-SC11 constitutes compliance with this requirement.	03/31/2006	-
SDGE-Palomar (PEC)	Requirements-Compliance	Air Quality	K-NOx and VOC Emissions Recordkeeping-AQ19	The Palomar Energy Center (PEC) Owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx and VOC, in tons per rolling 12-calendar month period, from all equipment, excluding permit exempt equipment, at this	The Palomar Energy Center (PEC) NOx and VOC emissions records are available for inspection by representatives of the District, CARB, and the Energy Commission and are retained for a minimum of five (5) years.	03/31/2006	2<

- HTML or Excel Output
- User Defined Reports



Questions?