

At-Berth Regulation



Background

- Why this regulation?
 - Reduce PM emissions at California ports
- Board approved At-Berth Regulation
December 2007
- Regulation effective January 2009
- Terminal plans filed with ARB July 2009

What Are We Covering Today?

➤ **Regulation overview**

- Upcoming requirements for 2013-2014
- Fleet compliance calculations
- Compliance tool for fleets

Regulation Summary (1/2)

Affected vessel types:

- Container
- Passenger
- Refrigerated cargo (reefer)

Two options to comply

- Reduced Onboard Power Generation
- Equivalent Emission Reduction

Regulation Summary (2/2)

Fleets affected by regulation:

- Container and reefer
 - For each port
 - 25+ visits per year
- Passenger
 - For each port
 - 5+ visits per year
- POLA & POLB is considered one port
- Visiting multiple berths within two hours counts as one visit

Fleet Compliance Schedule

Period	Shore power visits	Reduction in power use
2014-2016	50%	50%
2017-2019	70%	70%
2020+	80%	80%



Impact of Regulation

Stakeholders affected

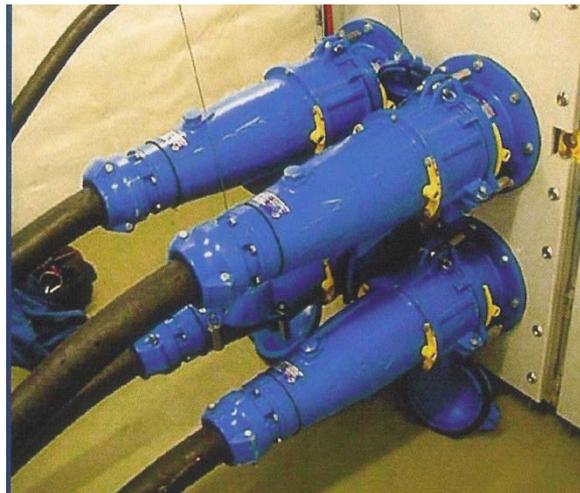
- Six ports
- 28 terminal operators
- 57 fleets

Terminals equipped with shore power

- Seven container terminals
- Two cruise terminals

Implementation Survey

- Understanding regulation start-up issues
- Identifying potential implementation issues
 - 3-hr limit on auxiliary engine operation
 - Equipment breakdown



What Are We Covering Today?

- Regulation overview
- **Upcoming requirements for 2013-2014**
- Fleet compliance calculations
- Compliance tool for fleets

Important Upcoming Requirements

- July 1, 2013
 - Terminal plans update and vessel plans
- January 1, 2014
 - Recordkeeping requirements and 50 percent reduction standards
- March 1, 2015
 - Annual statement of compliance from fleet operators

Requirements for Terminal Operators

- Terminal Plan update
 - What has changed since original terminal Plan
 - Fleet changes
 - Status of shore power installation
- Recordkeeping requirements for shore power ready berths



Recordkeeping for Terminal Operators (1/3)

- Vessels using shore power
 - Name of vessel
 - Date and time of arrival
- Electricity usage
- Documenting when shore power is not available
 - Equipment breakdown
 - Utility service interruption

Recordkeeping for Terminal Operators (2/3)

- Documenting breakdown of shore-side shore power equipment
 - Date and time of initial breakdown
 - Description of breakdown
 - Identify equipment and specific component
 - Reasons for breakdown
 - Course of action necessary to continue use of shore power
 - Maintenance records

Recordkeeping for Terminal Operators (3/3)

- Utility service interruption
 - Date and time
 - Notification from utility
 - Electricity interrupted
 - Electricity restored
 - Reason for interruption



Requirements for Ports

- Wharfinger information on annual basis starting in 2010



Requirements for Fleets

- Vessel plans
- Fleet recordkeeping requirements
- Annual statement of compliance
 - Due March 2015 for 2014
- Fleet compliance requirements



Vessel Plans

- Due July 2013
- Plan needed for each port
- Information needed
 - Identify specific vessels to be equipped to use shore power for 2014 and expected visits
 - More general information for 2017 and 2020

Fleet Recordkeeping Requirements

- Vessel visit information, by port and terminal
 - Berthing information
 - Auxiliary engine operation
- At-berth power usage
- Delays that affect meeting the 3-hr requirement
- Emergency events

Annual Statement of Compliance

- Signed statement of compliance
- Summary of information on visits and power requirements



What Are We Covering Today?

- Regulation overview
- Upcoming requirements for 2013-2014
- **Fleet compliance calculations**
- Compliance tool for fleets

General Compliance Information

- Starts January 1, 2014, and applies on a quarterly basis
 - Visits included in a quarter are visits that begin in the applicable quarter
 - No catch up provisions
- Applies to fleets
 - 25 or more visits annually to a port for container and reefer vessels
 - 5 for passenger vessels

General Compliance Information

Fleet 1st Quarter Visits

12/31 to 1/3

1/14 to 1/17

1/28 to 2/1

2/11 to 2/14

2/25 to 2/28

3/11 to 3/14

3/31 to 4/3

4/8 to 4/11

What's a fleet?

- “Under direct control of same person”
- Includes vessels owned by carrier plus vessels under charter agreements
- Fleets are port specific
- POLA/POLB is considered one port



Other Issues Affecting Compliance

- Start-up issues
 - Commissioning
 - Vessel retrofits / new installs
 - Approved by Class Society
 - US flagged vessels must also obtain Coast Guard approval



Minimum requirements starting January 1, 2014

- 50% of visits are “shore power visits”
- 50% reduction in power generation by auxiliary engines



Shore power visit

- A visit where auxiliary engines operate for 3 hours or less
- Delays due to Homeland Security and Coast Guard that extend auxiliary engines may be counted as shore power visit
- Visits affected by Emergency Event are counted as shore power visits

Delays

- Initial inspection by Homeland Security takes more than an hour
- Delayed departure by Coast Guard or Homeland Security



Emergency Events

- Safety of vessel
- Utility equipment failure
- Utility stage 3 emergency
- Natural disaster
- Terminal equipment failure

After emergency event is over, shore power use should be started/re-started within one hour

Power Reduction (1/4)

- 50% power reduction
 - Use of auxiliary engines drop reduced by 50%
 - Calculated by the formula:

$$\frac{[\text{Baseline fleet power generation}] - [\text{auxiliary engine generation}]}{\text{Baseline fleet power generation}}$$

$$\underline{\text{Baseline fleet power generation}} = \sum \text{berthing time} \times \text{power requirement}$$

Power Reduction (2/4)

- Modifications to calculation
 - Emergency event visits are excluded from the power reduction calculation
 - Not included in either baseline fleet power generation or auxiliary engine generation

Power Reduction (3/4)

Example

Date	Berth (hr)	Eng op (hr)	MW	MWh	MWh	
1-14	70	70	1.5	105	105	
1-28	75	2	1.5	112.5	3	
2-11	72	72	1.5	108	108	
2-25	70	3	1.5	105	4.5	
3-11	65	2	1.5	97.5	3	
3-25	67	2	1.5	100.5	3	
				baseline	aux eng op	% reduction
				628.5	226.5	64.0

Power Reduction (4/4)

- If defaults were used, percent reduction reduced to 63%
- If unable to use shore power for 3-11 visit, percent reduction reduced to 48%
- If the 3-11 visit considered an emergency event, percent reduction increases to 57%

What Are We Covering Today?

- Regulation overview
- 2013-2014 schedule
- Fleet compliance calculations
- **Compliance tool for fleets**

Purpose of Compliance Tool

- Aid fleets in compiling with regulation
- Aid in finding and fixing problems with data
- Provides a tool to test compliance scenarios
- Used by ARB to assist in compliance determination



System Requirements

- Visit Tracking:
 - Windows XP or newer
 - Microsoft Excel 2010
 - Or Excel 2003 with “Microsoft Office Compatibility Pack”
- Compliance Report:
 - Windows XP or newer
 - Microsoft Access 2010
 - Or Standalone with “Microsoft Access 2010 Runtime”

What does it do?

- Reads data from excel spreadsheet(s)
- Checks data for possible errors
- Identifies visits that may require follow-up
- Checks regulation compliance
- Prints compliance statements
- Exports data into single excel spreadsheet

Blank Compliance Spreadsheet

Every visit will fill out the following information

	A	B	C	D	E	F	G	H	I	J
1	Fleet	Vessel Name	Lloyd Number	Vessel Type	Power Requirement	Shore Power Capable	Port	Berth	Time of Arrival	Time of Departure
2										

Shore Power visits will fill out the entire sheet

	K	L	M	N	O	P	Q	R	S	T	U
1	Electricity Provider	Time Auxiliary engines stopped	Time Auxiliary engines started	Emergency Event	Time of Start of Emergency	Time of End of Emergency	Emergency Explanation	Delayed Event	Time of Start of Delay	Time of End of Delay	Delay Explanation
2											

- See instructions for specific formats for data entry.

Standardized Names

Consistent data is critical

Agree on standard names beforehand

Suggested Names:

POLA/POLB for the Port of LA or Long Beach

POO for the Port of Oakland

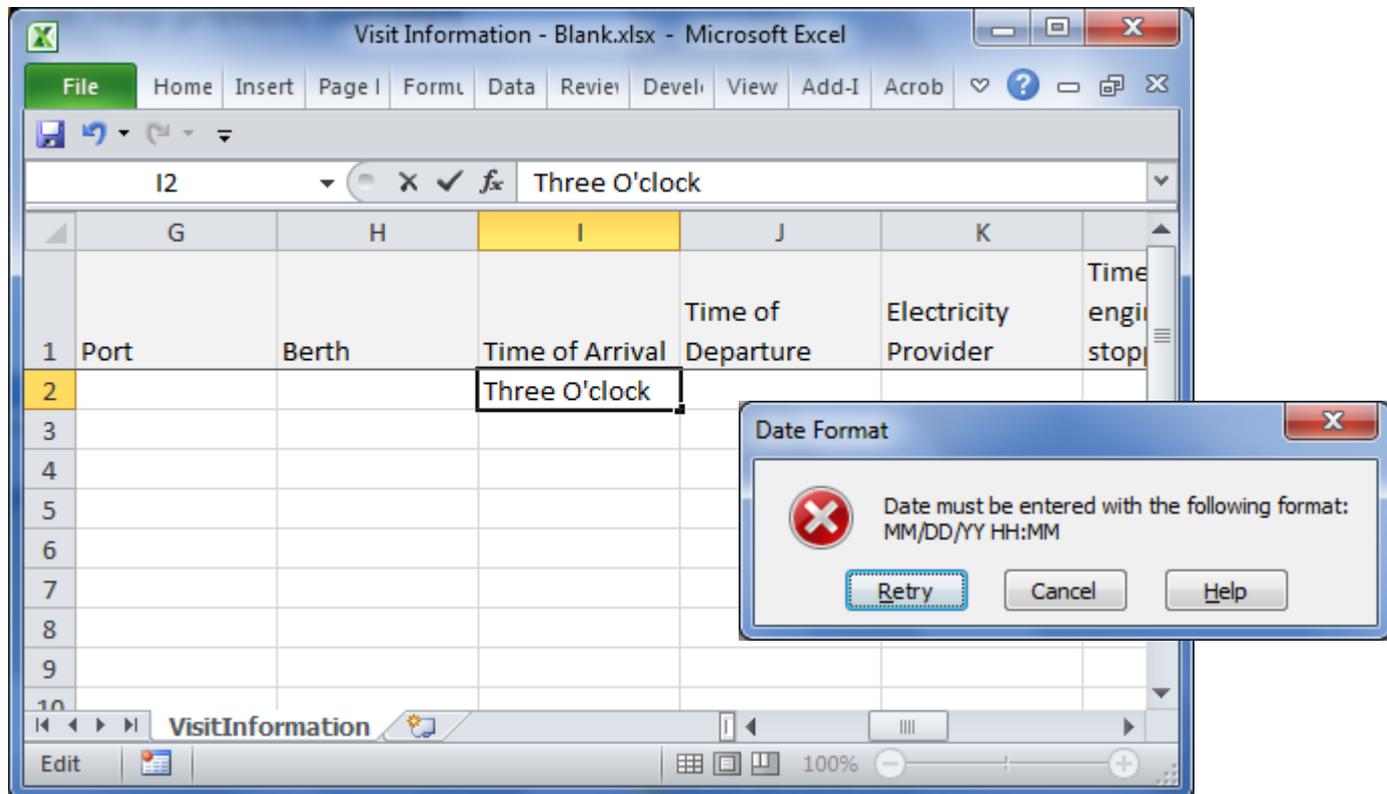
POH for the Port of Hueneme

POSD for the Port of San Diego

POSF for the Port of San Francisco

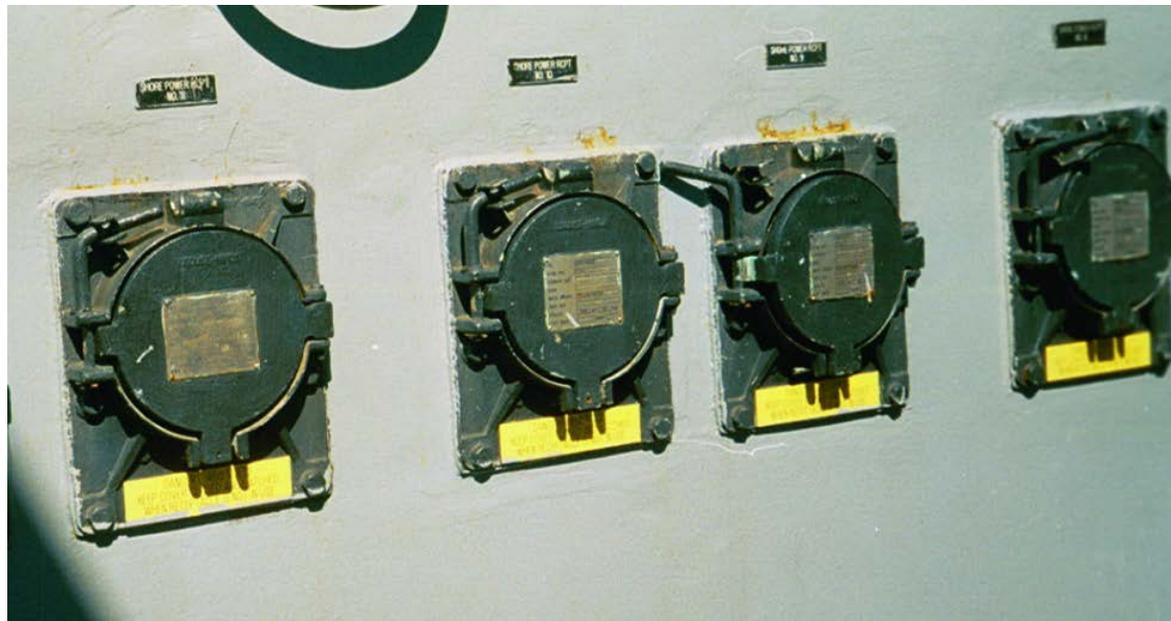
Excel Data Validation

- Spreadsheet uses excel data validation
- Checks data formats



Blank Compliance Spreadsheet

- Suggest vessel operator maintain a sheet, update at start and end of each visit.
- Sheets for each vessel can all be imported into compliance tool for final calculation



Demo of compliance tool

Example Spreadsheet: Visit Information - Examples.xlsx

Example fleet Speedy Shipping visits Port of Oakland's terminal 33 (shore power ready) and terminal 34 (non shore power)

Fleet consists of 3 ships:

- Plugin-Cheetah is a shore power ready 3500 TEU container vessel

- Plugin-Cheetah visits Berth 33 every 14 days and stays 3 days.

- If Plugin-Gazelle is needs berth 33, then Plugin-Cheetah visits berth 34.

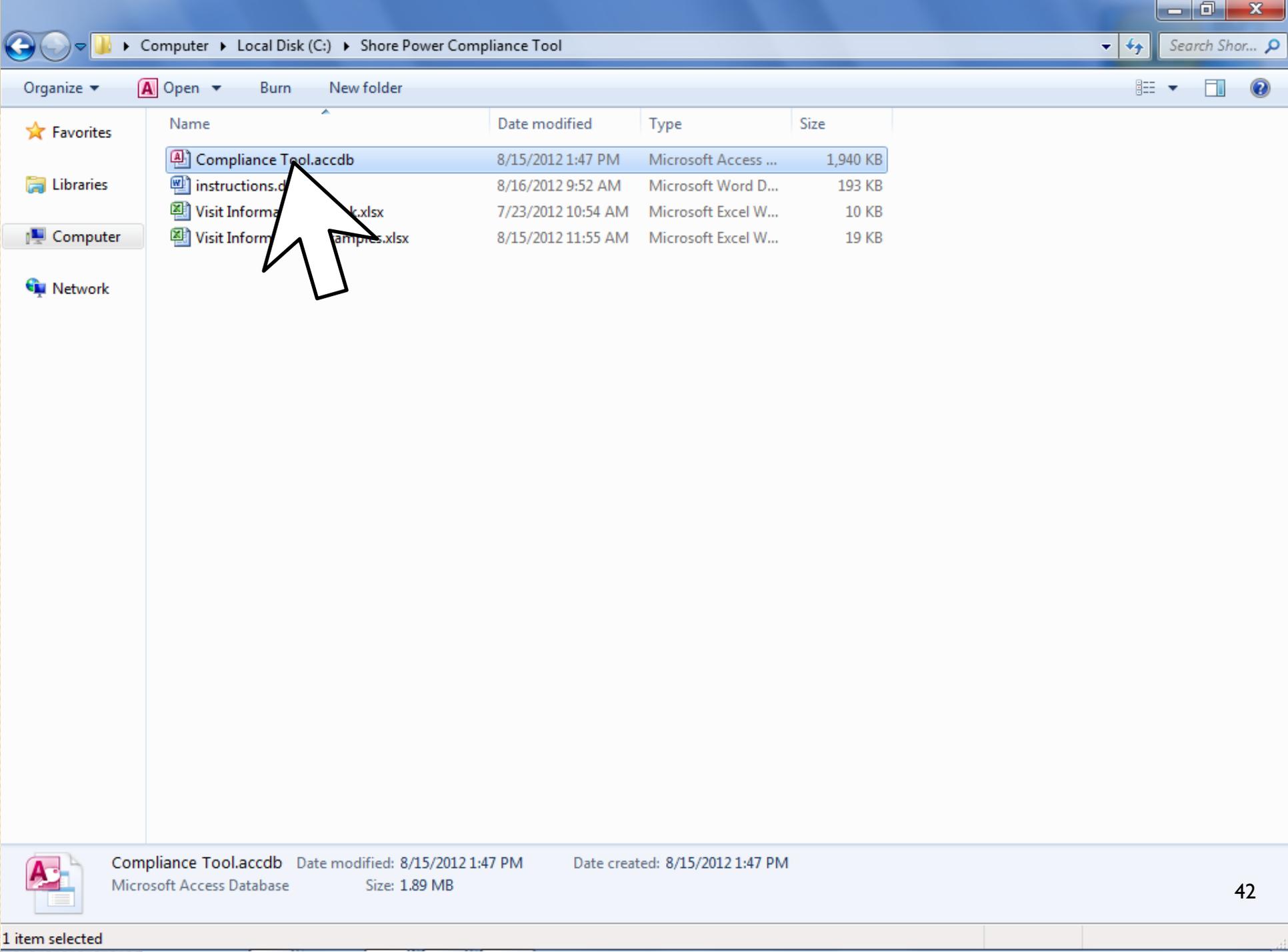
- Plugin-Cheetah also visits Port of Los Angeles the day after it visits Oakland

- Plugin-Gazelle is a shore power ready 4500 TEU container vessel

- Plugin-Gazelle visits berth 33 every 21 days and stays 4 days

- Wildebeest is a non-shore power 5500 TEU container vessel

- Wildebeest visits berth 34 every 28 days and stays 5 days



Computer > Local Disk (C:) > Shore Power Compliance Tool

Organize Open Burn New folder

- Favorites
- Libraries
- Computer
- Network

Name	Date modified	Type	Size
Compliance Tool.accdb	8/15/2012 1:47 PM	Microsoft Access ...	1,940 KB
instructions.doc	8/16/2012 9:52 AM	Microsoft Word D...	193 KB
Visit Information Samples.xlsx	7/23/2012 10:54 AM	Microsoft Excel W...	10 KB
Visit Information Samples - Samples.xlsx	8/15/2012 11:55 AM	Microsoft Excel W...	19 KB



Compliance Tool.accdb Date modified: 8/15/2012 1:47 PM Date created: 8/15/2012 1:47 PM
Microsoft Access Database Size: 1.89 MB

1 item selected

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All Delete More Records Find Go To Select Text Formatting

Main View



ARB Shore Power Compliance Tool

Import data from a file

Import data from a folder

Fleet

Compliance Summary for at

	#Visits	% Shore Power	% Emi
Requirements: Visits			
Q1 Details			
Q2 Details			
Q3 Details			
Q4 Details			

Select the EXCEL file:

Local Disk (C:) > Shore Power Compliance Tool

Name	Date modified	Type
Visit Information - Blank.xlsx	7/23/2012 10:54 AM	Microsoft Excel W...
Visit Information - Examples.xlsx	8/15/2012 11:55 AM	Microsoft Excel W...

File name: Visit Information - Examples.xlsx

Save as type: Excel Files (*.xlsx)

Hide Folders Save Cancel

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All New Save Delete Records Find Go To Select Replace Spelling Text Formatting

Main View



ARB Shore Power Compliance Tool

Database Tools

Import data from a file

Export data

Erase all data

Import data from a folder

Recheck Errors and Flags

Fleet

Port

Compliance Year

Speedy Shipping

PLA/PLB

2015



2015 Compliance Summary for Speedy Shipping at PLA/PLB

	#Visits	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors	Compliance Statement
Requirements: Visits	50%	50%				
Q1 Details	7	71%	70%	0	0	Q1 Statement
Q2 Details	6	67%	66%	0	0	Q2 Statement
Q3 Details	7	71%	70%	0	0	Q3 Statement
Q4 Details	6	67%	66%	0	0	Q4 Statement
	26					

View Flags and Errors

File Home Create External Data Database Tools Acrobat

View Views Paste Copy Format Painter Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All New Save Delete Records Find Go To Select Replace Spelling Text Formatting

Main View



ARB Shore Power Compliance Tool

Database Tools

Import data from a file

Export data

Erase all data

Import data from a folder

Recheck Errors and Flags

Fleet

Port

Compliance Year

Speedy Shipping

PO

2015



2015 Compliance Summary for Speedy Shipping at PO

Requirements:	#Visits	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors	Compliance Statement
Q1 Details	15	67%	60%	0	0	Q1 Statement
Q2 Details	14	57%	50%	0	0	Q2 Statement
Q3 Details	14	64%	57%	0	0	Q3 Statement
Q4	14	64%	59%	0	0	Q4 Statement

View Flags and Errors

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Toggle Filter Refresh All New Save Delete Records Find Replace Go To Select Text Formatting

Main View Quarter Details

Quarter Details

Q2Y2015 Fleet: Speedy Shipping at port PO

Close

	Vessel Name	Arrival	Stay (Hr)	ShorePower (Hr)	Emergency	Errors	Flags
Visit Details	WildeBeest	4/1/2015 11:00	120.0				
Visit Details	Plugin-Cheetah	4/10/2015 11:00	72.0	71.0			
Visit Details	plugin-Gazelle	4/21/2015 11:00	96.0	95.0			
Visit Details	Plugin-Cheetah	4/24/2015 11:00	72.0				
Visit Details	WildeBeest	4/29/2015 11:00	120.0				
Visit Details	Plugin-Cheetah	5/8/2015 11:00	72.0	71.0			
Visit Details	plugin-Gazelle	5/12/2015 11:00	96.0	95.0			
Visit Details	Plugin-Cheetah	5/22/2015 11:00	72.0	71.0			
Visit Details	WildeBeest	5/27/2015 11:00	120.0				
Visit Details	plugin-Gazelle	6/2/2015 11:00	96.0	95.0			
Visit Details	Plugin-Cheetah	6/5/2015 11:00	72.0				
Visit Details	Plugin-Cheetah	6/19/2015 11:00	72.0	71.0			
Visit Details	plugin-Gazelle	6/23/2015 11:00	96.0	95.0			
Visit Details	WildeBeest	6/24/2015 11:00	120.0				

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Filter Ascending Descending Remove Sort Toggle Filter Selection Advanced Refresh All New Save Delete Records Totals Spelling More Find Find Go To Select Text Formatting

Fleet: Speedy Shipping at Port: PO Q2Y2015 Compliance Statement

Print Close

Vessel information

Lloyd Number	Vessel Name	Vessel Type
9578001	Plugin-Cheetah	Container 3500 TEU
9578002	plugin-Gazelle	Container 4500 TEU
9578003	WildeBeest	Container 5500 TEU

Berth Totals

8 visits at berth:	33
6 visits at berth:	34

Fleet Totals

57	Total number of Visits in 2015
14	Total number of Visits in Q2
0	Total exempt visits in Q2
8	Total Shore Power Visits in Q2
93	Average Berth Time in hours in Q2
198	Average Power Requirements in MWh in Q2

Compliance Summary

	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors
Requirements:	50%	50%		
Summary:	57%	50%	0	0

Understanding Errors and Flags

Compliance Summary for at

Requirements:	#Visits Visits	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors	Compliance Statement
Q1 Details						Q1 Statement
Q2 Details						Q2 Statement
Q3 Details						Q3 Statement
Q4 Details						Q4 Statement
				View Flags and Errors		

- **Flags**
 - ARB will review these visits carefully
 - Compliance can still be calculated
- **Errors**
 - There is a problem with the data
 - Compliance can not be calculated until corrected

Compliance Tool Flags

- Delay
 - This visit includes a delay
 - No documentation for delay
 - Delay longer than 3 hours
 - Delay lacks explanation



Compliance Tool Flags

- **Emergency**
 - This visit includes an emergency
 - No documentation for emergency
 - Emergency lacks explanation
- **Visit overlap**
 - Visit overlaps with another ship
 - Ship appears in more than one dock at the same time
 - Ship visited another berth within 2 hours

Compliance Tool Errors

- Auxiliary engines
 - Auxiliary engines start time is before auxiliary engines shut off time
 - Auxiliary engines shut off before arrival
 - Auxiliary engines started after departure



Compliance Tool Errors

- Arrival times
 - Departure time is before arrival time
- Delay
 - Delay started after Auxiliary engines shut down
 - Delay longer than time to berth and shut down engines



Demo of Errors and Flags

Example Spreadsheet: Visit Information - Examples.xlsx

- Example fleet Problem Carrier visits Port of LA at terminal 206 (non shore power) and terminal 207 (shore power ready).

Fleet Problem Carrier consists of 3 ships:

- Always Flags is a shore power ready container ship. For example purposes, each visit from this ship will throw a flag.
- Always Errors is a shore power ready container ship. For example purposes, each visit from this ship will thrown an error.
- Overlap is a container ship that visits at the same time as another ship.

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All New Save Delete More Totals Spelling Find Go To Select Replace

Clipboard Sort & Filter Records Find Text Formatting

Main View



ARB Shore Power Compliance Tool



Database Tools

Import data from a file Export data Erase all data

Import data from a folder Recheck Errors and Flags

Fleet Port Compliance Year

Problem Carrier PLA/PLB 2015

2015 Compliance Summary for Problem Carrier at PLA/PLB

Requirements:	#Visits	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors	Compliance Statement
Q1 Details	6	Can not compute	Can not compute	2	5	Q1 Statement
Q2 Details	11	73%	57%	13	0	Q2 Statement
Q3 Details						Q3 Statement
Q4 Details						Q4 Statement

View Flags and Errors

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Views

Paste Copy Format Painter Clipboard

Filter

Ascending Selection Advanced Toggle Filter

Descending Advanced

Remove Sort

Refresh All

New Save Delete Records

Totals Spelling More

Find Find

Replace Go To Select

Text Formatting

Main View Quarter Details

Quarter Details

Close

Q1Y2015

Fleet: Problem Carrier at port PLA/PLB

	Vessel Name	Arrival	Stay (Hr)	ShorePower (Hr)	Emergency	Delayed	Errors	Flags
Visit Details	AlwaysError	1/10/2015 11:00	-120.0				yes	
Visit Details	AlwaysError	1/20/2015 11:00	120.0	-118.0			yes	
Visit Details	AlwaysError	1/30/2015 11:00	120.0	120.0			yes	
Visit Details	AlwaysError	2/9/2015 11:00	120.0	120.0			yes	
Visit Details	AlwaysError	2/19/2015 11:00	120.0	118.0		Yes	yes	yes
Visit Details	AlwaysError	3/1/2015 11:00	120.0	118.0		Yes	yes	yes

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Toggle Filter Refresh All Selection Advanced Delete More Records New Save Delete More Find Replace Go To Select Text Formatting

Main View Quarter Data... Visit Details Edit Details

Visit Details

Save and Close Form

Ship Information

Fleet	Problem Car
Vessel Name	AlwaysError
Lloyd Number	123456
Vessel Type	Container 3500 T
Power Requirement	1900
Shore Power Capable	Yes

Visit Information

Port	PLA/PLB
Berth	206
Time of Arrival	1/5/2015 11:00:00 AM
Time of Departure	1/10/2015 11:00:00 AM

ShorePower Information

Electricity Provider	
Time Auxiliary engines stopped	
Time Auxiliary engines started	

Emergency Information

Emergency Event	
Time of Start of Emergency	
Time of End of Emergency	
Emergency Explanation	

Delay Information

Delayed Event	
Time of Start of Delay	
Time of End of Delay	
Delay Explanation	

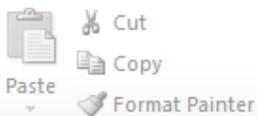
Navigation Pane

File Home Create External Data Database Tools Acrobat



View

Views



Paste

Copy

Format Painter

Clipboard



Filter

A-Z Ascending
Z-A Descending
Remove SortSelection
Advanced
Toggle Filter

Sort & Filter



Refresh All

New
Save
Delete

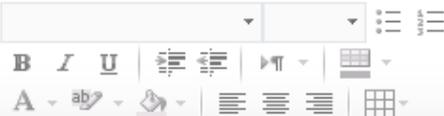
Records

Σ Totals
ABC Spelling
More

Find

Replace
Go To
Select

Find



Text Formatting

Main View

ARB Shore Power Compliance Tool

Database Tools

Import data from a file

Export data

Erase all data

Import data from a folder

Recheck Errors and Flags

Fleet

Port

Compliance Year

Problem Carrier

PLA/PLB

2015

2015 Compliance Summary for Problem Carrier at PLA/PLB

	#Visits	% Shore Power	% Emission Reduction	#Visits with Flags	#Visits with Errors	Compliance Statement
Requirements:	Visits	50%	50%			
Q1 Details	6	Can not compute	Can not compute	2	5	Q1 Statement
Q2 Details	11	73%	57%	13	0	Q2 Statement
Q3 Details						Q3 Statement
Q4 Details						Q4 Statement

View Flags and Errors

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Filter Ascending Descending Remove Sort Toggle Filter Refresh All New Save Delete Records Find Find Replace Go To Select Text Formatting

Main View Quarter Details

Quarter Details Close

Q2Y2015 Fleet: Problem Carrier at port PLA/PLB

	Vessel Name	Arrival	Stay (Hr)	ShorePower (Hr)	Emergency	Delayed	Errors	Flags
Visit Details	AlwaysFlags	4/4/2015 10:00	72.0	68.0		Yes		yes
Visit Details	AlwaysFlags	4/14/2015 10:00	72.0	70.0		Yes		yes
Visit Details	AlwaysFlags	4/24/2015 10:00	72.0	62.0		Yes		yes
Visit Details	AlwaysFlags	5/4/2015 10:00	72.0	68.0		Yes		yes
Visit Details	AlwaysFlags	5/14/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	5/24/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	6/3/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	6/13/2015 10:00	72.0	70.0				yes
Visit Details	Overlaped	6/14/2015 22:00	72.0					yes
Visit Details	AlwaysFlags	6/24/2015 22:00	72.0	70.0				yes
Visit Details	AlwaysFlags	6/26/2015 10:00	72.0					yes
Visit Details	AlwaysFlags	6/27/2015 22:00	72.0					yes
Visit Details	AlwaysFlags	6/30/2015 23:00	72.0					yes

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Selection Advanced Toggle Filter Refresh All New Save Delete Records Find Go To Select Text Formatting

Main View Quarter Data... Visit Details

VisitEvents Close Window

Lloyd Number	654321
Vessel Name	AlwaysFlags
Port	PLA/PLB
Berth	207
Time of Arrival	4/4/2015 10:00
Time of Departure	4/7/2015 10:00
Electricity Provider	PLA/PLB
Time Auxiliary engine:	4/4/2015 13:00
Time Auxiliary engine:	4/7/2015 9:00
Emergency Event	
Delayed Event	Yes

Delays



Flags indicate a potential problem with an entry. ARB staff will review each flag and may request additional information.

This visit includes a delay

Edit Visit Details

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Filter Ascending Descending Remove Sort Toggle Filter Refresh All New Save Delete Records Find Find Replace Go To Select Text Formatting

Main View Quarter Details

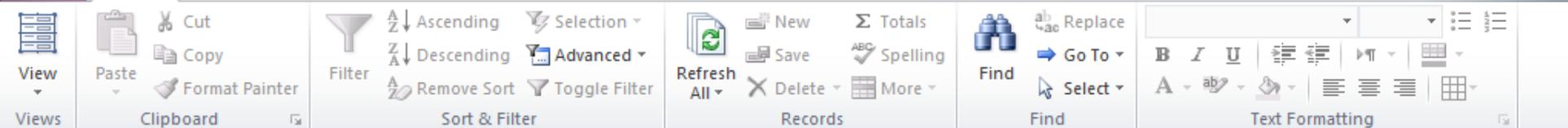
Quarter Details

Close

Q2Y2015

Fleet: Problem Carrier at port PLA/PLB

	Vessel Name	Arrival	Stay (Hr)	ShorePower (Hr)	Emergency	Delayed	Errors	Flags
Visit Details	AlwaysFlags	4/4/2015 10:00	72.0	68.0		Yes		yes
Visit Details	AlwaysFlags	4/14/2015 10:00	72.0	70.0		Yes		yes
Visit Details	AlwaysFlags	4/24/2015 10:00	72.0	62.0		Yes		yes
Visit Details	AlwaysFlags	5/4/2015 10:00	72.0	68.0		Yes		yes
Visit Details	AlwaysFlags	5/14/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	5/24/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	6/3/2015 10:00	72.0	70.0	Yes			yes
Visit Details	AlwaysFlags	6/13/2015 10:00	72.0	70.0				yes
Visit Details	Overlaped	6/14/2015 22:00	72.0					yes
Visit Details	AlwaysFlags	6/24/2015 22:00	72.0	70.0				yes
Visit Details	AlwaysFlags	6/26/2015 10:00	72.0					yes
Visit Details	AlwaysFlags	6/27/2015 22:00	72.0					yes
Visit Details	AlwaysFlags	6/30/2015 23:00	72.0					yes



VisitEvents

Close Window

Lloyd Number	654321
Vessel Name	AlwaysFlags
Port	PLA/PLB
Berth	206
Time of Arrival	6/27/2015 22:00
Time of Departure	6/30/2015 22:00
Electricity Provider	
Time Auxiliary engine:	
Time Auxiliary engine:	
Emergency Event	
Delayed Event	

Edit Visit Details

Flags Multi Berths Overlaps Duplicate Ships

Flags indicate a potential problem with an entry. ARB staff will closely review each flag and may request additional information.

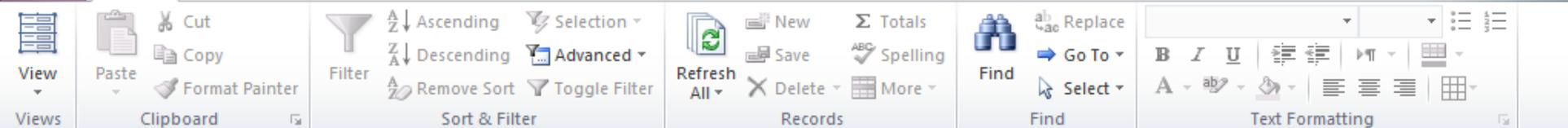
Visit overlaps with another ship

Ship appears in more than one dock at the same time

Ship appears in more than one dock at the same time

Ship visited multiple berth within 2 hours

Ship visited multiple berth within 2 hours



VisitEvents

Close Window

Lloyd Number	654321
Vessel Name	AlwaysFlags
Port	PLA/PLB
Berth	206
Time of Arrival	6/27/2015 22:00
Time of Departure	6/30/2015 22:00
Electricity Provider	
Time Auxiliary engine:	
Time Auxiliary engine:	
Emergency Event	
Delayed Event	

Edit Visit Details

Flags Multi Berths Overlaps Duplicate Ships

This ship arrived at the following berths during this visit (If it is blank, then this ship visited only one berth)

207	6/24/2015 22:00
207	6/30/2015 23:00

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Ascending Descending Remove Sort Toggle Filter Selection Advanced Refresh All New Save Delete Records Totals Spelling More Find Replace Go To Select Text Formatting

Main View Quarter Data Visit Details

VisitEvents Close Window

Lloyd Number: 654321

Vessel Name: AlwaysFlags

Port: PLA/PLB

Berth: 206

Time of Arrival: 6/27/2015 22:00

Time of Departure: 6/30/2015 22:00

Electricity Provider:

Time Auxiliary engine:

Time Auxiliary engine:

Emergency Event:

Delayed Event:

Edit Visit Details

Flags Multi Berths Overlaps Duplicate Ships

Entries below indicate ships that share the same berth at the same time as the ship in this visit

V2Lloyds	654321
V2Name	AlwaysFlags
Arrival	6/26/2015 10:00
Departure	6/29/2015 10:00

Navigation Pane

File Home Create External Data Database Tools Acrobat

View Paste Copy Format Painter Filter Sort & Filter Records Find Text Formatting

Main View Quarter Data... Visit Details

VisitEvents Close Window

Lloyd Number: 654321

Vessel Name: AlwaysFlags

Port: PLA/PLB

Berth: 206

Time of Arrival: 6/27/2015 22:00

Time of Departure: 6/30/2015 22:00

Electricity Provider:

Time Auxiliary engine:

Time Auxiliary engine:

Emergency Event:

Delayed Event:

Edit Visit Details

Flags Multi Berths Overlaps Duplicate Ships

Entries below indicate a visit that takes place by the same ship at a different dock during the duration of the original visit

Lloyd Number	654321
Vessel Name	AlwaysFlags
Port	PLA/PLB
Berth	206
Time of Arrival	6/26/2015 10:00
Time of Departure	6/29/2015 10:00
Lloyd Number	654321
Vessel Name	AlwaysFlags
Port	PLA/PLB
Berth	207
Time of Arrival	6/24/2015 22:00
Time of Departure	6/27/2015 22:00

Navigation Pane

Further information

- Visit:
arb.ca.gov/ports/shorepower/shorepower.htm



The screenshot shows the California Air Resources Board (ARB) website. The header includes the CA.GOV logo, the text 'California Environmental Protection Agency Air Resources Board', and navigation links for 'About ARB', 'Calendars', 'A-Z Index', and 'Contact Us'. A search bar is present with the text 'Search ARB' and options for 'Google' and 'Advanced'. A red navigation bar contains links for 'Home', 'Reducing Air Pollution', 'Air Quality', 'Business Assistance', 'Laws & Regulations', and 'Health'. The main content area displays the date 'Friday, August 24, 2012' and the title 'Shore Power for Ocean-going Vessels'.

- Instructions
- Examples
- Blank Compliance sheets (Excel spreadsheet)
- Blank Compliance Tool (Access database)
- E-mail and telephone contacts

Questions

E-mail: shorepower@arb.ca.gov

Call: (916) 327-5602, Grant Chin

(916) 327-1512, Jonathan Foster

