Freight Hub Survey: Truck Stops

The Freight Hub Survey for Truck Stops is the first in a series of six freight hub surveys that will be released by ARB this year. Staff has designed this survey to gather specific facility and equipment information from California based truck stops and is requesting feedback on the information included in the survey. The data gathered in this survey will help ARB staff better understand the activity that occurs at truck stops in California, assess the potential for emission reductions, and assist with the development of strategies for potentially reducing emissions at trucks stops. The information will also be used to determine the costs associated with any potential actions and direct future funding assistance efforts.

February 2017
Introduction

On July 17, 2015, Governor Brown issued Executive Order B-32-15 which directs State agencies to improve freight efficiency, transition to zero-emission technologies, and increase the competitiveness of California’s freight system. To support this effort and other air quality, climate, and sustainability goals, Air Resources Board (ARB) staff has identified the need to collect specific facility and equipment information from California based freight hubs. The Freight Hub Survey for Truck Stops is the first in a series of six freight hub surveys that will be released by ARB this year.

ARB staff has designed this survey to gather specific facility and equipment information from California-based truck stops and is requesting your participation in completing the enclosed survey. For the purposes of this survey, a truck stop is defined as any retail fuel establishment that sells fuel and provides rest (parking that is paved or unpaved) for truck drivers. The data gathered in this survey will help ARB staff better understand the activity that occurs at truck stops in California, assess the potential for emission reductions, and assist with the development of strategies for potentially reducing emissions at trucks stops. The information will also be used to determine the costs associated with any potential actions and direct future funding assistance efforts.

If you have any questions regarding this survey, please contact Ugo Eke, Air Resources Engineer, at (916) 322-7298 or ugonna.eke@arb.ca.gov.

How to Complete the Survey

- Hard Copy – Print a paper copy of the survey from the Program website at [https://www.arb.ca.gov/gmp/sfti/sfdatacollect.htm](https://www.arb.ca.gov/gmp/sfti/sfdatacollect.htm). Complete the survey and mail it to:

  California Air Resources Board  
  Attention: Ugo Eke  
  TTD/FTB/PSS – 6th Floor  
  P.O. Box 2815  
  Sacramento, California 95812-2815

  All surveys should be submitted by April 1, 2017.

  *If you wish to designate any survey information as a trade secret or confidential information, please check the box on the first page of the survey and complete the corresponding contact information.*

I. **Instructions for Contact Information**

If the property owner and truck stop owner is the same person or entity, complete only Part A of Section I. Otherwise, complete Part A and Part B of Section I.

**Company Name:** Provide the name of your company or owner/operator.

**Corporate Parent Name:** If applicable, provide the name of your parent company or corporation.

**Primary Contact Name/Title:** Provide the name of the primary contact and their title.

**Mailing Address:** Provide the complete mailing address of company. Include the city, state, or province, as well as the zip code and country.
Phone Number: Provide the phone number of primary contact.
Email Address: Provide the email address of the primary contact.

II. Instructions for Property and Operational Information

A. General Property

1. Provide the approximate number of non-passenger truck (trucks) visits to your facility in 2016.
   a. Considering the number of trucks given above, provide the percentage of trucks using refrigerated trailers. Include truck transport refrigeration units (TRU) and trailer TRUs.
2. Provide the total size of your property in acres.
   a. Considering the size of your property, provide the percentage of your property that is used for truck transit (i.e., truck passage/movement), not including parking areas.
   b. Considering the size of your property, provide the percentage of your property that is used for truck parking. Include parking that is paved and unpaved.
   c. Considering the size of your property, provide the area of undeveloped land with the potential to be developed in the future (in acres). For the purposes of this survey, undeveloped land is land that has not been built on or used for industrial purposes.
3. Provide the maximum number of trucks that can park on your property at any given time. Include parking that is paved and unpaved.
4. Check the appropriate box indicating whether or not you have a reservation system for truck parking.
5. For each month, estimate the average percentage of truck parking spaces used each month. Include parking that is paved and unpaved.
6. For the past year, estimate the average percentage of truck parking occupancy for the days and time ranges listed in the table.
7. Provide the hours of the day with the largest volume of truck parking occupancy. Include parking that is paved and unpaved.
8. Estimate the number of days in 2016 that trucks were not able to park at your facility due to unavailable parking spots.

B. Infrastructure

1. Provide the number of fuel dispenser pumps/stations available for trucks.
2. Check the appropriate box indicating whether or not your facility offers electric power plugs for truckers’ in-cab hoteling loads (e.g., power for microwave, TV, computer, heater, or air conditioning). If applicable, provide the number of plugs offered.
3. Estimate the average percentage of time that electric power plugs for in-cab hoteling (e.g., power for microwave, TV, computer, heater, or air conditioning) are used.
4. Check the appropriate box(es) indicating the voltage and phase of your electric power plugs for in-cab hoteling loads.
5. Check the appropriate box indicating whether or not your facility offers electric power plug infrastructure for eTRUs so they can run the transport refrigerator on electricity while parked/stationary. If applicable, provide the number of plugs offered.
6. Estimate the percentage of time that eTRU power plugs are used at your facility.
7. Check the appropriate box(es) indicating the type of electric power plugs you provide for eTRUs.
8. Check the appropriate box(es) indicating the voltage and phase of your electric power plugs for eTRUs.
9. Estimate the installed cost of each electric power plug for eTRUs. For the purposes of this survey, installed cost includes both the cost of equipment and its installation.

10. Check the appropriate box indicating whether or not you had to upgrade your electrical service to offer power plugs for in-cab hoteling or eTRUs.

11. Check the appropriate box indicating whether or not you would be interested in applying for incentive funding for installing electric power infrastructure for trucks or eTRUs such as, but not limited to: electric charging stations, hydrogen fueling units, or power plugs for in-cab hoteling and eTRUs.

C. Operations

1. Check the appropriate box indicating whether or not you are open for fueling 24 hours per day.

2. If you are open for fueling 24 hours per day, estimate the average percentage of daily fueling that takes place during the time ranges given.

3. If you are not open for fueling 24 hours per day, provide your facility’s hours of operation for fueling.

4. Provide the approximate number of diesel truck visits to your property in 2016 to provide supplies or services. Check the appropriate box to indicate whether this number is per day, week, month, or year.

5. Provide the percentage of fuel that is delivered to your facility by 1) truck and/or 2) pipeline.

6. Check the appropriate box(es) indicating which additional services are provided for truck drivers on your property. For each service, provide its hours of operation. Check all that apply. If you provide a service that is not listed, check the “other” box and describe the type of service provided in the space provided.

7. Check the appropriate box(es) indicating the type(s) of fuel provided at your facility. For each fuel type, provide the total number of point of sale transactions for 2016.

III. Freight Equipment Data

A. Mobile Equipment

Cargo Handling Equipment (CHE)

1. Check the appropriate box indicating whether or not you operate cargo handling equipment at this facility. For more information on CHE please go to https://www.arb.ca.gov/ports/cargo/cargo.htm.

2. Electric, Diesel, or Alternative Fueled CHE – List all of the types of electric, diesel, or alternative fueled CHE that operate or are stored at this facility in the table. For each piece of electric equipment listed, provide the motor model year, electric motor power rating (in kW) or engine horsepower (in bhp), and annual activity in 2016 (in hours). If a piece of equipment has multiple motors please list the motor type and its associated power rating (in kW) or engine horsepower (in bhp). For each type of diesel or alternative fueled CHE listed, provide the fuel type, engine model year, engine horsepower (in bhp), the annual activity (in hours), and whether or not an after-market diesel oxidation catalyst (DOC) or an after-market diesel particulate filter (DPF) is installed.
Truck Stop Survey Instructions

B. Stationary Equipment

1. Check the appropriate box indicating whether or not you have local air district permit(s) for any of your on-site stationary equipment.

C. Portable Equipment

1. Check the appropriate box indicating whether or not you operate portable equipment on this property. For more information on portable equipment please go to https://www.arb.ca.gov/diesel/peatcm/peatcm.htm.
2. List the Portable Equipment Registration Program (PERP) Registration Number or District Permit Number for each piece of portable equipment permitted by the ARB or your local air district.

D. Other Equipment

1. Check the appropriate box indicating whether or not you operate other diesel equipment on this property that was not listed previously. If applicable, list the equipment in the table and provide the equipment type, engine model year, engine horsepower, the annual activity in 2016 (in hours), and whether or not an after-market diesel oxidation catalyst (DOC) or an after-market diesel particulate filter (DPF) is installed.
Truck Stop Survey

☐ Please check this box if this survey contains any trade secrets or confidential information. All inquiries pertaining to the confidentiality of this information should be directed to the following person:

Name: ______________________________ Phone Number: ______________________________

Mailing Address: ________________________________________________________________

I. Contact Information

A. Truck Stop Owner/Operator Contact Information

Company Name: ________________________________________________________________

Corporate Parent Name (if applicable): _____________________________________________

Primary Contact Name: ___________________________________________________________________________ Title: ______________________________

Mailing Address: ________________________________________________________________

City: ____________________________ State/Province: __________ Zip: __________ Country: __________

Phone Number: _________________________ Email Address: ______________________________

☐ If the truck stop company owner and property owner are the same, please check this box and continue to Section II. Otherwise, continue to Part B below.

B. Property Owner Contact Information

Company Name: ________________________________________________________________

Corporate Parent Name (if applicable): _____________________________________________

Primary Contact Name: ___________________________________________________________________________ Title: ______________________________

Mailing Address: ________________________________________________________________

City: ____________________________ State/Province: __________ Zip: __________ Country: __________

Phone Number: _________________________ Email Address: ______________________________

II. Property and Operational Information

A. General Property

1. Estimate the number of non-passenger trucks (trucks) that entered your facility in the year 2016: ___________

   a. What percent of trucks had refrigerated trailers? ______________________________

2. What is the size of this property in acres? ______________________________

   a. What percent is used for truck transiting (not including parking areas)? ______________________________

   b. What percent is used for truck parking (include paved and unpaved parking)? ______________________________
Truck Stop Survey

c. Acres of undeveloped land that have the potential to be developed in the future? ______________________

3. How many trucks can park on your property (include paved and unpaved parking)? ______________________

4. Do you have a reservation system for truck parking?  ☐ Yes  ☐ No

5. Estimate the average percentage of parking spaces used each month (include paved and unpaved parking).
   _____ January  _____ February  _____ March  _____ April  _____ May  _____ June
   _____ July  _____ August  _____ September  _____ October  _____ November  _____ December

6. Estimate the average percentage of truck parking occupancy for the days and time ranges listed?

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>Estimated Average Truck Parking Occupancy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td>Day 6:00 AM – 6:00 PM</td>
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<tr>
<td></td>
<td>Overnight 6:00 PM – 6:00 AM</td>
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<tr>
<td>Monday</td>
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<td>Tuesday</td>
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<td>Saturday</td>
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<tr>
<td>Sunday</td>
<td></td>
</tr>
</tbody>
</table>

7. Typically, what hours during the day do you see a peak(s) in truck parking? ______________________

8. How many days in 2016 did your parking area reach full capacity? ________________________________

B. Infrastructure

1. How many fuel dispenser pumps/stations do you have for trucks? ________________________________

2. Do you offer electric power plugs for truckers’ in-cab hoteling loads (e.g., power for microwave, TV, computer, heater, or air conditioning) and, if so, how many do you have?
   ☐ Yes, I have ______________ electric power plugs for in-cab hoteling loads – continue to question 3 below.
   ☐ No – skip to question 5 below.

3. Estimate the average percentage of time that electric power plugs for in-cab hoteling are used? ____________

4. What voltage and phase are your electric power plugs for in-cab hoteling loads? Check all that apply.
   ☐ 110 Volt, single-phase  ☐ 220 Volt, single-phase  ☐ 230 Volt, 3-phase  ☐ 480 Volt, 3-phase
   ☐ Other – please specify: ________________________________________________________________
Truck Stop Survey

**eTRU Section**

eTRUs are hybrid-electric Transport Refrigeration Units (TRU) or TRUs equipped with electric standby that are mounted on semi-trailers and straight truck cargo vans. These units have the capability of being plugged into electric power plugs while stationary and are powered by diesel engines while on the road.

5. Do you offer electric power plug infrastructure for eTRUs so they can run the transport refrigerator on electricity while parked/stationary and, if so, how many do you have?
   - ☐ Yes, I have _____________ eTRU power plugs – continue to question 6 below.
   - ☐ No – skip to question 10 below.

6. On average, what is the estimated percentage of time that eTRU power plugs are used? __________________

7. What type of electric power plug do you provide for eTRUs? Check all that apply.
   - ☐ Twist Lock
   - ☐ 4-Pin and Sleeve
   - ☐ 5-Pin and Sleeve
   - ☐ 6-Pin and Sleeve
   - ☐ 7-Pin and Sleeve
   - ☐ Other – please specify: ____________________________________________

8. What voltage and phase are your electric power plugs for eTRUs? Check all that apply.
   - ☐ 110 Volt, single-phase
   - ☐ 220 Volt, single-phase
   - ☐ 230 Volt, 3-phase
   - ☐ 480 Volt, 3-phase
   - ☐ Other – please specify: ____________________________________________

9. What is the estimated installed cost for each electric power plug for eTRUs? Installed cost includes both the cost of the equipment and its installation. ____________________________

10. If applicable, did you have to upgrade your electrical service to offer power plugs for in-cab hoteling or eTRUs?
    - ☐ Yes
    - ☐ No

11. If incentive funding is available for installing electric power infrastructure for trucks or eTRUs, would you be interested in applying for that funding?
    - ☐ Yes, please send me information about incentive funding.
    - ☐ Yes, but I will look into it later through my local air district.
    - ☐ No.

C. Operations

1. Are you open for fueling 24 hours per day?  ☐ Yes  ☐ No

2. If you are open 24 hours per day, estimate the average percentage of daily fueling that takes place in the time ranges listed below:
   - 6:00 AM – 6:00 PM: __________________________
   - 6:00 PM – 6:00 AM: __________________________

3. If you are not open 24 hours per day, what hours are you open for fueling? __________________________
4. Estimate the number of diesel trucks that entered this property in 2016 to provide supplies or services for your business?

____________________________ per (check one of the following): □ day  □ week  □ month  □ year

5. Percentage of fuel delivered by truck or pipeline in 2016?  
   Truck: __________%  
   Pipeline: __________%

6. Indicate which additional services are provided for truck drivers on your property and hours of operation.

   Service:                                                                 Hours of Operation:
   □ Truck Repair – Mechanical                                                                                   
   □ Truck Repair – Autobody                                                                                   
   □ Tire Service                                                                                               
   □ Truck Wash                                                                                                 
   □ Convenience Store                                                                                           
   □ Restaurant(s)                                                                                               
   □ Hotel                                                                                                       
   □ Other (explain):                                                                                           
                                                                                                                  
7. Indicate the type of fuel provided and the number of point of sale transactions for each fuel type during 2016:

   Fuel Type:                                                                 Number of Point-of-Sale Transactions:
   □ Regular Gasoline (87 Octane)                                                                                   
   □ Midgrade Gasoline (89 Octane)                                                                                   
   □ Premium Gasoline (91 Octane)                                                                                   
   □ No. 2 Diesel                                                                                                 
   □ Bio-Diesel                                                                                                  
   □ Propane                                                                                                      
   □ E-85 (85% Ethanol Fuel)                                                                                       
   □ Compressed Natural Gas (CNG)                                                                                  
   □ Liquefied Natural Gas (LNG)                                                                                   
   □ Other (Explain):                                                                                             
                                                                                                                  

____________________________
III. **Freight Equipment Data**

Complete the following questions for all equipment that you own/lease and operate on this property.

**A. Mobile Equipment**

**Cargo Handling Equipment (CHE)** – For more information on CHE please go to [https://www.arb.ca.gov/ports/cargo/cargo.htm](https://www.arb.ca.gov/ports/cargo/cargo.htm).

1. Do you operate cargo handling equipment at this facility?  ☐ Yes – continue to question 2 below.  ☐ No – skip to Part B below.

2. **Electric, Diesel or Alternative Fueled CHE** – In the table below list the CHE equipped with electric motors or diesel or alternative fueled engines that you operate at this facility. For each CHE include equipment type, fuel type (list electric or the type of fuel used), motor or engine model year, engine horsepower, and whether or not an after-market diesel oxidation catalyst (DOC) or an after-market diesel particulate filter (DPF) is installed.

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Electric or Fuel Type</th>
<th>Motor or Engine Model Year</th>
<th>Electric Motor Power Rating (kW) or Engine Horsepower (bhp)</th>
<th>Activity in 2016 (hours)</th>
<th>Installed Emission Controls (If Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>☐ DOC ☐ DPF</td>
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</table>
B. Stationary Equipment

1. Do you have a local air district permit(s) for any of your on-site stationary equipment? ☐ Yes ☐ No ☐ Not Applicable

C. Portable Equipment – For more information on portable equipment please go to https://www.arb.ca.gov/diesel/peatcm/peatcm.htm.

1. Do you operate portable equipment at this facility? ☐ Yes – continue to question 2 below. ☐ No – skip to Part D below.

2. List the Portable Equipment Registration Program (PERP) Registration Number or District Permit Number for each piece of portable equipment permitted by the ARB or your local air district.

   i. ____________________________________________

   ii. __________________________________________

   iii. __________________________________________

   iv. __________________________________________

   v. __________________________________________

   vi. __________________________________________

D. Other Equipment

1. Do you operate other diesel equipment on this property that was not listed previously?
   ☐ Yes – please list the equipment in the table below. ☐ No

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Engine Model Year</th>
<th>Engine Horsepower (bhp)</th>
<th>Activity in 2016 (hours)</th>
<th>Installed Emission Controls (If Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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