AQMD High Cube Warehouse Truck Trip Study Stakeholder Working Group

August 9, 2012
# Summary of High Cube Warehouse Definitions

<table>
<thead>
<tr>
<th></th>
<th>&gt;100,000 sf</th>
<th>&gt;200,000 sf</th>
<th>&gt;500,000 sf</th>
<th>&gt;24 ft ceiling</th>
<th>&gt;28 ft ceiling</th>
<th>&gt;30 ft ceiling</th>
<th>1 dock door/10,000 sf</th>
<th>High level° of automation</th>
<th>Used for storage of goods prior to distribution</th>
<th>Used for the storage of component parts and assembling of products at all stages in the supply chain</th>
<th>Small employee count</th>
<th>Off-peak truck activity</th>
<th>Good freeway access</th>
<th>&gt;50% land coverage</th>
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Key Criteria for High Cube Warehouses

- Greater than 200,000 sf building size
- Minimum ceiling height of 24 feet
- Minimum dock door ratio of 1 per 10,000 sf
- Used primarily for distribution of goods to stores or other warehouses
- High level of automation/mechanization
Business Survey Pilot Study

- Draft Business Survey will be sent to 10 warehouses
- 10 warehouses chosen have all been visited by AQMD staff
- Not all warehouses in Pilot Study are high-cube warehouses
## Draft Pilot Study Warehouses

<table>
<thead>
<tr>
<th>Warehouse Type</th>
<th>Address</th>
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<tbody>
<tr>
<td>Costco Depot (dry)</td>
<td>11600 Riverside Drive, Jurupa Valley</td>
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<tr>
<td>Costco Depot (refrig.)</td>
<td>11600 Riverside Drive, Jurupa Valley</td>
</tr>
<tr>
<td>Skechers</td>
<td>29800 Eucalyptus Ave., Moreno Valley</td>
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<tr>
<td>Kohl's</td>
<td>890 E. Mill St., San Bernardino</td>
</tr>
<tr>
<td>TTSI/ NEC (Bldg. 1)</td>
<td>18735 South Ferris Ave., Compton</td>
</tr>
<tr>
<td>Stater Brothers</td>
<td>301 South Tippecanoe Ave., San Bernandino</td>
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<tr>
<td>California Cartage</td>
<td>2401 E. Pacific Coast Highway, Wilmington</td>
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<tr>
<td>New Balance</td>
<td>5540 East 4th Street, Ontario</td>
</tr>
<tr>
<td>Jakks Pacific Inc.</td>
<td>21749 Baker Parkway, City of Industry</td>
</tr>
<tr>
<td>Target</td>
<td>14750 Miller Avenue, Fontana</td>
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</tbody>
</table>
AQMD High Cube Warehouse Business Survey - Internal Draft

User Information

1. Facility Information

Facility Name
Facility Street Address
City
State
Zip Code

2. Contact

Name
Title
Phone
E-mail

Next
3. What is the size of your warehouse excluding office space?
   Warehouse size in square feet

4. Are you the only tenant at this facility?
   ○ Yes
   ○ No

5. What is the approximate ceiling height of your building?
   Ceiling height in feet

6. How many dock doors are located at your warehousing operation?
   Number of dock doors

7. What percent of goods are transported to/from your warehouse using an onsite rail line?
   ○ 0 percent
   ○ 1 to 25 percent
   ○ 25 to 50 percent
   ○ Greater than 50 percent

8. What percentage of floor space is typically dedicated to each activity?
   Storage racks
   Cross dock
   Parcel
   Sorting
   Refrigeration/freezer
   Value added service (labeling, etc.)
   Supporting activities (pallet handling, forklift battery charging, cardboard handling, etc.)
   Other
9. What type of goods do you handle at your warehouse?
- Raw materials
- Durable goods (furniture, appliances, etc.)
- Non-perishable consumable goods (clothing, toys, etc.)
- Perishable consumable goods (food, drinks, etc.)
- Parole
- Other (please specify)

10. Approximately how many employees work at your facility on a typical day?
- Full time
- Part time

11. Which month(s) do you move the highest volume of goods?
- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

12. How much busier are you during these month(s) compared to average months?
- % increase

13. How does your current number of total deliveries compare to your historical best year? (only fill in one)
- % higher
- % lower

14. At what percentage of utilization is your warehouse?
- Less than 50 percent utilization
- 50 to 60 percent utilization
- 60 to 70 percent utilization
- 70 to 80 percent utilization
- 80 to 90 percent utilization
- 90 to 100 percent utilization

15. How long do you generally take to turn over most of your inventory?
- Daily
- Weekly
- Monthly
- Quarterly
- Semi-annually
- Annually
16. If your warehouse uses conveyorized track/belt to move goods throughout your facility, approximately how many miles of conveyor do you use?

- We don't use conveyors
- 0 to 3 miles
- 3 to 6 miles
- 6 to 9 miles
- Greater than 9 miles

17. How many forklifts/pallet jacks does your business use?

Number of forklifts/pallet jacks

18. Does your facility use any of the following processes to automate your warehouse operations?

- Barcode scanning
- Automated sorting
- Automated storage
- Conveyorized loading and/or unloading directly into trailers
- Other
### Vehicle Activity

10. How many employee vehicles enter through your gate(s) on the busiest day of a typical week?
   - Number of light duty cars and pickup trucks

20. How many delivery trucks enter through your gate(s) on the busiest day of a typical week?
   - Number of delivery trucks

21. What percentage of deliveries come from the following locations?
   - Port of Los Angeles
   - Port of Long Beach
   - Port of San Diego
   - Port Hueneme
   - Other Warehouses
   - Rail Yard
   - Airport
   - Local Store (southern CA)
   - Non-local Store (other CA)
   - Out of State

22. What percentage of deliveries go to the following locations?
   - Port of Los Angeles
   - Port of Long Beach
   - Port of San Diego
   - Port Hueneme
   - Other Warehouses
   - Rail Yard
   - Airport
   - Local Store (southern CA)
   - Non-local Store (other CA)
   - Out of State
23. How many hostlers (i.e., yard goats) does your warehouse operate?

Number of hostlers

24. If you own heavy duty delivery trucks, please indicate which engine technology makes up the largest portion of your fleet:

- Pre-2007 model year diesel engines
- Model year 2007 or newer diesel engines
- Model year 2010 or newer diesel engines
- LNG
- Other alternative fuel
25. List any other features of your operation that you think might benefit or impact air quality.

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