Industrial & Research Gases

University of Nebraska Procurement and Delivery Services Model

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Your presenters...

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Strategic Sourcing
Scientific Sourcing Manager
One school’s journey…

Industrial Gases…

– Category overview & analysis
– Data analysis & strategy
– New service model overview
– Implementation follow up and future goals
CATEGORY OVERVIEW & ANALYSIS
Category Analysis

• NU estimated annual spend ~ $1.5MM
  – Four campuses make up total spend
• Over 50% is demurrage, service fees
• Market influences:
  ▪ Tariffs (Steel)
  ▪ Volatile industrial gases: helium, nitrogen
  ▪ Geographic location
  ▪ Low availability of substitutes
Market Impact

• 2018 Impact
  – Helium: estimated 10% market increase due to recent US Department of the Interior, Bureau of Land Management (BLM) price increases, higher distribution costs worldwide
  – Steel price pressures –
    • February 2018: US Commerce Department recommending steep tariffs on foreign steel and aluminum
Strategic Sourcing Implications

• University of Nebraska system
  • Unique environment – diversity among spend and research needs across campuses
  • 4 campuses are all isolated, agricultural market

• Current supplier: Matheson
  • Capacity – separation plant in Waverly
  • Logistics – only manufacturer in 200-300 mile radius
  • Services other gas companies in 5-state area
  • Global organization with leverage, impact
About Matheson

- Subsidiary of Taiyo Nippon Sanso
- Strong heritage with the University
  - Supplier for 25 years
  - University supporter and advocate
- Matheson as a prime supplier
  - Previously locally known as Linweld with corporate offices in Lincoln, serving 8 states
  - Sold to Matheson in 2006
- Part of a global organization, 220+ stores in US, major supplier of higher education
- Continued reputation of safety first, excellent customer service
DATA ANALYSIS AND STRATEGY
UNL City and East campus challenges

Safety hazards, cause delays

- Multiple deliveries in one week to same locations, buildings
- Locked doors
- Orders for less than full tank fills
- No freight elevator in some buildings
- Students riding same elevator
- Parked cars blocking delivery docks
- Safety hazards
- Inefficient – benchmarking against best practices and other similar customers
Methods

- Data Analysis
  - Spend from 2016
    - Group by building
    - Divided spend by weeks
    - Number tanks/date
    - Number of different types of gas/week
    - Identifying what day of the week most deliveries landed
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<th>SADDR2</th>
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<th>UOM</th>
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Methods

• Mapping
  – Identifying “zones” that combine both high and medium/low level areas
  – Separating high volume delivery buildings in different zones, different scheduled day of the week
NEW SERVICE MODEL OVERVIEW
New Service Model

- **Schedule deliveries** – consolidate by location and building
  - Monday – City 1
  - Wednesday – City 3
  - Thursday – fill in day for emergency deliveries
  - Tuesday – East
  - Friday – City 2

- **Order by 11:00 am previous workday**, receive delivery on assigned day

- If no order in eSHOP (Jaggaer), Matheson will not stop

- **Grace period**: July 1 through October 1

- **Order the right-size of dewars for volume requirements**
  - Full refills **only** – no partial refills (safety concern)
  - Will be billed per size of dewar

Effective: July 1, 2017
## New Service Model: Schedule

<table>
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<tr>
<th>Campus Sector</th>
<th>Delivery Day</th>
<th>Place order by 11 am on:</th>
<th>Location / Facility</th>
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<tr>
<td>City #1</td>
<td>Monday</td>
<td>Friday</td>
<td>Hamilton, Manter</td>
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<tr>
<td>City #3</td>
<td>Wednesday</td>
<td>Tuesday</td>
<td>Beadle, NIC (Innovation Campus)</td>
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<tr>
<td>East</td>
<td>Tuesday</td>
<td>Monday</td>
<td>East Campus/IANR</td>
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<tr>
<td>City #2</td>
<td>Friday</td>
<td>Thursday</td>
<td>Othmer, Scott, Jorgensen</td>
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**To receive delivery on your scheduled day:** Ensure your order is approved and released to Procurement Services (via eSHOP) by 11 am the day before your scheduled Delivery Day (shown above).
## New Service Model: Rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
<th>Rationale</th>
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<tbody>
<tr>
<td>Order by or before 11 am the day before your regular scheduled day</td>
<td>No additional delivery charge</td>
<td>Next day scheduled delivery</td>
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<tr>
<td>Rush charge</td>
<td>$15.00 per delivery</td>
<td>Items ordered after 11 am for delivery on your regular day</td>
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</tbody>
</table>

**NOTE:** If your order is placed after 11 am the day before your delivery date, it will be transported on the following week’s scheduled delivery date.

| Non-scheduled delivery day | $25.00 | Request delivery on a day that is not your scheduled day |
| Thursday delivery          | $40.00 | Delivery truck not typically out that day; needs special scheduling |

**Effective: October 1, 2017**
NEW service delivery model:
City Campus
IMPLEMENTATION FOLLOW UP & FUTURE GOALS
Follow up – UNL campus

- Transition completed October 1, 2017
  - Very few issues with non-compliance
  - One building was the primary focus of issues
  - Added alternate delivery date and waived the exception handling fee
- Pricing:
  - Increased the delivery fee from $1 to $5, had been the same since late 1990’s, lowering overall cost to serve
  - Approved price increases for helium and nitrogen effective April 2018 due to market pressures
- Continue to review and monitor for enhancement
- Overhaul of S&D model allowed most prices to remain flat in 2019, with exception to helium and nitrogen
  - Helium and nitrogen had a modest increase compared to other suppliers increased cost for those gases/liquids
Follow up - Matheson

• Double-digit cost to serve decrease
  – Initial: 26.8%
  – Current: 12.8%

• Sustainability highlights
  – 2.5 metric tons of CO2 reduced
    • Fewer miles driven around campus, fewer runs to pick up tanks at warehouse and back to campus
  – Savings allowed for new delivery truck to be purchased
    • More efficient fuel mileage
    • Lower emissions
    • Truck governed on highway routes – no more than 62 MPH (achievement for environmental AND safety concerns)
Present State and Future Goals

• Closing up standing framework orders
• Remove Buyer approval in eProcurement tool – automatic route to Matheson
• Success stories
  – Campus collaboration
  – Adjacent product enhancement
QUESTIONS?