



**INDIANA
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Warehouse Challenges & Delivery Processes of Off-Site Warehouses

Rick Mankowski

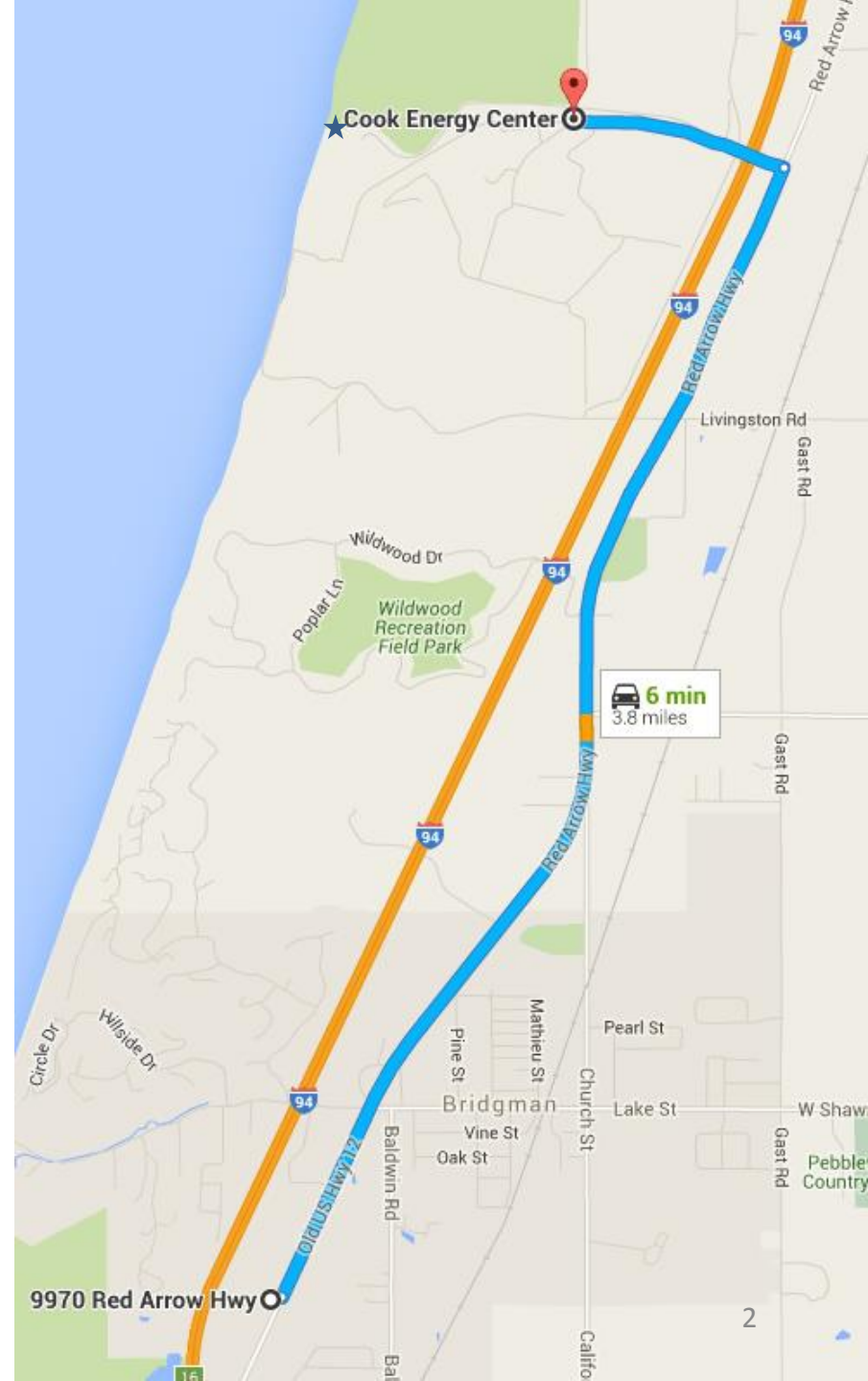
DC Cook Supply Chain Manager

Material Center – Warehouse
9970 Red Arrow Hwy

3.8 Miles to DC Cook

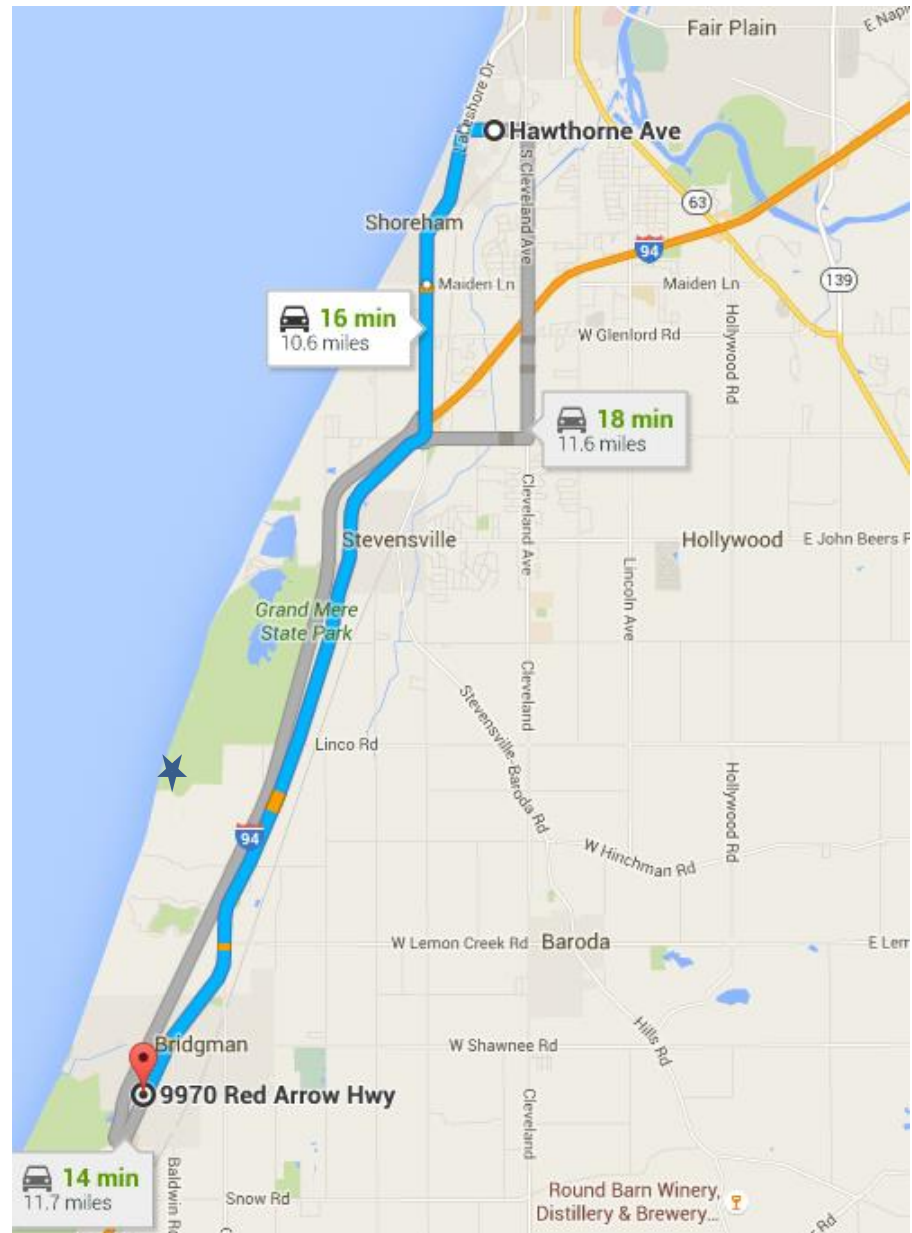
Timeline:

- Security Arrives @ MC: **08:00**
- Site food caterer food is x-rayed and van loaded: **08:30**
- Loading of Trucks: **10:00**
- Average Departure Time from MC for DC Cook: **11:15**
- Average Arrival Time at DC Cook Crane Bay for Unloading: **12:30**
- Unloading Duration: **30 mins**
- Average Departure Time from DC Cook Crane By: **13:00**
- Average Arrival of Truck back at MC: **13:30**



Capital Projects Hawthorne Warehouse

- 11.6 miles from Bridgman Warehouse
- 3.8 miles back to DC Cook Plant
- Most material and equipment received at Bridgman Warehouse then transported to Hawthorne.
- Material and equipment brought back to Bridgman for x-ray
- DC Cook Supervision over projects
 - Supply Chain contract personnel
 - PE
 - Buyers
 - RI
 - Material Handling





4 Hold / Stop Points at DC Cook

Post 1 – Average wait time: 15 mins

Post 2 – Average wait time: 30 mins

VSO/ Sallyport – Average wait time: 5 mins

Gate 2 – Average wait time: 10 mins

5 Possible Stops on Return Trip

WH #3/Annex (Chemicals 10K sqft)

WH #4 (20K sqft)

Training Center

Fuel Island

Environmental Shed (Chemicals)

Storeroom (15K sqft)



Bridgman Warehouse Shipping and Receiving area.



Rapiscan A-10 X-Ray

All Material to be transported to the Plant must be X-Rayed.

Challenges: Breakdowns; Security Officer must travel from Plant to Material Center prior to any material being x-rayed and must be A-10 Qualified.



Receiving & Projects' Staging Area

Challenges: Questionable Materials/Items cannot be readily looked at by Engineers and/or System Experts.



X-Ray & Plant/Stock Material Staging Area

Challenges: Due to limited Box Truck space and distance to Plant and time through Hold Points, maximum 15 skids a day. Therefore, standard stock material may be delayed (i.e. cleaning supplies, water, paper, etc.)



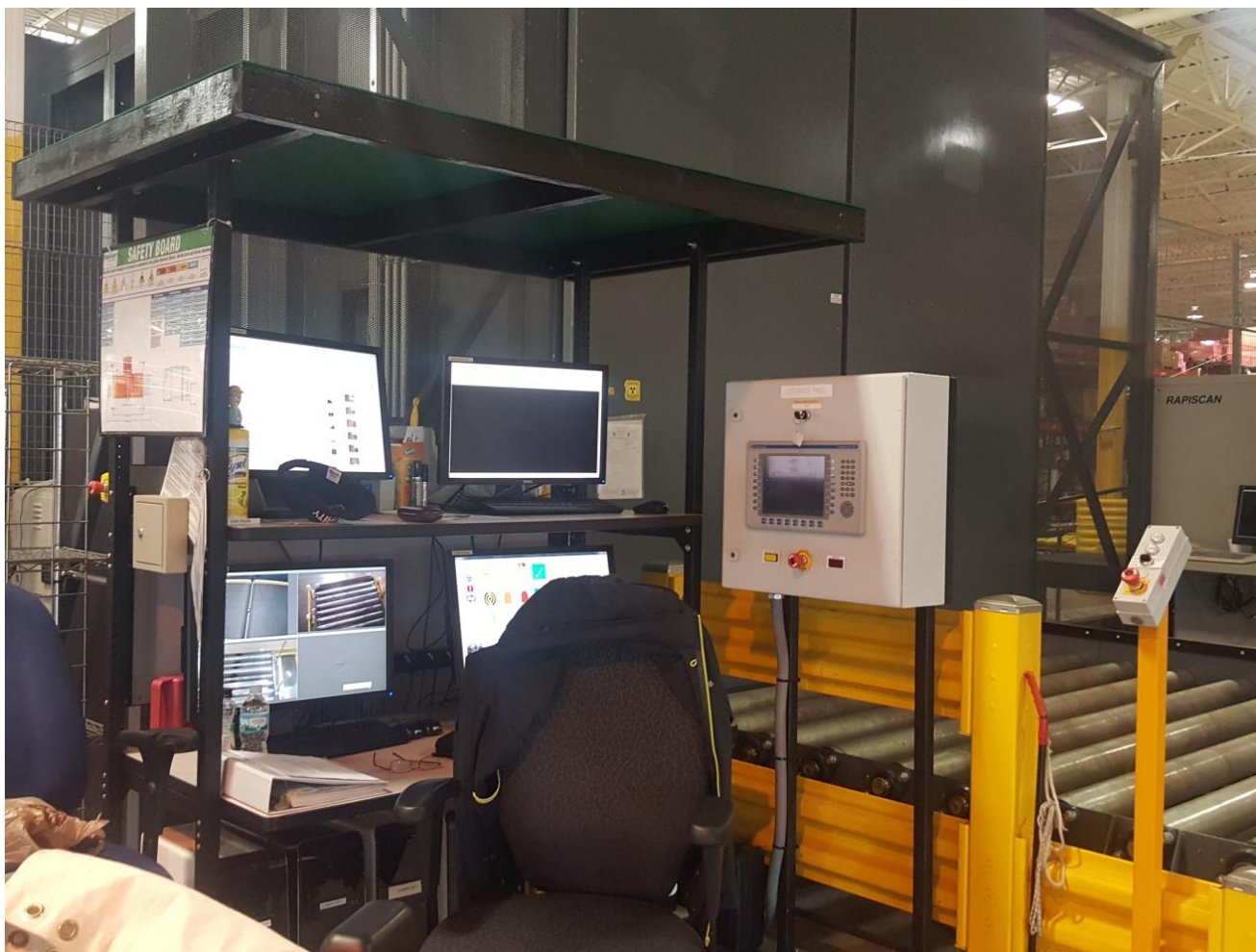
Secure Side of X-Ray (small x-ray unit on right)

Challenges/Comments: Used when larger x-ray breaks down. Must be hand loaded and unloaded to pallets and carts.



Secure Box Truck Loading Dock – Inside Cage

Challenges: Existing Warehouse: Width of loading dock doors do not match DC Cook Box Trucks



Security Office Station – Secure Side of X-Ray

Challenges/Comments: Security availability for x-ray operation during normal operation is usually not an issue. During outage periods with emergent material needs officer availability is very challenging.



Additional Plant/Stock Material Staging Area

Challenges/Comments: Large amounts of material, just in time deliveries and emergent outage needs with short turnaround for plant use are temporarily stored in WH isles for ease of processing through x-ray.



Black Plastic X-Ray Skids

Required for all wood pallets going through the x-ray; stored and maintained only at Material Center.



**Movement of Material after x-ray; Secure Side.
Ready to be loaded into Box Truck**



**Whether it is water, paper, food, oil, resin, pump
or a circuit card, it must be x-rayed prior to
being sent to the plant.**



Classic Catering

Food for Plant Cafeteria being loaded into catering van. Requires support from Security and from at least 3 Material Handlers.



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Food for Plant Cafeteria being loaded into catering van. Requires support from Security and from at least 3 Material Handlers.



Secured Vehicle

Security lock on Catering Van (DC Cook Box Trucks are secured in the same manner)

Challenges: Per FDA, Food must be delivered (oven to oven) within 2 hours (need to verify this time!!)



VSO Sallyport (Vehicle Security Officer)

Challenges: Congestion of other vehicular traffic both entering and exiting sallyport; availability of Security Officer to open gates.



Congestion at Area between VSO Sallyport & Gate 2



Gate 2

Box truck ready to enter Gate 2 and be off loaded at onsite Storeroom.

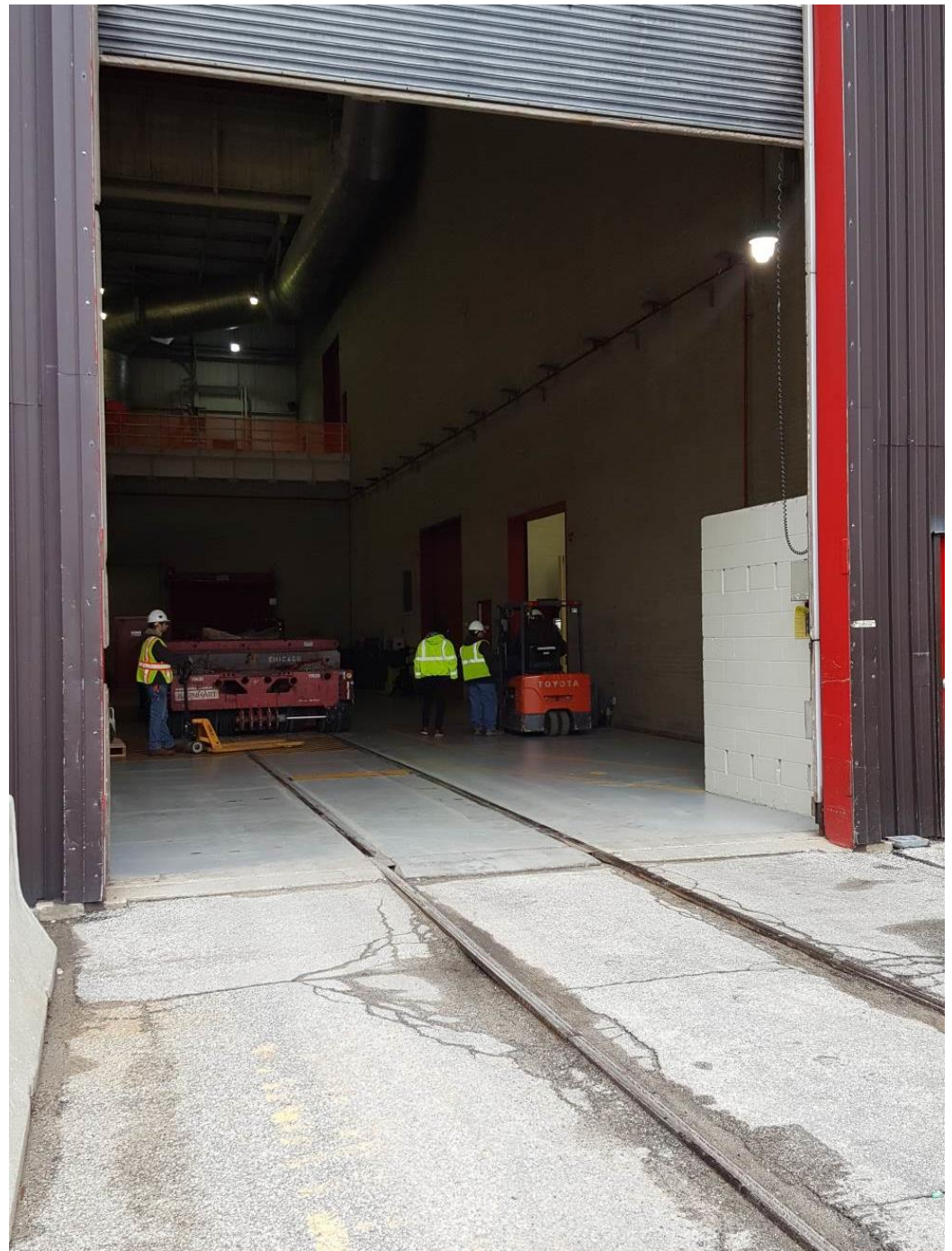


Box Truck ready to be off loaded at U1 Crane Bay

Challenges: If Crane Bay is congested with other material/equipment, box truck must be unloaded outside; inclement weather, uneven pavement, congestion from construction trailers and staged material.

U1 Crane Bay

Challenges: No room for Box Truck due to other equipment being staged in the Crane Bay





U1 Crane Bay

Challenges: No room for Box Truck due to other equipment being staged in the Crane Bay; Trapping forklifts. NFPA 805 fire loading requirements.



Off Loading Box Truck Outside

Challenges: Weather, congestion, pavement condition, train tracks, construction trailers, construction material



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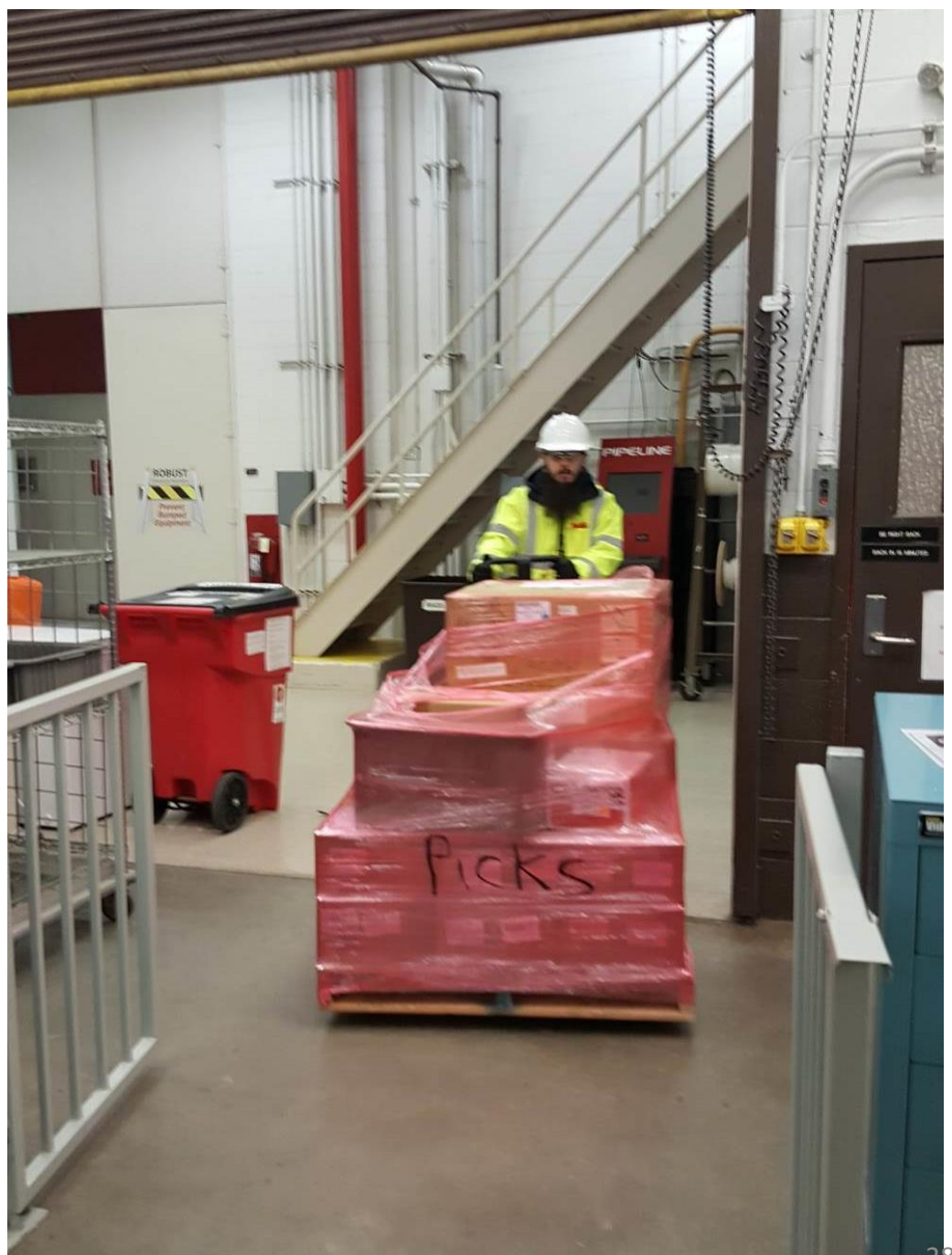


U1 Crane Bay Staging Area

Challenges: Limited space, unattended staged/issued material in turbine crane bay. Large, emergent and just in time delivered material is placed in the crane bay. Cannot be stored more than 7 days. Dates of when material is marked on material and equipment. NFPA 805 is also an issue.

Plant Storeroom

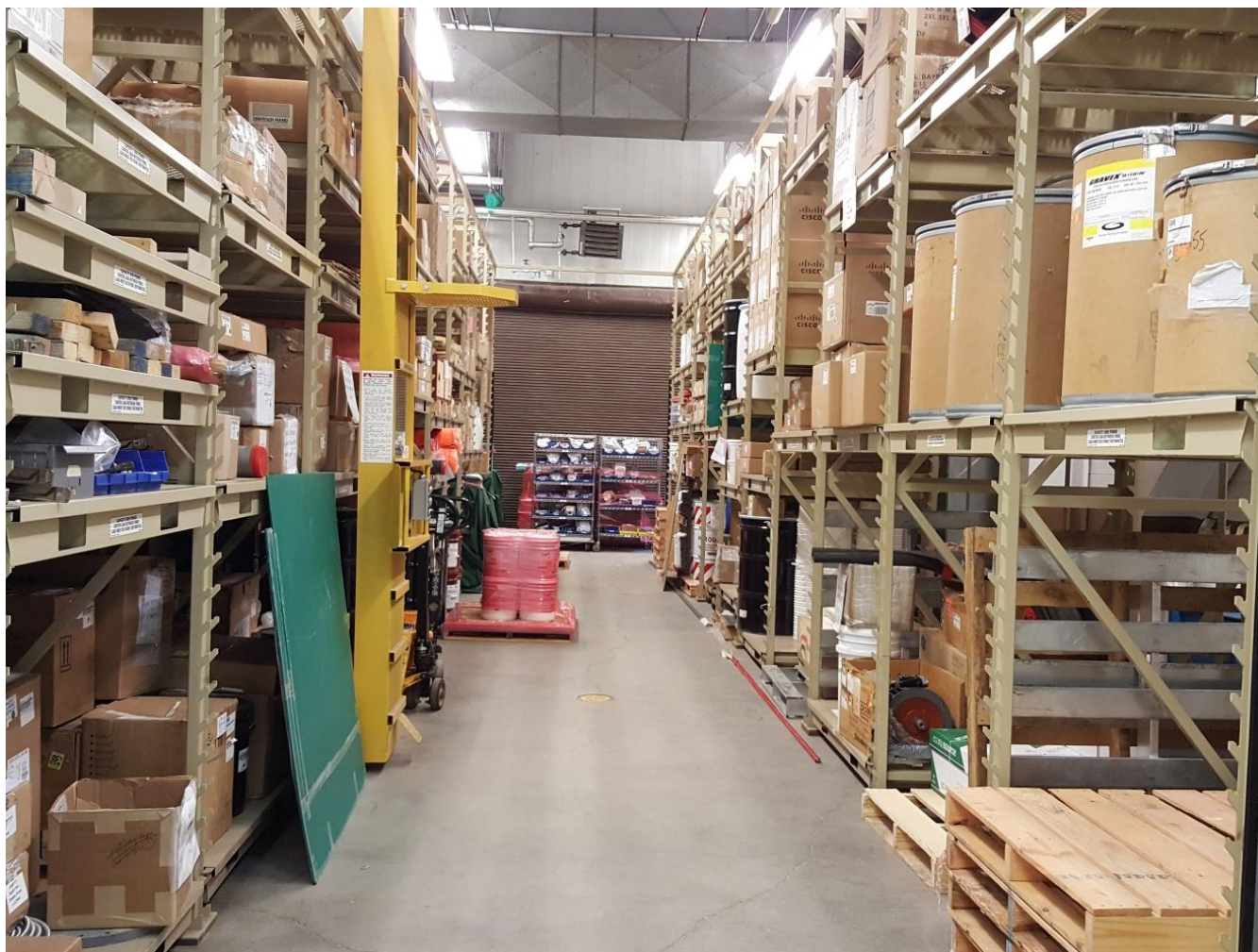
Challenges: The number of personnel required to off load trucks and maintain safe traffic flow often stretches our resources. If there is another delivery such as diesel fuel or gas bottles the storeroom and issue counter is shut down.





Plant Storeroom

Challenges: Limited staging and storage areas



Plant Storeroom Secure Storage / Cage Area

Challenges: We have limited protected area storage. We store T-Week and short term LCO material on site. This is our T-Week storage area.

Questions?

