

**Cherry Point Refinery Continuous
Improvement**
Site Logistics/ Materials Management

History



Built in 1971 , the site has undergone many significant capital upgrades since that time



During these times of growth and expansion, we experienced new and unique challenges around space utilization

Problem Statement

OMS 5.3- Asset Operation

Problem Statement:

Site facilities and infrastructure are not managed in a holistic manner, leading to inefficiency and waste across the site..

Background

Over many years of operation, lack of integration of site activities led to silo behavior in the use of facility space and materials

At a cost of approximately \$1 Million per acre to develop within the fence line, there was a financial prize in utilizing the real estate in a more federal manner.

Surplus materials and “bone yard” items were often stored indefinitely and were not tracked, leading to redundant orders and increased surplus following major projects.



Go-See-And-Assess

- How was site real estate being used?
 - Pockets of silos with unclear ownership/ accountability
 - “Homesteaders”- first come- first served
- What were the site needs?
 - Unclear and misaligned prioritization
- How are materials managed?
 - Surplus materials were “tossed in the garage”
 - No tracking or accounting of surplus items
 - Inconsistent procurement practices amongst multiple groups



Go-See-And-Assess



Scrap/ surplus materials were essentially “dumped” into an area designated as the Scrap Yard

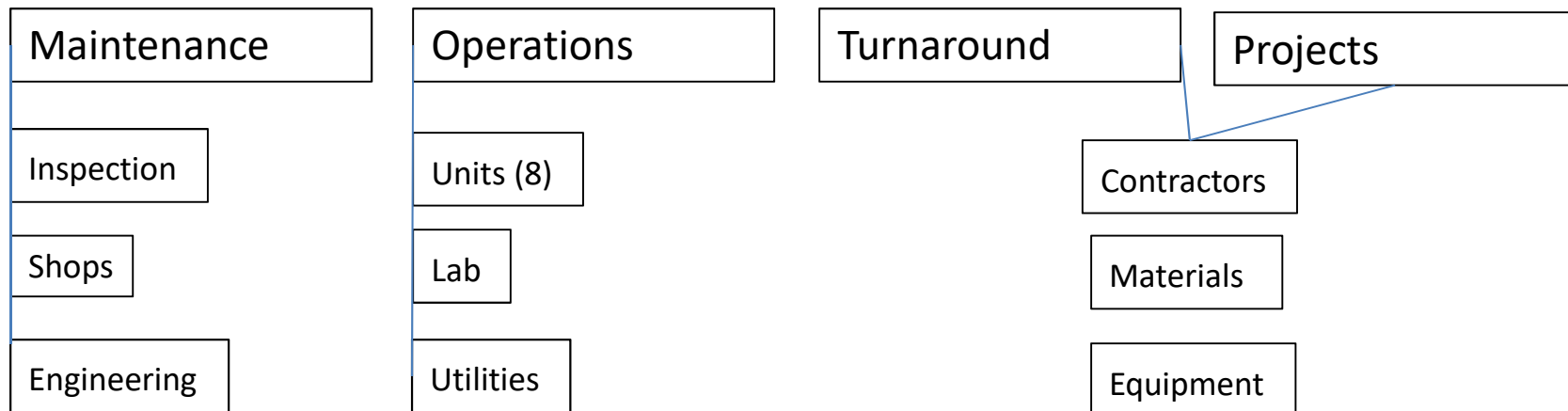
Who doesn't need a spare phone booth?

Items were not accounted for, but in some instances led to “saving the day” when a lucky person found a part at the right time. This led to an emotional attachment to this area.



Identify Root Cause

Multiple stakeholders with no single point of accountability or structured process based on priority.



Proposed Solutions

Implement management system/ process with single point of accountability tied to site priorities

Governance Process established through cross-functional steering team

Utilize and shore up existing workflow and processes, create those that didn't exist

Implementation

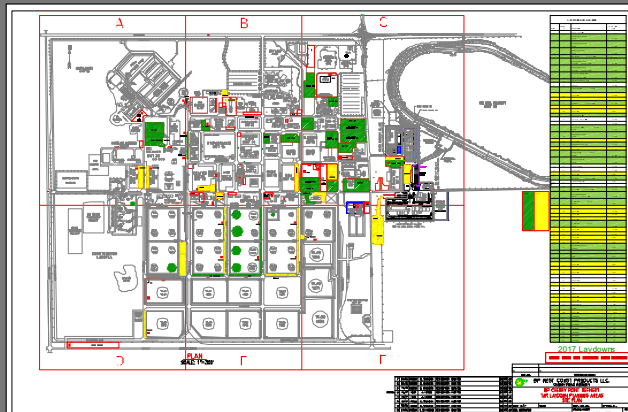
Established clear areas of ownership and accountability with roles and responsibilities defined

Created a Steering Team with regular meeting cadence and format for priority setting and conflict resolution

Developed work processes for space usage and materials management

Coordinated with Storehouse group to take on management of surplus and tied into front-end procurement process.

Implementation- cont'd



bp Forms & Templates > Laydown Area Request

Cherry Point Refinery Documents - Applications - Organization -

All Site Content

Related Links:

- View the CHP Refinery Laydown Area Site Map
- Tutorial: How to make a Laydown Area Request
- Site Logistics Team SharePoint

To create a new Laydown Area Request, click the New button on the toolbar below.

Click to start a new request

Click to view the Laydown Area Map

New | Upload | Actions

Laydown Area Request Form

Submit Form

Requester *

Date Requested *

Work Order Number *

Company *

If Contractor - specify

BP Phone Extension *

Other Contact Phone

Start Date *

Finish Date *

Group *

Group - if "Other" - specify

Requested Parcel Number: [Click here to view Site Map](#) *

(Number of parcel closest to your preferred location, after viewing the map. E.g. "B23")

Click to submit form

Indicates a required field

Click to view Site Map

Click on these arrows to view the maps of different years

Request Status					
Requester	Date Requested	WONumber	Status	Facility Siting Status	
yan (AECOM)	Ryan Garr	7/19/2016	TBD		
n, Christopher (MATRIX SERVICES INC)	Gary Bannerman	7/13/2016	666391	Approved	
n, Christopher (MATRIX SERVICES INC)	Alan Adad	7/12/2016	TBD	Pending	

Implementation



 Surplus Scrap Request Form	
Item Name:	16-1903 Break Water Tank
Requester Name:	_____
Requestor Email:	_____ (e.g., John.Doe@bp.com)
Item Description:	Break Water Tank (e.g., age, model, condition)
Surplus or Scrap?	<input type="radio"/> Surplus <input type="radio"/> Scrap <input checked="" type="radio"/> TBD (Scrap = take offsite, Surplus = retain onsite, TBD = To Be Determined)
Location:	Laydown area west of the bundle slab (Location of items being sold or scrapped)
Cost Center Owner:	Mitch Bubb CC Owner Email: _____ (e.g., John.Doe@bp.com) CC Owner Job Title: Process Superintendent
CP Number?	<input type="radio"/> Yes <input type="radio"/> No CP Num: _____
Other ID Info:	_____
Upon submit, an email will go to the Cost Center Owner for Approval	
Cost Center Owner can approve/not approve this form from this email. Upon CC Owner submit, an email will go to the requestor and to G CHP SurplusScrap	
Cost Center Owner Approval: <input type="radio"/> Yes <input type="radio"/> No	
Approved By: _____	
Approved Date: _____	

Implementation



SURPLUS YARD INVENTORY										
									QUANTITY	
GROUP	TYPE	SIZE	PRES SUR	TAG	DETAIL	LOCATION	NV	OUT		
VALVE	BALL VALVE, JAMESBURY, 1" 300#, V01918	BALL VALVE	1	300	V01918	CS	5A	7		
VALVE	BALL VALVE, JAMESBURY, 3/4" 150#, V01918	BALL VALVE	3/4	150	V01918	CS	5A	3		
VALVE	BALL VALVE, VELAN, 3/4" SW/SW	BALL VALVE	3/4	600		CS	5A	7		
VALVE	BALL VALVE, VELAN, 1" SW/SW	BALL VALVE	1	600		CS	5A	3		
VALVE	BALL VALVE SW/SW V06912, 1/2" WORCESTER FZ4446RM SW 316SS	BALL VALVE	1/2	600		CS	5A	10		
VALVE	CHECK VALVE, HORIZONTAL, BONNEY, 1" 300#, V03000	CHECK VALVE	1	300	V03000	CS	6A	9		
VALVE	CHECK VALVE, HORIZONTAL, BONNEY, 1 1/2" 300#, V03000	CHECK VALVE	1 1/2	300	V03000	CS	6A	3		
VALVE	CHECK VALVE, HORIZONTAL, BONNEY, 1 1/2" 150#, V01000	CHECK VALVE	1 1/2	150	V01000	CS	6A	12		
VALVE	CHECK VALVE, HORIZONTAL, BONNEY, 1" 150#, V01000	CHECK VALVE	1	150	V01000	CS	6A	2		
VALVE	GATE VALVE, 1-1/2 KITZ 150UMHMG 150# T316SS RF P:GRF HW, V01017	GATE VALVE	1 1/2	150	V01017	316SS	1B	1		

Implementation



Orange tags and barcodes noted on pipe and materials are affixed by storehouse receiving personnel to identify the work order and workgroup the materials are intended for.

Pipe and plate racks are located closer to the work areas.



Specific area designated for materials requiring paint. Process established for this as well.

Validate/ Sustain-

Procedures are managed documents with review frequency

Personnel change management includes role accountabilities

Auditable on-line tools with assigned owners

Processes imbedded into project procedures and procurement plans

Financial tracking of cost savings through surplus yard

2. Procedures -- We document and rigorously follow procedures for safe, responsible and reliable operating.				
OMS Section	OMS Principle	Example Turnover Topics	Role-Specific Turnover Topics	Documentation/Items Turned Over
1.	BP entities document, maintain and follow practices and procedures for the safety of their workforce and the safe, responsible and reliable operation of their assets, facilities, floating structures and transport equipment.	<ul style="list-style-type: none"> Are there any accountabilities for documents (owner, steward, etc.) that need to be MOC'd? Are there any procedures and practices that need to be reviewed? Are there any out of date documents? 		

Accountability	BRY	Facilities-Logistics
Bird control (USDA)	X	
BRM (set up and remodeling for projects & events)		X
Building Repairs (see Building Repair Request Form)	X	
Building/Trailer/BRM/Tents Maintenance	X	
Busing		X
Decks and handrails (existing)	X	
Fleet yard equip management (rentals during events)		X
Freeze protection	X	
Furniture needs	X	
Janitorial services coordination	X	
Laydown areas (creation of new or repair after events)		X
Laydown areas (existing)	X	
Lenel Maintenance	X	
Lighting (existing)	X	
Lighting (new, for projects & events)		X
Materials and Distribution (MAD) Area		X ⁽¹⁾
Moves (large population moves)		X
Moves (small population moves)	X	
Parking lot assignments		X ⁽²⁾
Portable restroom coordination	X	
Rodent and pest control	X	
Signage, site-wide standard	X	
Surplus materials		X ⁽³⁾
TA event build-up		X
Tents (new)		X
Walkways (existing)	X	
Walkways (new)		X
Waste and recycling coordination	X	

Accountabilities Matrix

1. Co-ownership with Maintenance during an event
2. During events
3. Co-ownership with Procurement

What did we learn/ do next?

Newly minted logistics milestones for projects/ turnarounds include timelines for planning of site and surplus

Sharing with other facilities of what has worked, and learning from others around what could be better.

Milestone Completion Goal	Days to Oil Out	Months to Oil Out	Description	Assigned Contact	Category	Actual Milestone Completion Date*	Objectives/Activities
12/1/15	866	28.9	Head Planner to Review Post TAR document from previous TAR	Logistics Head Planner			Hard copies of organization chart completed, electronic storage system and format established, hard copy filing system created
12/27/15	840	28.0	Review Laydown Plan	Logistics Planner	Laydown		Review 12 year TAR plan and any major projects and document obvious laydown spaces on the laydown map.
12/27/15	840	28.0	Review housing plan for TAR and major projects	Logistics Head Planner	Head Count		
1/15/16	821	27.4	Review population moves that may affect TAR	Logistics Team Lead	Head Count		
1/15/16	821	27.4	Review Milestones with Team lead	TA Head Planner			Logistics Head Planner meets with TA Team Lead
2/5/16	800	26.7	Write and submit any needed one pagers for Logistics	Logistics Team Lead	Budget		One pagers for any Logistics needs, facility siting, or other for capital funding
2/5/16	800	26.7	Review rental vs purchase vs long term lease for TAR	Rental Coordinator	Rental		Needs detail sheet
3/6/16	770	25.7	Review Logistics staffing plan with Team Lead and ensure team is staffed correctly	Logistics Head Planner	Head Count		
3/16/16	760	25.3	Contractor Strategy Developed/Major Mechanical Contractors Identified	TA Manager			Typically for large major mechanical groups. Identify major mechanical contractors supporting constructability for Major Projects.
3/26/16	750	25.0	Request contracting strategy from TAR Manager	Logistics Head Planner	Head Count		
4/25/16	720	24.0	BRM Usage, Inventory and Assignments	Logistics Planner	BRM		Inventory and identify BRM maps and develop future BRM strategy for 3 years out
6/4/16	680	22.7	Preliminary Logistics Review with Head Planner	Logistics Team Lead			Laydown areas identified for upcoming TA. We need to have an integrated assumption clearing meeting here including TST members plus Gordon and Chris, Head Planner to assist as required. Logistics team set expectations and explain requirements to Head Planners for laydown space, tool trailers, including adding a Logistics Team member and Rental Coordinator to their planner meetings Send out a meeting notice for the Second Logistics Review at this time (95days out)