

West Central Ohio Safety Council Jan 2022

PLEASE HANG TIGHT
UNTIL 8:00.

THANK YOU!



WE'RE SO HAPPY YOU JOINED US
TODAY!

Thom McKee
Fort Amanda Specialties

Behavior Based Safety: What Works



Sheakley/Chamber Relationship – Mike Cicak
BWC Updates – Dean Bidlack



Webinar Logistics

Welcome!

- Please use the chat feature to network and to ask any questions.
- A recording of this webinar along with all the information from today's meeting will be shared via email to all attendees.
- If you have any ideas for a future speaker or topic, please let us know.

Steering Committee Members

President: Amy Ricker, Lima Pallet Co.

Joe Hutton, Fort Amanda Specialties

Vice President: Crystal Jackson, Cenovus- Husky
Lima Refinery

Deb Mosher, Institute for Orthopedic Surgery

Past President: Craig Hohenbrink, INEOS

Dean Bidlack, BWC Rep

Tony Daley, Spallinger Millwright

Jed Metzger, Chamber Liaison

Rose Hesseling, HCF Management

Deb Katzenmeyer, Manager

FY 2022 – Ongoing Changes & BWC Mega Meeting Dates

- ✓ All BWC safety council meetings will be conducted virtually thru June 2022
- ✓ The rebate program remains suspended until in-person meetings resume.
- ✓ **No collection of semi-annual reports.**
- ✓ No CEO attendance requirement.
- ✓ BWC will host two mega meetings in FY22.
 - ✓ Next one is on April 13, 2022 **

***Therefore, WCOSC will not plan a separate meeting for those months.*

TENTATIVE

Safety Council Program Updates for FY2023

** beginning July 1,
2022*

- ✓ Returning to in-person meetings beginning July 1, 2022.
- ✓ The rebate program will be reinstated with some changes
- ✓ There will continue being no collection of semi-annual reports.
- ✓ No CEO attendance requirement.

Attendance Incentive



\$100 each meeting –
attend to be entered
for the drawing

YOU could WIN
TODAY! 😊



Grand Prize in June including ALL
attendances for FY22.



Winner to be notified/announced
after each meeting.



Registration Process

- The registration process has changed. All emails on our safety council list will be automatically registered each month. This avoids each person having to go out and register for each meeting or risk missing the meeting for lack of registering.
- The invitation will still be sent out via email, so you can invite/forward to anyone who doesn't normally receive the invites – or ask me to add people to the list if needed.
- Benefits:
 - You automatically get the recordings from each meeting afterwards
 - You don't have to remember to register or risk not being able to access the webinar the day-of.

Questions? Put them in the chat box.

Virtual Meeting Schedule

Jan 2022 – June 2022



Jan 11 - Safety Culture

Thom McKee, Fort Amanda Specialties

- Zoom @ 8:00 AM

Feb 8 - Effective Communication: Turning Diggers into Builders

Dale Lesinski, Dival Safety

- Zoom @ 8:00 AM

Mar 8 - The Real Cost of Safety

Rich McElhaney

- Zoom @ 8:00 AM

Apr 13 - BWC Mega Meeting - Now What?

How to Lead by Bringing Your Human to Work

- 11:00 on Microsoft Teams

May 10 - TBD

- Zoom @ 8:00 AM

June 14 - Heat Stress

Beth Angus, Safex, Inc.

- Zoom @ 8:00 AM

BWC Mega Meeting

SAVE THE DATE!

April 13, 2022 @
11am

Topic: How to Lead
by Bringing Your
Human to Work

Ohio

Bureau of Workers'
Compensation



Free webinars for employers currently enrolled in an Ohio safety council or those wanting to learn more about the benefits of safety council participation.

Wednesday, April 13

11 a.m. to 12 p.m. ET



Keynote speaker Erica Keswin is a two-time Wall Street Journal bestselling author, internationally sought-after speaker, and workplace strategist.

Now What? How to Lead by Bringing Your Human to Work

We've all been through a lot, but managers at every level are dealing with unprecedented levels of stress and pressures. Erica will provide tools to help leaders find their way through this difficult time and will explore five things which will allow your organization to thrive:

- Communicate often, with transparency and honesty
- Mind your meetings – in person, remote and hybrid
- Create a culture of wellness
- Take professional development personally
- Return to rituals (and create new ones)

Learn more about how successful companies navigate turbulent times, prepare to bring your human to work, be confident that you can manage the chaos and be ready to rock the hybrid revolution!



At the scheduled date and time, [click here to join this live event](#). You do not need to pre-register.

Meetings will be moderated by Ohio Safety Council Program Manager Michelle Francisco

BWC Updates - Dean Bidlack

Reminder

Thank You
for
Working Safely

SmartSign.com • 800-952-5457 • 50 808



Bureau of Workers'
Compensation



**Safety
Training**

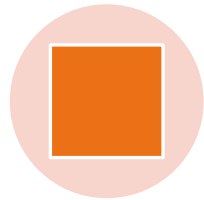
Behavior Based Safety: What Works



Thom McKee
Fort Amanda Specialties



Meeting Wrap up - Thanks for attending!



\$100 in Chamber gift certificates - drawn after the meeting.



All information from today's meeting will be shared via email after the meeting.



Questions/Comments?
Email me at dkatz@limachamber.com.

Thanks for attending!



Please complete the meeting evaluation survey when you receive it.



Next meeting is February 8, 2022.

**Effective Communication:
Turning Ditch Diggers into
Bridge Builders**

**Dale Lesinski
DiVal Safety**



Deb's Contact Info
Direct # 419.222.6708
Email: dkatz@limachamber.com

**BEYOND THIS SLIDE ARE
THE PRESENTER'S
SLIDES FROM THE
MEETING**

JAN 10, 2022



**Behavior Based
Safety:**

What works???

Agenda

- Why am I cool?
- Why do you care? (What's are the Benefits?)
 1. Culture Change
 2. #s and \$\$s
 3. Safe Outages (Maintenance Turn-around)
- What is BBS?
 1. Behaviors
 2. Observations
- Our Background
 1. Sustained Success (Risk Mitigation)
 2. Why it works
 3. Best Practices
- What's Important



Why am I cool???



I'm just a regular guy...

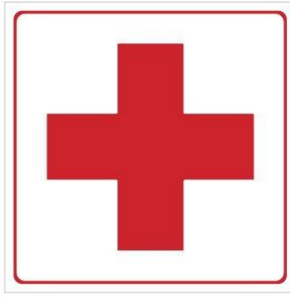
Why do you care???



CULTURE CHANGE

- Frontline employee determined solutions lead to **ownership, buy-in**
- Greater than 50% of risks/hazards mitigated by **employees, peer to peer**
- Continued **improved risk recognition**
- Continued **lowered risk acceptance**
- Sustained hazard recognition and mitigation
- Positive means of **communicating risks and solutions plantwide** without dampening morale
- Generates **communication among peers**...as risk is recognized and observed immediate mitigations are reinforced
- Facilitates **communication** of risk AND mitigation **to entire plant** vs. conversation between two people
- Identifies BIG and small barriers, some already known on the shop floor and spotlights them to be addressed
- Larger barriers to safe work are **owned by employees** and supported by management

##s and \$\$s



Worked 5141 days (14+ years) without an LTI (November 10, 2007)-steam condensate burn to hand

Worked 1,696,240 Hours with no Recordable Injuries (June 4, 2014)-back injury picking up a slipsheet

		Near Misses		
Year	First Aids	People	Process	Total
2014	3	33	55	133
2015	9	48	121	204
2016	8	63	1	99
2017	17	33	2	59
2018	4	38	2	56
2019	6	20	29	59
2020	4	12	10	29

##s and \$\$s cont'd



- 300+ actions identified and resolved over the last 4 years
- Multiple projects to mitigate Combustible Dust (PH1 Bulkbag filler, MRT Bulk bag unloader, small additions and ventilation), Single point LOTOTO Headers, Process/WH Area Re-organization, Operation Clean Sweep
- Organized and facilitated best practice sharing visits between multiple sites of two leading chemical manufacturing corporations (BASF/Nouryon(Akzo Nobel)
- Worked with HSE Department to overlay Near Misses, First Aids and At-risk observed to find leading indicators and communicate “Next Risks” to the site
- Sustained 5 year safe rebate from BWC beginning 2014 through current 2022

2021 Fall Outage Results

- 40000 hours worked
- Multiple Level 2 Activities (Critical Lifts, CSE, Sparking Hot Work in Classified, HHC Line Breaks)
- 5 near misses
- Pinpoint risks and tasks to be emphasized in morning meetings
- Watch behavior change daily

10/3-11/19



	TOTAL
# Obs	256
#Coached	69
Specialized	78
Safes	7067
At-Risks	105
Imm Mit.	78
%IM	74%



Safes



MOTOR VEHICLE USE	Safe	40	13	53	100%
	At Risk	0	0	0	
Vehicle Selection / Condition / Use / Checks	Safe	19	7	26	100.00%
	At Risk	0	0	0	
Seatbelt is worn	Safe	21	6	27	100.00%
	At Risk	0	0	0	

BODY POSITION	Safe	964	282	1246	99.20%
	At Risk	9	1	10	
Line of Fire	Safe	281	86	367	98.39%
	At Risk	6	0	6	
Pinch Points	Safe	142	43	185	99.46%
	At Risk	0	1	1	
Eyes on Task	Safe	340	93	433	99.54%
	At Risk	2	0	2	
Ascending / Descending	Safe	201	60	261	99.62%
	At Risk	1	0	1	



At-Risks



WORKING @ HEIGHTS	Safe	703	174	877	98.10%
	At Risk	15	2	17	
Working at Heights	Safe	57	9	66	97.06%
	At Risk	2	0	2	
Communication of Hazards	Safe	304	82	386	98.47%
	At Risk	5	1	6	
Fall protection	Safe	169	52	221	97.79%
	At Risk	4	1	5	
Barricades & Warnings	Safe	99	31	130	97.01%
	At Risk	4	0	4	
Platforms / scaffolds / ladders	Safe	74	0	74	100.00%
	At Risk	0	0	0	

- Did well with ladder usage and wearing fall protection.
- Barricading/extended barricading and tie off points needed improvement.



At-Risks



WORK AREA MANAGEMENT	Safe	1209	340	1549	98.04%
	At Risk	26	5	31	
Storage	Safe	206	59	265	98.15%
	At Risk	5	0	5	
Barricades & Warnings	Safe	99	31	130	97.01%
	At Risk	4	0	4	
Communication of Hazards	Safe	304	82	386	98.47%
	At Risk	5	1	6	
Walking / Working Surfaces	Safe	303	84	387	96.99%
	At Risk	10	2	12	
Housekeeping / 5S	Safe	297	84	381	98.96%
	At Risk	2	2	4	

- Did well with housekeeping.
- Barricades/extended barricades and signage needed improvement.
- Cords, tools, parts that were involved in the task were challenging but improved over the shutdown.

2021 Fall Outage



- Site wide Observation Strategy implemented
- Daily start of shift communication of Safes vs. At-risks and to re-calibrated contractors to our standard (both Operations and Contractors)
- Weekly recognition of Observees (tokens=lunch)
- Recognition of Specialized Observations
- Communication tent
- Satellite Permitting locations



Top Outage At-risks

≥50% of observed At-Risks during outages have been a result of Evolving Conditions. Specifically these behaviors/conditions:

- Storage
- Barricades/Warnings
- Proper Permitting
- Additional PPE
- Walking/Working Surfaces
- Housekeeping



Summary of Best Practices for Shutdown Observations

- Always give SPECIFICS on both safe and at-risk behaviors and conditions that are observed.
- Always COMMUNICATE the information to everyone DAILY. Not just a typed up paper but formally and directly allowing for open discussion. High level managers need to be visible and active during the report outs, in the field completing observations and encourage employees to observe with them. Top down SUPPORT is imperative.
- Always develop a SCHEDULE to ensure that risky and non-routine tasks are observed.
- Always REINFORCE SAFE Behaviors that are observed
- Never assign blame
- Never miss the opportunity to give detailed conversation in a non-threatening way



What is Behavior Based Safety (BBS)???

The BBS process enables us to actively improve our safety culture by **completing quality observations** and **providing feedback of safe and at-risk behaviors** to all employees, thus **raising awareness of existing hazards and increasing safe behaviors**. This practice also allows us to **identify and remove barriers** which make working safely difficult or non-enabled.

Our site process, formerly known as CBT (Changing Behaviors Together), is called TCB (Takin' Care of Business)



BEHAVIOR

Behavior-An observable act...ACTION!!!



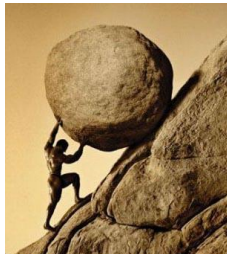
Three Types of Behaviors



Enabled-well within the control of the person, requires little additional effort



Difficult-can be done, but takes additional effort to complete



Non-enabled-not within the control of the person, not possible to completed even with additional effort

Three Keys to Success



1. Hazard Recognition

See the hazard

2. Behavior in relation to Hazard

Change behavior(s) in response to risk-**short term mitigation**

3. Barrier Removal

Eliminate or control any condition(s) that makes safe difficult or impossible-**long term mitigation**

Immediate/Short & Long Term Mitigation

Wet floor

ST→ Put out a wet floor sign...mop the floor

LT→ Fix the roof...repair the leak



High noise area

ST→ Wear ear plugs...supply ear plugs at point of use

LT→ Reduce the noise by redesign, repair, or insulation of equipment



Low light area

ST→ Use head lamp, flash light or temporary lighting

LT→ Upgrade lighting or install additional fixtures



Observation Steps

1. Introductory Conversation

- Make contact (observe openly)
- Explain process/CBI items for those unfamiliar with the process
- NO NAME, NO BLAME
- Ask what the task is and if there are any specific risks



2. Observe




- Situation-centered
- Behavior-centered
- Record on data sheet




3. Feedback

- Feedback on safe behaviors
- Feedback on at-risk behaviors
- Get input from employee/document comments


Observation Form

	COACHED <input type="checkbox"/>		IMMEDIATE REVIEW <input type="checkbox"/>	
	Date: _____		Names of Observer(s): _____	
	# of workers observed: _____		_____	
	Weather?	rain ice snow fog	Plant/Block Condition?	operating idled maintenance Risk of the Day? <input type="checkbox"/>
	n/a wind clear <32 >90			
1. Introductory Conversation  NO NAME. NO BLAME.			 Schedule? <input type="checkbox"/>	
Task Observed?				
Ask if any specific risks?				

Observation Form cont'd

2. Circle what you see 				Where are they working?		Admin Building	Control Room	Derivatives
Who are you observing?		Administrator	Contractor	Derivatives Lab	Elec Shop	Guardhouse	Intermediates	Liquids
Derivatives Op	Intermed. Op	Liquids Op	Lab. Tech	Liquids Lab	MW Shop	PF Shop	QC Lab	Rails
Maintenance	Security	Tank Farmer	Warehouse Op	Roadway/Northpad	Tank Farm	Tech Building	Utility Rooms	Warehouse/Crib
State of Mind?		Taking Time/Rushing		Content/Frustrated		Knowledgable/Unknowledgable		
		Alert/Fatigued		Focused/Distracted				
Body Position		Circle		Tools & Equipment cont'd		PPE cont'd		
1 Line of Fire	S	R	NA	13 Storage	S	R	NA	25 Foot/Leg
2 Pinch Points	S	R	NA	14 Barricades and Warnings	S	R	NA	26 Body
3 Eyes on Path/Task	S	R	NA	Procedures				27 Fall Protection
4 Ascending/Descending	S	R	NA	15 Communication	S	R	NA	Environment
Body Use				16 Pre/Post Job Checklists	S	R	NA	28 Walking/Working Surfaces
5 Lifting/Lowering	S	R	NA	17 SOP/SWS	S	R	NA	29 Housekeeping
6 Twisting	S	R	NA	18 Permit To Work	S	R	NA	30 Lighting
7 Pushing/Pulling	S	R	NA	19 Overriding/Bypassing Safeties	S	R	NA	31 Industrial Hygiene
8 Overextended/Cramped	S	R	NA	PPE Task appropriate???				Driving
9 Posture	S	R	NA	20 Head	S	R	NA	32 Forklift/JLG/Raymond/Trackmobile/Yardmule Checklist
10 Assistance Asked/Needed	S	R	NA	21 Eyes/Face	S	R	NA	
Tools & Equipment				22 Hearing	S	R	NA	33 Seatbelt
11 Selection/Condition	S	R	NA	23 Respiratory	S	R	NA	Other _____
12 Use	S	R	NA	24 Hands/Arms	S	R	NA	_____

Observation Form cont'd

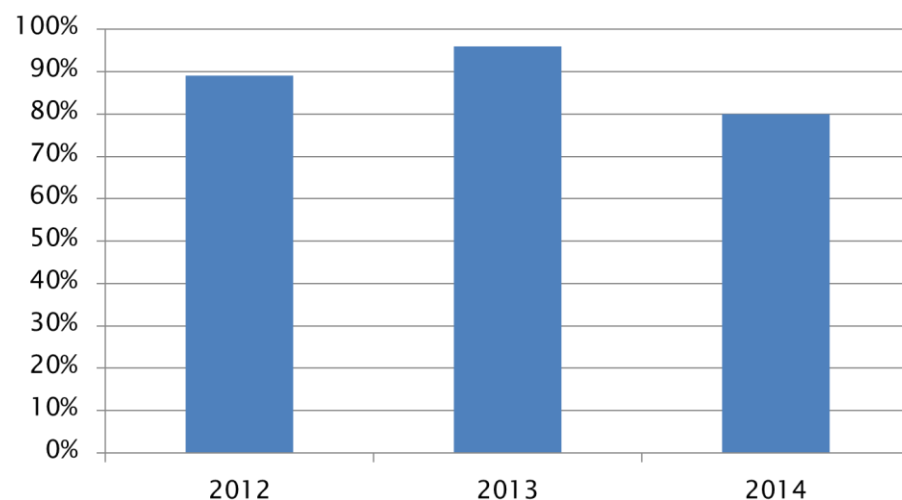
3. Provide details for specific Safe and then At-risk behaviors observed below. 							
Safe Behavior #: _____							
While: _____							
Was: _____							
Because: _____							
Safe or At-Risk Behavior #: _____							
While: _____							
Was: _____							
Because: _____							
Solution: _____							
Tried? Y or N			Modification required <input type="checkbox"/>		WO# _____		
At-Risk Behavior #: _____							
While: _____							
Was: _____							
Because: _____							
Solution: _____							
Tried? Y or N			Modification required <input type="checkbox"/>		WO# _____		
COMMENTS: _____							



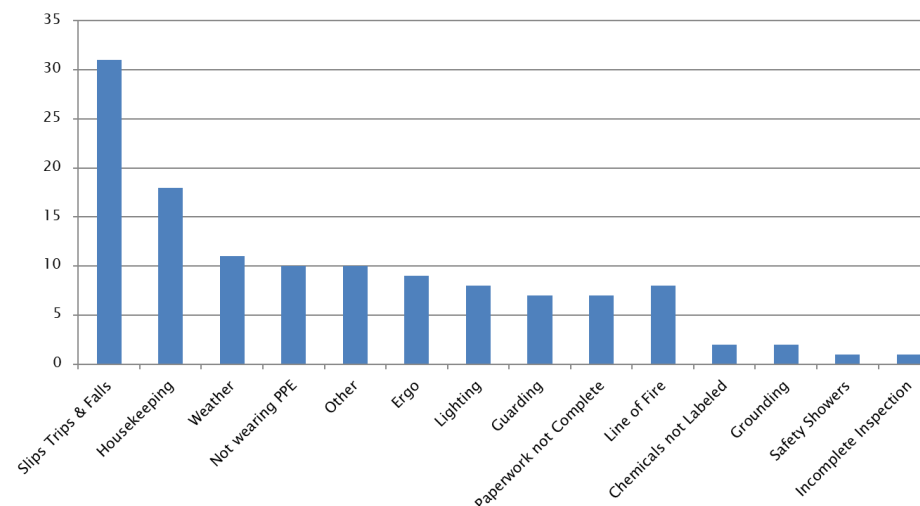
Background

- BBS process implemented 2006 and
- Process began to stall out and become stagnate in 2014....push to focus on only behaviors and less emphasis on conditions.
- The team identified the challenges- many of which were prioritization, technological, training and support issues.
- Site identified the gap of not having a fulltime facilitator on the committee
- Early 2015 became the part-time facilitator of the site's BBS Team

Observations Complete



2014 At Risk Behaviors



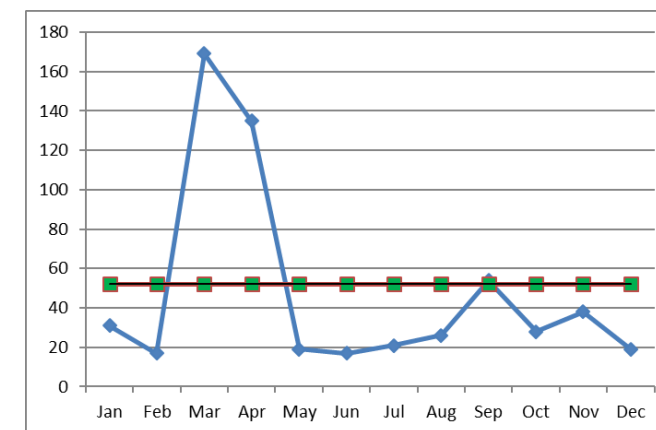


2016

Fulltime facilitator spot was formed (Sept 2016):

- Responsible for design, development and deployment of site-specific safety related training and processes, as well as corporate launched safety programs, initiatives and training.
- Develop, coordinate and administer operations/new hire training for chemical operators, logistics and laboratory personnel.
- Facilitator and chairperson of the site Behavior Based Safety team and member of Health, Safety and Environment Site Leadership Team.
- Planned, coordinated and executed best practice safety and process collaboration visits with team and other Nouryon sites in the region.
- Cross-functional team lead responsible for initiating an evaluation and deployment of a sustainable revamp to shift the safety culture at the site, in order to improve operator level engagement and ownership of the programs, processes and metrics related to safety.
- Serve as both operator representation and lead roles in projects, process safety reviews, management of change, and root-cause problem solving.
- Facilitate and actively participate in process hazard assessments and PSM compliance at the site.
- Responsible for the review, update and/or development of Job Safety Analysis (JSA)'s.
- Participate in or lead incident investigations, root cause analysis, and the development, completion and tracking of corrective/preventive actions.
- Participate in ISO auditing as both and auditee and internal auditor.
- Managing 5S projects and authoring Standard Work Steps designed to improve process understanding, execution and safety. Served on the North American People Safety Expert team, selected and managed by the Corporate HSE Region Lead and responsible for traveling to and providing sites throughout the North America Region with various safety training, program support and implementation assistance on corporate initiatives and improving safety culture and safety programs.
- Present quarterly report outs to the site and Managing Committee (top level offsite managers from parent companies).
- Maintain operator certification to run the Chelate Derivatives Unit at the site.
- Worked with HSE Department to analyze Near Misses/First Aids to determine behaviors to observe

2016	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Total	31	17	169	135	19	17	21	26	54	28	38	19	574
# at Risks	52	52	52	52	52	52	52	52	52	52	52	52	624
% Safe	10	9	67	52	12	11	6	13	42	16	22	3	267
	99	99	99	99	98	98	99	99	98	99	99	98	99





2017 Revamp/Rejuvenation

Using the corporate maturity grid we assessed these 5 key aspects of the process: Observations, Communication, Management Involvement, Resources, Continuous Improvement.

Modified the site policy to define, set expectations and a path forward for the committee/site for each of these points. Some of the key points of the policy include:

- Defined roles and responsibilities
- Barrier Removal Teams and the Barrier Removal Process
- Observation Strategy (expectations for observers, observees and alignment of observations to risks #s and locations)
- Coached Observations
- Training of Observers and Coaches
- Criteria for quality observations
- Communication of At-Risks, Safes, Barriers and Mitigations
- Outline of Annual goals, KPI's
- Incorporation of Best Practices

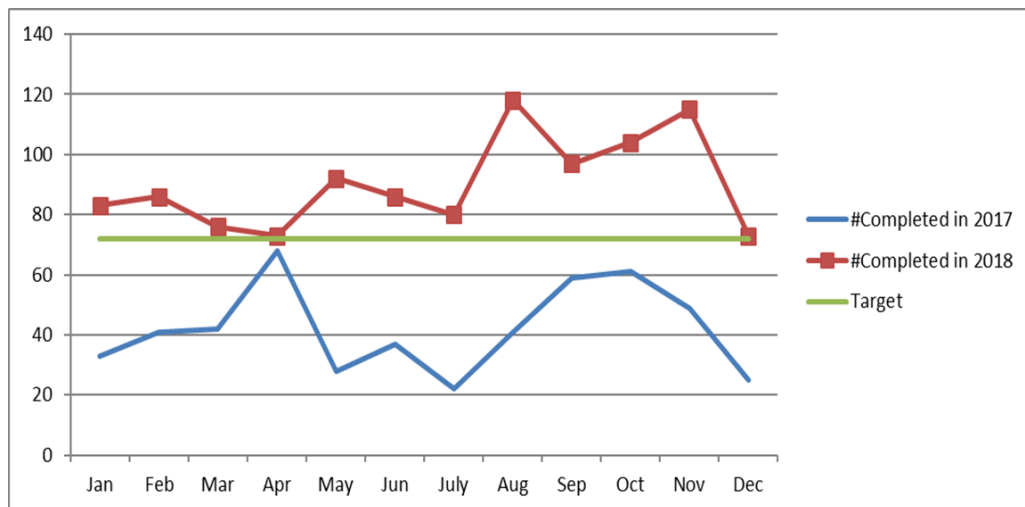
Attended Facilitator Training

REVAMP

- Completed a pilot of the concept of 18 people completing observations in Q4 of 2017
- Trialed coaching plan in Q4 of 2017
- Implemented new Observation Schedule based upon identified “risky tasks” and heat map
- Improvements on observation form
- Developed observer training to be given quarterly prior to each team rotating to active



2018



Q4

	# Safe	# Risk	% Safe
1.4 Eyes on Task	288	0	100.00
2.2 Twisting	198	0	100.00
2.9 Assistance	124	0	100.00
3.6 Guards in Place LSR	146	0	100.00
4.7 Follows Procedures	238	0	100.00
5.4 Respiratory (PPE)	51	0	100.00
5.8 Foot (PPE)	280	0	100.00
5.9 Seatbelt (LSR)	49	0	100.00
6.1 Walking/Working Surfaces	259	14	94.87
3.1 Selection/Condition	243	12	95.29
2.4 Overextended/Cramped	158	8	95.18
3.5 Barricades and Warnings	141	8	94.63
3.7 Wheel Chocks	32	2	94.12
Total	6933	115	98.37

TEAM A

Total/Target	% for Q1
241/198	122%

TEAM B

Total/Target	% for Q2
238/198	120%

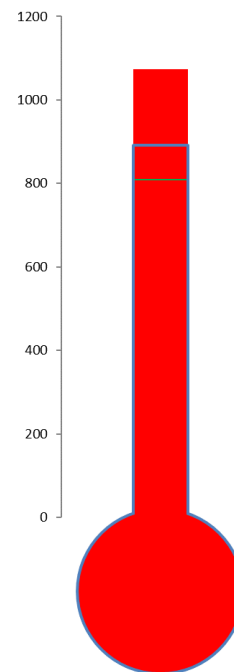
TEAM C

Total/Target	% for Q3
286/198	144%

TEAM D

Total/Target	% for Q4
292/198	147%

2018 Total



Summary

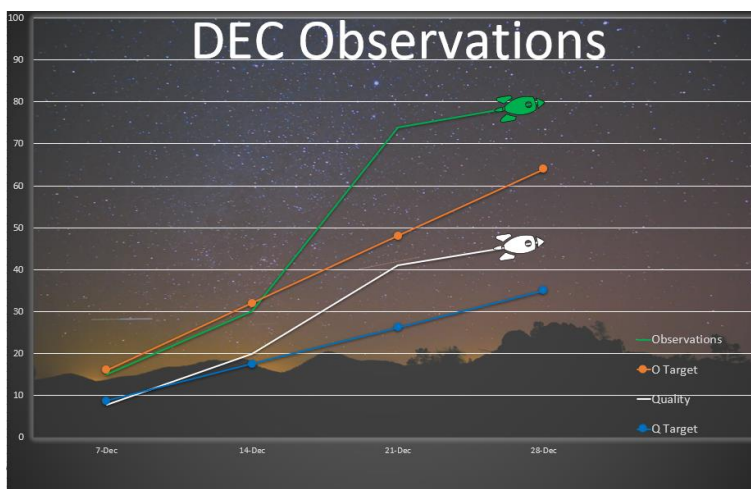
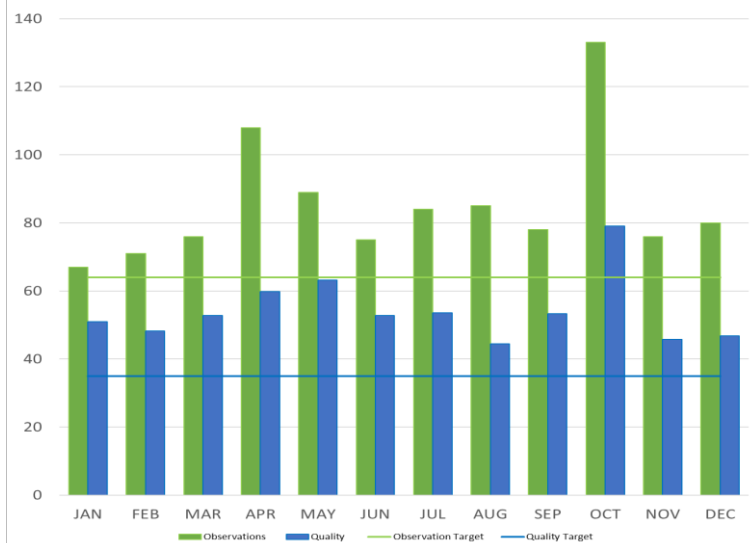
- Completed 1092 Observations
- 1462 people observed for a **Contact Rate of 1.69**
- 728 Specific Safe Behaviors** were noted
- Identified **472 At-risk Behaviors**
- 52% At-risks were **immediately mitigated (247/472)**
- 175 actions were also created, with **177 actions closed** (including Pre-2018 actions)

SOME OF THE BARRIERS REMOVED

- grating at AEEA offload, trip hazard
- sample buckets TF 4
- pneumatic torque wrench for drum bungs
- store or discard rolls of fencing
- condition of bottom bar of turnstyle #31945
- better set-up to pull sample 8% NaOH (VC-11-01) and flat surface for bucket to set on
- Working @ Heights clarification on permit
- review of set point on HCN weigh tank
- availability of longer gloves with thermal protection
- repair process lab titrator for NaOH
- new mirrors on forklift 3
- gap between MRT platform and hopper
- repair leaking RO unit relocate air bottles
- guarding on the top of NaOH tank (seal manway, shield high level probe) top is slippery
- repair safety shower leaking, area taped off area
- possible lube on valve bodies, WO31883
- review CH2O dike signage
- sample carrier for Lonza
- training on new permits
- warehouse lighting
- replace old escape packs/boxes



2019 CBT Observations



	T1	T2	T3	2019 Total
# OBS	324	345	354	1023
TARGET	256	256	256	768
# People Obs	431	460	552	1443
Contact Rate	1.61	1.71	2.05	1.79
Target	1.00	1.00	1.00	1.00
Per Schedule	270	259	215	744
Complete Comments	265	304	320	889
Coached	43	44	53	140
Coached Target	48	48	48	144
At Risks	160	155	166	478
Immediately Mitigated	72	94	117	283
% Immediately Mitigated	45%	61%	70%	59%
Actions	50	39	29	118
Actions Closed	57	51	29	137
Immediate Reviews	5	1	2	8

Top 5 SAFES		T1	T2	T3	2019 Total	
Seatbelt is worn	Safe	100.00%	100.00%	100.00%	155	100.00%
	At Risk				0	
Eyes on Task	Safe	100.00%	99.66%	100.00%	1238	99.92%
	At Risk				1	
Head	Safe	99.73%	100.00%	100.00%	1140	99.91%
	At Risk				1	
Eyes on Path	Safe	99.75%	99.66%	99.81%	1219	99.75%
	At Risk				3	
Foot	Safe	99.73%	99.24%	100.00%	1113	99.73%
	At Risk				3	
Top 5 AT-RISKS		T1	T2	T3	2019 Total	
Barricades & Warnings	Safe	92.97%	96.03%	94.66%	583	94.49%
	At Risk				34	
Walking / Working Surfaces	Safe	94.92%	92.71%	95.20%	1137	94.51%
	At Risk				66	
Hearing	Safe	94.77%	92.78%	96.76%	432	95.15%
	At Risk				22	
Selection / Condition	Safe	93.66%	93.77%	98.35%	1074	95.72%
	At Risk				48	
Overextended / Cramped	Safe	98.80%	97.28%	95.65%	713	97.14%
	At Risk				21	

2019

- Completed **1023** observations (target of 768)
- Contact rate of **1.79** (target of 1.0)
- 140** observations were coached (target of 144)
- Immediately Mitigated 283 of the 478 risks observed (**59%**)
- Created 118 actions, closed 137 actions

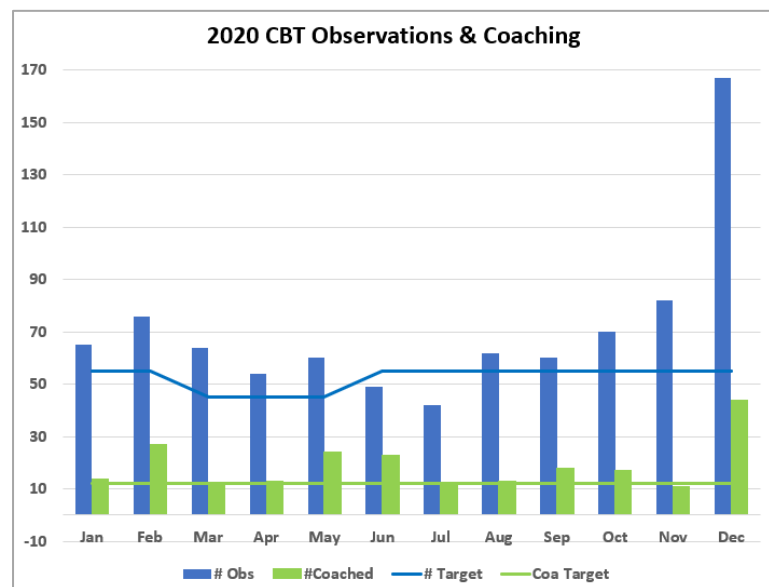
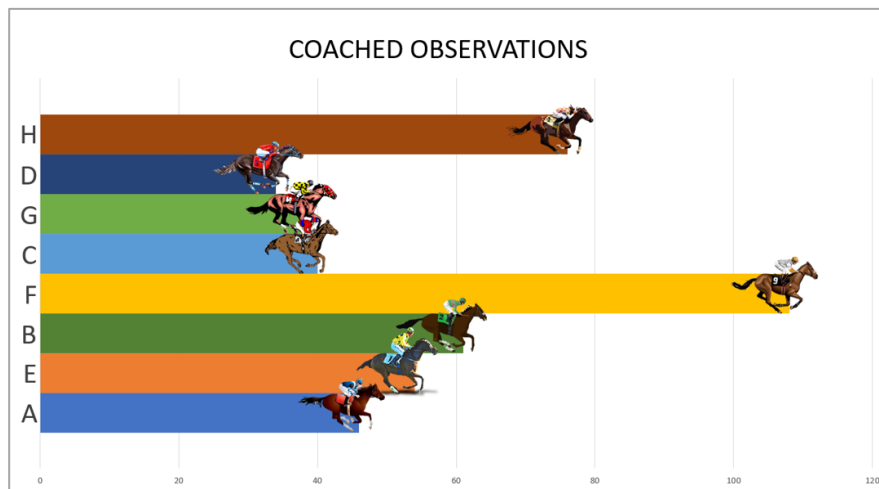
SOME OF THE BARRIERS REMOVED

- Modification of handrails in PH1
- Repaired gaps in grating and deteriorated floor in liquids, TF3 pad, loose Step in PH1 and other walking working surfaces
- Strahmen upgrade to the Lonza Stripper (TF2 and FIF tank modifications are also on the way)
- Continued modifications to access the MRT BBU and additional railing at the 2nd floor access point
- Improved access to disconnects for actuator valves in multiple areas
- CH2O Vent line modification and storage
- Replaced spring in DMH stinger and other equipment upgrades
- Extended ladder on TA-25-01 and other access related modifications
- Improved tool storage
- 5S areas instituted in the Silver Waste Storage area and other areas of the plant
- Repair and/or improvement of lighting in various areas of the plant including forktruck 4
- Repair of existing equipment including dock light indicators, multiple leaks in Derivatives
- New styles of PPE to provide protection and more flexibility and options



2020

2020 Recap



Seatbelt is worn	Safe	145	100.00%
	At Risk	0	
Head	Safe	1008	99.80%
	At Risk	2	
Eyes on Task	Safe	1065	99.63%
	At Risk	4	
Foot	Safe	1039	99.62%
	At Risk	4	
Eyes / Face	Safe	1031	99.23%
	At Risk	8	
Line of Fire	Safe	954	99.07%
	At Risk	9	
Walking / Working Surfaces	Safe	985	94.53%
	At Risk	57	
Selection / Condition	Safe	943	96.22%
	At Risk	37	
Overextended / Cramped	Safe	566	96.92%
	At Risk	18	
Barricades & Warnings	Safe	451	96.99%
	At Risk	14	
Storage	Safe	642	97.42%
	At Risk	17	
SOP / SWS	Safe	347	97.47%
	At Risk	9	

- Completed 851 observations (target of 630)
- Contact rate of 1.34 (target of 1.0)
- 228 observations were coached (target of 144)
- Immediately Mitigated 180 of the 349 risks observed (52%)
- Created 98 actions, closed 117 actions

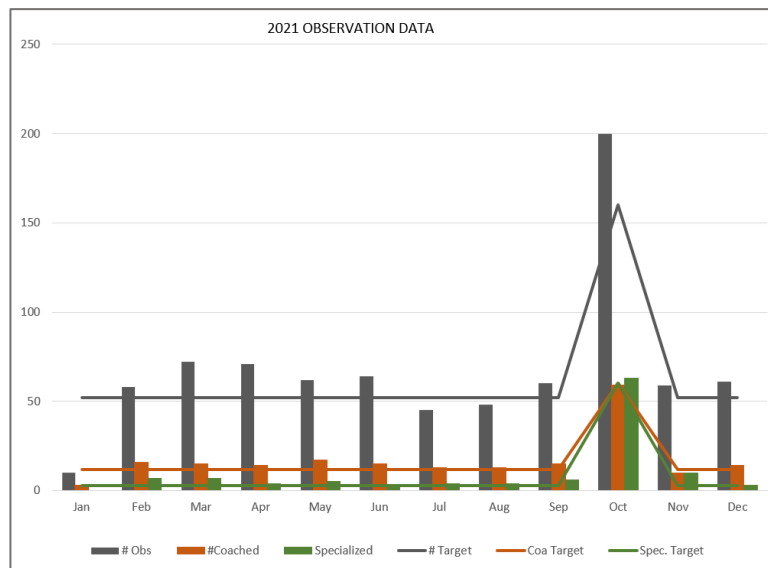
BARRIERS Removed:

- Warehouse Congestion Project
- Hose hangers and tool storage throughout the processes and TF loading platforms
- Repair of hoist in MW Shop
- CH2O vent line/storage
- CH2O dike signage
- Drum filler guarding
- Drum filler process water piping modification
- Mezz-level stops
- Clean up of maintenance parts and pieces on N. Pad
- Floor marking for fire door, etc
- Mother liquor torque air wrench
- PPE Reviews and Recommendations
- Additional/upgraded lighting in various areas of the plant
- SOP reviews/recommendations
- Insulated jars/PPE for various hot samples
- NaCN start button
- PPE storage and supply stations at usage points
- Additional insulation for personnel protection in possible contact areas
- Centrifuge Isolation and Upgrades to reduce scraping
- Jump boxes on scaffolding
- Began work on PH1 Bagger and MRT Replacement

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
# Obs	65	76	64	54	60	49	42	62	60	70	82	167	851
# Target	55	55	45	45	45	55	55	55	55	55	55	55	630
#Coached	14	27	12	13	24	23	12	13	18	17	11	44	228
Coa Target	12	12	12	12	12	12	12	12	12	12	12	12	144
Contact Rate*	1	1.24	1.16	1.01	0.99	0.89	0.86	1.63	1.39	1.39	1.56	2.99	1.34
Safes	1121	1527	1520	1045	1651	1131	1092	1358	1679	2078	2004	3821	20027
At-Risks	48	48	23	7	31	29	15	19	31	26	17	55	349
Imm Mit.	21	32	14	2	16	10	12	10	18	17	11	17	180
%IM	45%	67%	61%	29%	52%	34%	79%	53%	58%	65%	65%	31%	52%
Actions Created	19	12	11	3	9	7	3	2	7	4	7	14	98
Actions Closed	15	18	9	8	10	5	9	8	12	8	8	7	117



2021



Work pace / rushing / stress	Safe	256	100.00%
	At Risk	0	
Seatbelt is worn	Safe	171	100.00%
	At Risk	0	
Foot	Safe	1058	99.91%
	At Risk	1	
Assistance asked / given	Safe	647	99.85%
	At Risk	1	
Head	Safe	1077	99.81%
	At Risk	2	

Walking / Working Surfaces	Safe	992	95.85%
	At Risk	43	
Barricades & Warnings	Safe	398	96.14%
	At Risk	16	
Respiratory	Safe	351	96.16%
	At Risk	14	
Portable safety equipment	Safe	118	96.72%
	At Risk	4	
Overextended / Cramped	Safe	486	97.39%
	At Risk	13	

2021 Recap

- Completed **810** observations (target of 630)
- 204** observations were coached (target of 144)
- 116** Specialized Observations were completed (target of 93)
- Immediately Mitigated 205 of the 284 risks observed (**72%**)

PH1 Super Sacker

Initially we had challenges getting 2271 in the bag, but that seems to be resolved for the most part. We have a list of items we are tackling to close the loop on the installation. A few of the big hitters we are:

- A larger cylinder on the debris valve to help it close when there is build up.
- The housekeeping application of the dust collector to aid in clean-up.
- A means to clean the overfill protection switch when it is triggered.

The switch itself has already prevented some big messes

There are a few other things on the list, but if you have any additional recommendations or suggestions to improve operation of this unit.

Special thanks to Caleb (FAS) and Glenn from Kahle Technologies on making this work. **Bailey/McKee/Recker**

MRT Bulb Bag Additions/Piping Improvements

The BBU Unit has completed ~1 month of operation. The majority of bugs have been resolved. One key to success is connecting the bag discharge spout to the connection point inside the untie box. The white strap bags seem to have shorter spouts than the green strap bags, so that is one of the big hangups. Most recently a slide was placed over the beam and the conduit rerouted to keep the supersacks being raised from catching on the beam/conduit. We are working on bringing the housekeeping option up to speed on this unit next. If you have more suggestions and opportunities to improve this unit, please make sure to communicate them.

McKee/Recker/A.Siefker

CH2O Scrubber

The scrubber is in operation and the automation seems to be working well. The two main actions left to address on this are the heat trace/insulation on the sample pot/return and extending the timer for the scrubber permissive to allow Tank Farmers a little more time to start the scrubber.

M.Smith/McKee/Siefker

2021 Golf League

FORT AMANDA
SPECIALTIES

JANUARY		1/31-3/6	3/7-4/10	4/11-5/15	5/16-6/19	6/20-7/24
0		A	E	B	F	C
A	-1	-1	-3	-1	-1	-3
E	-1	-1	-50	-19	-3	-2
B	-1	-2	-5	-54	-12	-1
F	-1	-1	-1	-1	-39	-10
C	-1	-2	-2	-3	-2	-25
G	-3	-11	-5	-3	-10	-5
D	0	-3	-3	-3	-3	-3
H	-1	-4	-4	-9	-4	-4

7/25-8/28		8/29-10/2	OCT SHUTDOWN	NOV SHUTDOWN	11/28-12/31	TOTAL			
G		D	ALL	ALL	H	Par for 2021			
A	-2	-3	-13	-3	-2	65	15	SP	
E	0	-5	-1	-10	-4	-12	-4		
B	-1	-17	-19.5	-5	-11	-58	-8		25
F	-4	0	-18	0	-2	-60.5	-13.5		20
C	-4	7	-11.5	-7	-7	-9	-12		10
G	-45	-8	-46	-14	0	8.5	-2.5		10
D	0	-30	-17	-3	-9	-84	-17		25
H	-6	-4	-36	-14	-27	4	-9		12
						-50	-18		32

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
# Obs	10	58	72	71	62	64	45	48	60	200	59	61	810
# Target	52	52	52	52	52	52	52	52	52	160	52	52	630
#Coached	3	16	15	14	17	15	13	13	15	59	10	14	204
Coa Target	12	12	12	12	12	12	12	12	12	60	12	12	144
Specialized	0	7	7	4	5	3	4	4	6	63	10	3	116
Spec. Target	3	3	3	3	3	3	3	3	3	60	3	3	93
Contact Rate*	0.214	1.14	1.37	1.29	1.14	1.13	0.71	1.04	1.03	5.34	1.37	1.16	1.41
Safes	267	1354	1784	1999	1861	1565	1026	1354	1415	7101	2027	1824	23577
At-Risks	2	29	35	14	21	17	13	16	19	88	18	12	284
Imm Mit.	2	17	27	10	15	14	8	13	13	67	12	7	205
%IM	100%	59%	77%	71%	71%	81%	62%	80%	72%	76%	65%	58%	72.18%
Actions Created	0	5	8	4	2	3	0	4	5	6	2	0	39
Actions Closed	5	0	9	3	0	2	1	6	5	4	0	1	36

WHY DOES IT WORK???

Fulltime Facilitator

- Allows attention to detail
- Allows for follow-up
- Allows for lobbying
- Allows for more consistent representation
- Allows for more shop floor visibility
- Allows for improved employee ownership/input
- Allows for continuous improvement
- Allows for consistent training and communication

OTHER BEST PRACTICES

Barrier Removal Teams (BRT)

- Visibility of champion/manager responsible
- Development of team members
- Rotational attendance of Site Leadership Team

Policy

- Structured to detail responsibilities
- Reviewed regularly for improvements



OTHER BEST PRACTICES cont'd

Observation Schedule

- Distribute observations over plant
- Specific risky tasks identified by operators
- Specialized Observations
- Shutdown observation schedule

Training

- Ongoing training
- Best practice Visits

Recognition

- Recognize observers
- Recognize observees
- Recognize successes





What's Important?

- System embedded into plant, **shop floor ownership** with **management support**
- No Name, No Blame
- Keep Evolving
- Communicate-Acknowledge and Address Conditions
- Communicate-Celebrate and publicize success
- Involve employees in the solution
- It takes time
- Every site is different...find what works and use it

Q & A (10 minutes)

CONTACT INFO:

Thom McKee- Safety, Training, Facilitator

Fort Amanda Specialties, LLC

A joint venture of BASF and Nouryon

1747 Ft. Amanda Rd

Lima, OH 45804-1864

419-996-2012

419-303-3302

thom.mckee@fortamanda.com

