

# **NWR Sturgeon Refinery**

## **2017 – COAA BP Conference Recent Project Experience: Implementing ICCS at Sturgeon Refinery**



# Implementing ICCS at Sturgeon Refinery

**Welcome & Workshop Introduction**  
**Niaz Ahmed – Workforce Development Co-Chair**



# Implementing ICCS at Sturgeon Refinery

## Special Thanks to Invited Guests

**Tammy Hawkins - ACSA**

**Brent Melnyk – GOA**

**Jason Morphy – AIT**

**Paul Uchacz - AIT**



# Implementing ICCS at Sturgeon Refinery

## Workshop Objectives

- Understanding Program Objectives & Mechanics
- Involvement and Coordination of Training Providers
- Perspective of Training Providers
- Perspective of AIT
- Return on Investment



# Implementing ICCS at Sturgeon Refinery

## Program Objectives

- Leverage existing training programs funded through various training trusts
- Based on 20M man hours – project will invest approx \$8M in training trusts
- Facilitate delivery of high quality/high value training
- Mitigate project risk



# Implementing ICCS at Sturgeon Refinery

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# NWR Risk Matrix (5x5) Pyxis

NWR Risk Matrix Consequence						Likelihood				
People	Cost	Schedule	Reliability	Regulatory/ Environment	Public Image	1 Extremely remote chance of happening <0.0001 yr	2 Remote chance of happening 1/10,000yr	3 May happen less than once during the project lifetime 1/1,000yr	4 Expected to occur in the project lifetime 1/100yr	5 Expected to occur several times in the project lifetime 1/10yr
Multiple fatalities	> \$100M	> 3 Months	Extended facility outage Replacement of major equipment/systems.	Incident results in revocation of permit to operate and/or serious judicial action	International attention	5				
Single Fatality or permanent disability	\$10 M to \$100M	1 - 3 Months	4 week unit outage or 1 week site outage Partial loss of plant with major repairs.	Reportable violation of major permit limit(s) Incident results in fines, control order(s) or other operating	National attention	4				
Temporary disability or lost time Incident	\$1M to \$10M	< 1 Month	2 week unit outage or 1-3 day site outage Immediate repairs required.	Reportable incident with violation of minor permit limits May require investigation.	Industry-Wide attention	3				
Medical aid injury	\$100K to \$1M	< 2 Weeks	Significant production upset. May require immediate repairs	Reportable incident within permit limits, without fines or investigation Potential stakeholder complaint(s).	Province-wide attention	2				
First aid injury or no impact	up to \$100K	< 1 Week	Minor production upset. Plant can continue to operate with planned repairs	Minor incident which may require compliance reporting Corrected immediately.	Local or community attention	1				
						<b>Risk Level</b>	<b>Mitigation Level</b>			
						High	Mitigating action must be taken to at least reduce to a moderate level and reported monthly			
						Medium-High	Mitigating action must be taken to at least reduce to a moderate level			
						Medium	Mitigating action should be considered			
						Low	Mitigating action is normally not required; Part of Continuous Improvement initiatives			

## Implementing ICCS at Sturgeon Refinery

En. 13	Shortage of competent field supervision.	Demand exceeds supply of competent field supervision.	Hroza, Karl	Threat	Schedule	-4 -4	Yorke, Mike	Contracting strategy. Contracting strategy supports access to broadest cross section of contractors and labour providers. Labour Management Plan will require contractors to ensure supply of qualified personnel and strategy to mitigate skill gaps. The project will rely heavily on industry supported programs. Review of EDS gate deliverables revealed that all EPC's are aware and building contingency plans regarding training and qualification of supervisors.	14-Feb-14	Completed	Closed
							Yorke, Mike	Industry training and support programs. Ensure contractors utilize all available industry training and support programs through ICCS. ICCS will be a condition on the project. (Industrial Certified Construction Supervisor). Worker training programs will be through the building trades and CLAC. We will need to ensure that NWR will have access to the funds that we are contributing through CLAC etc. 1st BSV course on site complete in June.		Completed	
							Yorke, Mike	Partner with industry training to facilitate onsite programs. Develop partnerships with ACSA, Merit, CLAC, BTA and CLR to facilitate onsite training programs to support ICCS and supervisory mentoring programs. A great site plan initiative. The budget has been approved. Training schedule to be implemented at the end of Q1	1-Apr-15	Completed	
							Yorke, Mike	Great site plan (CLAC +BTU). The Great Site Plan will help to optimize resource attainment, including supervision.	15-Dec-14	Completed	
							Yorke, Mike	Peak summer 2016. Finalize mitigation + timing based on site construction ( Peak to be determined). Provide updated labour survey with updated market conditions. 13-Jul-15. Contractor/Union/Owner group formed to bring forward recommendations regarding mitigation strategies. Labour survey being updated with 2016 shutdown info. Shutdown schedule is complete	1-Feb-16	Completed	
							Yorke, Mike	(Ongoing)Competency checks underway with supervision in conjunction with BTU building trades. Follow-up with the contractors needs to be done.	30-May-16	Completed	
							Yorke, Mike	Nightshift Supervision. Check nightshift supervision to ensure supervision is not holding up the staffing up of night work shifts	28-Feb-17	Completed	





## Implementing ICCS at Sturgeon Refinery

### Program Objectives

- Offer training on project hours – aligned with bussing strategy
- Minimize impact to length of day
- Mandate that online portions of training must be completed prior to classroom instruction



# Implementing ICCS at Sturgeon Refinery

## COORDINATION

- Better SuperVision – CLRA & BTA
- Leadership for Safety Excellence – ACSA
- ICCS Exam – Apprenticeship & Industry Training



# Implementing ICCS at Sturgeon Refinery

March							APRIL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2 ICC 4 Full	3	4	5						12 ICC 1 Full	13
6	7	8	9	10 ICC 8 Full	11 ICC 8 Full	12	19		16 ICC 1 Full	17 ICC 1 Full	18	19 ICC 1 Full	20
13	14	15	16	17	18	19	26	27 ICC 7 Full	28 ICC 7 Full	29	30 Class Out of for June ICC	31	
20	21	22	23	24	25 ICC 1 Full	26	27	28	29	30	31		
27	28	29	30 ICC 5 Full	31			3	4 Deadline for ICC 1 team	5	6	7	8 ICC 1 Full	9
MAY							JUNE						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
4	5	6	7 ICC 6 Full	8 ICC 1 team Prep 1	9 ICC 6 Full	10	17	18 ICC 6 Full	19 ICC 6 Full	20 ICC 1 Full	21 ICC 1 Full	22 ICC 1 Full	23
11	12	13 ICC 1 team Prep 2	14	15	16	17	24	25 ICC 6 Full	26 ICC 6 Full	27 ICC 1 Full	28	29	30
18	19	20 ICC 6 Full	21 ICC 6 Full	22	23	24	31	1 ICC 6 Full	2 ICC 6 Full	3 ICC 1 Full	4	5	6
22	23	24 ICC 1 Full	25	26	27	28	5	6	7 ICC 1 team	8	9 ICC 1 Full	10 ICC 1 Full	11
29	30	31					12	13	14	15	16	17 ICC 1 Full	18



## Implementing ICCS at Sturgeon Refinery

### Participation

BSV	233
LSE	341
ICCS	204

### ICCS Success Rate

204 Written

180 Pass

**88% Pass Rate**



# Implementing ICCS at Sturgeon Refinery

## Keys To Success

- Classroom time during project – participants able to take project bussing
- Constant Communication
- Individual contact and mentoring
- Additional supports as required
- **DEDICATED RESOURCE TO COORDINATE AND SHEPPARD INDIVIDUALS THROUGH THE PROCESS**



# Implementing ICCS at Sturgeon Refinery



**BUILD YOUR FUTURE**  
WITH  
INDUSTRIAL CONSTRUCTION CREW SUPERVISOR (ICCS) CERTIFICATION  
AND  
**BSV**  
Better SuperVision

Sign up at: [www.nwrpartnership.com](http://www.nwrpartnership.com)



**Better SuperVision Starts August**

**BUILD YOUR FUTURE**  
WITH  
INDUSTRIAL CONSTRUCTION CREW SUPERVISOR (ICCS) CERTIFICATION  
AND  
**BSV**  
Better SuperVision

Contact Great Site or your Supervisor for more information about the next available session.



**Better SuperVision Starts September 28!**

**BUILD YOUR FUTURE**  
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AND  
**BSV**  
Better SuperVision

Contact Great Site or your Supervisor for more information about the next available session.

**Pre-requisites:**

- Approval from your employer & union to attend
- BSV Registration\* on file: <https://www.bettersupervision.org/>
- Registration Fee (non-refundable & non-transferable)
- Online BSV portion (16 hours) to be completed prior to class

Questions: [Training@nwrpartnership.com](mailto:Training@nwrpartnership.com)  
\*Registration is to be completed by employee.

NWR will be hosting the following Certification program on site for Building Trade Members during regular work hours:

**Better SuperVision:**  
• 3 day program  
(Wed Sept 28, Fri Sept 30, and Wed Oct 5)

- Pre-requisites:**
- ✓ Approval from your employer & union
  - ✓ BSV Registration\* on file: <https://www.bettersupervision.org/>
  - ✓ Registration Fee (non-refundable & non-transferable)
  - ✓ Online BSV portion (16 hours) to be completed prior to class

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**NWR**  
NORTH WEST REFINERY

**WHAT'S YOUR NEXT CAREER MOVE?**  
**GET YOUR ICCS DESIGNATION**

**WHAT IT IS**  
The ICCS Designation is a certification program that recognizes the skills and knowledge of individuals who are currently working in the industrial construction industry. ICCS is a recognized practice of the Construction Owners Association of Alberta (COAA).

**WHY YOU WANT IT**  
Apply for the ICCS Designation to receive the following benefits:

- Professional recognition for your skills and knowledge
- Increased pay rates
- Enhanced job security
- Recognition of your skills and knowledge
- Recognition of your skills and knowledge

**HOW TO GET IT**

Apply for the ICCS Designation → Complete the application → Receive your ICCS Designation → Write your exam on the Sturgeon Refinery Project!

NWR is now hosting the ICCS Certification exam through AIT on the Sturgeon Refinery Project. Contact your supervisor or [Training@nwrpartnership.com](mailto:Training@nwrpartnership.com) for more information.

\*Apply on-line to AIT and then notify AIT that you would like to write the exam on site. NWR will coordinate with AIT on your behalf and provide you with the exam website and date.

# Implementing ICCS at Sturgeon Refinery

## ACSA Perspective

**Tammy Hawkins - COO**



# Implementing ICCS at Sturgeon Refinery

## AIT Perspective

**Brent Melnyk**  
**Manager – Industry Programs and Standards**  
**Government of Alberta**





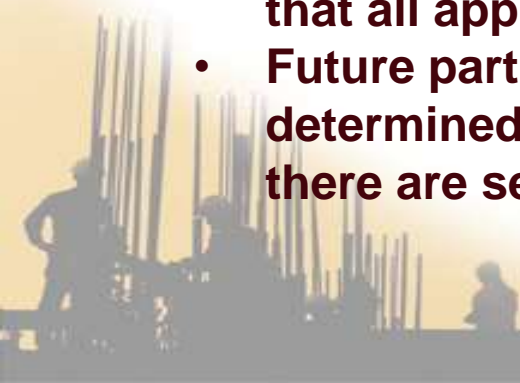
### AIT Perspective

- **The 2015-2017 NWR/ICCS pilot project saw 204 individuals apply and write the ICCS certification exam on site, resulting in 180 individuals receiving their certification.**
- **In that same time period Alberta certified 608 across the entire province. The NWR/ICCS pilot project is responsible for 30% of the ICCS certifications issued, furthermore proving the overwhelming support of the pilot project.**
- **From its inception in 2008, there have been 1240 ICCS certificates issued (the NWR/ICCS pilot project equals 14.5% of all certificates issued)**

## Implementing ICCS at Sturgeon Refinery

### AIT Perspective

- **This partnership between NWR and AIT was made possible by the commitment by NWR and its contractors to ensure supervisory staff were properly trained.**
- **AIT client services required a minimum class size of 20 individuals writing for an exam sitting as well as verification that all application requirements were met.**
- **Future partnerships or pilot projects may be possible but will be determined on a case by case basis for the ICCS program as there are several factors that need to be considered.**



## Implementing ICCS at Sturgeon Refinery

### Return on Investment

#### SUPERVISOR TURNOVER – QUILTS & TERM FOR CAUSE

	Total GF/FM Hired	Total Dismissed	Total Quit	Turnover
Contractor 1				8.47%
Contractor 2				5.15%
Contractor 3				0.00%
Contractor 4				10.84%
	1070	60	81	7.57%



## Implementing ICCS at Sturgeon Refinery

**Return on Investment**

**TURNOVER FOR ICCS GRADS**

**0%**



# Implementing ICCS at Sturgeon Refinery

## Return on Investment SAFETY PERFORMANCE – Cultural Impact

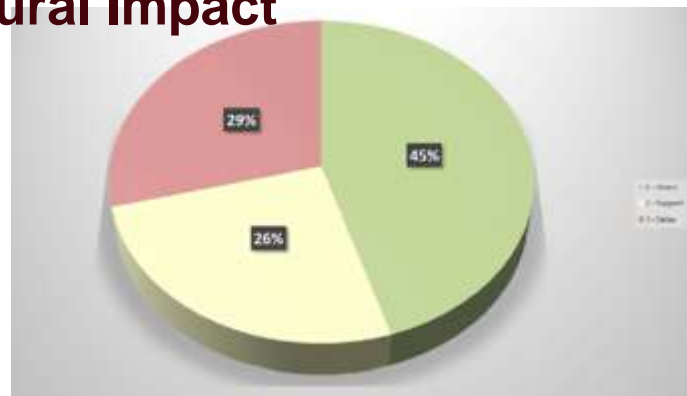
	Participation % of training utilized	TRIF
Contractor 1	18.02%	0.32
Contractor 2	42.57%	0.21
Contractor 3	9.11%	0.54
Contractor 4	3.56%	1.02

# Implementing ICCS at Sturgeon Refinery

## Return on Investment

### TIME ON TOOLS PERFORMANCE – Cultural Impact

	Participation % of training utilized	DA Direct Activity
Contractor 1	18.02%	43%
Contractor 2	42.57%	45%
Contractor 3	9.11%	44%
Contractor 4	3.56%	40%



# Implementing ICCS at Sturgeon Refinery

## Return on Investment

**Organizations that embrace training & development  
Improved Safety, Time on Tools, Turnover**

