

International Union of Painters and Allied Trades

Painter, Sign, Glass, Floorcovering & Asbestos Abatement Divisions

AFFILIATED WITH BUILDING TRADES DEPARTMENT

A.F.L. – C.I.O. – C.L.C.

District Council 17

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November 3, 2016

TO: **Bruce M. Cielen**, Manager, Research & Workplace Innovation Program
Joanne Machado, Coordinator, Research & Workplace Innovation Program
Workers Compensation Board of Manitoba
1010 -363 Broadway, Winnipeg, Manitoba, R3C3N9

Subject: Final Report, *Trade Specific Airborne Hazard / Respirator Training*

Acknowledgments

This marks the final report for Trade Specific Airborne Hazard & Respirator Training. The IUPAT District Council 17 (includes Local 739) again expresses our appreciation to WCB-Manitoba for grant monies for this project. Your contributions enabled successful outreach regarding airborne hazard awareness both internally amongst our own members and more broadly to other trades and organizations. This was a worthy project, we are proud to have been a part of it, and it will continue be offered w/in our general curricula.

Project Overview / Introduction

IUPAT District Council 17 (aka, Painters or DC17) represents several construction and manufacturing finishing trades in Manitoba. In the spirit of Manitoba's Five Year Plan for Workplace Injury and Illness Prevention, DC17 and our affiliated member employers agree that together we must raise the bar concerning Safety. In our industry, that primarily means trade specific respiratory protection training, which includes the following:

- Common **Inhalation / Respiratory hazards** associated with our trades' niche[s]
 - Including special hazards for *women of child bearing age*
- **Medical Screening** for Respirator Use (beyond current MB requirements)¹
- Traditional **Respirator training**
- An **oversight project advisory committee** to ensure the successful implementation of this program

Employer Organizations, Manufacturers, and the Manitoba Building Trades (MBT) continued to support this project from inception. This 'buy-in' from Labour and Management, plus the creation of our

¹ CSA Z94.4-11, Annex E, Part 5

Project Advisory Committee, has enabled **Painters** to help lay the groundwork for a new era in Safety Consciousness, *particularly respiratory safety awareness*.

If you scan the Safety Data Sheet (or MSDS) or any modern organic coating, and one immediately notes a cocktail of occupational respiratory hazards. Add various dust generating surface preparation techniques (e.g., power tool cleaning, abrasive blasting), and particulate inhalation hazards abound. Therefore, **Painters'** is the natural trade to provide this type of training.

Trade Specific Airborne Hazard Training?

Because different trades are exposed to different gases, vapours, and particulates, the *American National Standards Institute* has long argued that airborne hazard training should be coupled with respirator training. While all construction trades could stumble on asbestos as an example, abrasive sandblasters are particularly concerned with silica, welders with hexavalent chromium, painters with isocyanates, bridge workers with lead in paint and histoplasmosis, etc. The training modules were tailored to the airborne risks for the audience. And while some of this overlaps with general *right to know WHMIS/GHS* legislation² and **COR** requirements, *this training is clearly filling in the gaps*.

Course Content – Part I: Airborne Hazards:

- Introduction to Airborne Hazards References, Units and Terminology
- Airborne Hazards: Gases & Vapours
- Airborne Hazards: Particulates & Respirable Dust
- Airborne Sampling
- Hygiene & Wash trailers
- MSDS / SDS review (focus is respirator hazards)
- Note: it is relatively easy to focus on hazard modules of interest to the specific audience (e.g., silica for sand blasters) → hence, 'trade specific' airborne hazard training.

Course Contents – Part II: Respirators

- Hierarchy of Controls:
- NIOSH & CSA Litany of Respirator Terminology
- Atmosphere Supplying Respirators
 - SAR, SCBA, CCER
- Air Purifying Respirators
 - Filters vs Cartridges & Canisters
- Assigned Protection Factors & Maximum Use Concentrations
- Respirator Care
- Respirator Donning and Doffing
- Respirator User Seal Checks
- Qualitative and Quantitative Fit Test protocols
- Qualitative Fit Test (QLFT) and Issue half mask to those interested
 - On-line Medical Screening
 - QLFT for these people

Review of Work Completed

Painters committed to training 100 persons per year for both 2015 and 2016, for a total of 200. *In 2015, L739 trained 107. In 2016, L739 trained 149, for a total of 256.* Below is an example of the certificate of completion issued to attendees:

CERTIFICATE OF COMPLETION

*Developed in partnership with Industry, WCB and SAFE Work Manitoba,
the International Union of Painters and Allied Trades, District Council 17, certifies that*

TRAINING EXAMPLE

has successfully completed

AIRBORNE HAZARDS and RESPIRATOR TRAINING



Christopher Hooter,
Director of Training
IUPAT District Council 17

Date: February 2, 2016

Expiry: February 2, 2019



DC 17 On-Line Medical Clearances from Examinetics

Annex E Health Surveillance is a non-mandatory part of **CSA Z94.4-11 Selection, use, and care of respirators**³. Likewise, Canadian Provincial approach to medical [pre]screening for respirator fit test and respirator use is patchy and inconsistent. Our on-line respirator medical screening, prior to or simultaneous to fit testing, is a common practice in the USA (from which we borrowed the idea) and exceeds the practices of the Safety and Health Acts, Regulations and Codes of Canadian Provinces and Territories, *including Manitoba*. Our process protects worker confidentiality, is inexpensive, very accessible, and more generally *raises the bar* by embracing user-friendly, easy-to-use international practices; this on-line screening has caught on amongst our contractors and owner facilities they service.



Member undergoing qualitative fit testing with 3M Fit Test Gear, using Bitrex Solution, on a 3M 7503 Half Mask, Negative Pressure, Air Purifying Respirator with P100 filtration

Respirator Health Surveillance - Background

Occupational Clinic Visit = A+ Answer (although not \$practical\$)

Obviously, a [mandatory] visit to an occupational medical clinic would be the stellar “A+” answer for respirator health clearances; or, alternatively, one on staff [or contracted]. That is clearly the opinion of occupational nurses whom I met during this program (i.e., MOHNIG⁴). And this is how **Red River** does respirator clearances in their Apprenticeship programs.

I appreciate the occupational nursing enthusiasm for a thorough exam specifically prior to respirator use, and concede, in a perfect world, that is indeed the way to go. But a government funded entity like **Red River** is in a completely different \$world\$ than most construction employers. Coupled with the mobile nature of the construction workforce in general, my hunch is the construction \$pushback\$ to this “A+” health clearance idea would be enormous.⁵

Common Practical of No Clearance

Conversely, the frequently practiced alternative of no pre-respirator health survey at all (e.g., the ‘non-mandatory’ nature of **CSA Z94.4-11 Annex E**) clearly does not do workers justice. Respirator clearances are simply not a ‘tradition’ in construction, in general, in Manitoba.

Manitoba WSH Regulations Parts 6.15 [=Respiratory Protective Equipment] & 6.16 [=Working in Dangerous Atmospheres] do not explicitly require a mandatory health survey for respirator use either.

³ CSA Z94.4-11 clearly states Annex E is “Informative” and “is not a mandatory part of this standard”

⁴ **Manitoba Occupational Health Nurses Interest Group**

⁵ I know my friends at **Manitoba Occupational Health Nurses Interest Group (MOHNIG)** would be disappointed with this assessment in construction. But the \$realities\$ are the \$realities\$.

Indeed, 6.15 references the **CSA Z94.4-11** Respirator Standard⁶, which of course loops us back to the non-mandatory Annex E. And I think it would be a reach to suggest that **Part 36** requires such either.

Even something like the initial and on-going Medical Surveillance in the **Fibrogenic Dust Guideline**⁷ are not specifically for [pre] respirator use, but rather on-going medical monitoring for workers exposed to fibrogenic dust in general. And even if you did read pre-respirator use health screening into this Guideline, what of non-fibrogenic dust airborne hazards? Well, back to **Part 6** and **Part 36** ... and back to **CSA Z94.4-2011 Annex E Health Surveillance** questionnaire.

Recommendation: Add Respirator Health Surveillance to Manitoba Safety Regs

Honestly, I have a recommendation: add / amend explicit pre-respirator use screening to Manitoba Safety Regulations in, for example, the spirit of **Saskatchewan's Occupational Health and Safety Regulations Part VII, Section 88.2:**

“... employer or contractor shall ensure that the worker ... [d] is assessed according to an approved standard as being capable of wearing a respiratory protective device.”⁸

Note: the approved standard SK OHS uses is derived from **CSA Z94.4-11 Annex E**.

CSA Z94.4-11 Annex E Health Surveillance, Part 5

So, let's examine *Annex E, particularly Part 5, the “meat & potatoes” of the health information:*

Z94.4-11

© Canadian Standards Association

PART 5: RESPIRATOR USER'S HEALTH CONDITIONS

Check Yes or No box only. DO NOT specify **Note:** Medical information is NOT to be offered on this form.

- (a) Some conditions can seriously affect your ability to safely use a respirator. Do you have or do you experience any of the following or any other condition that could affect respirator use? ☐ **Yes** ☐ **No**

Shortness of breath	Breathing difficulties	Chronic bronchitis	Emphysem:
Lung disease	Chest pain on exertion	Heart problems	Allergies
Hypertension	Cardiovascular disease	Thyroid problems	Diabetes
Neuromuscular disease	Fainting spells	Dizziness/Nausea	Seizures
Temperature susceptibility	Claustrophobia/Fear of heights	Hearing impairment	Pacemaker
Panic attacks	Colour blindness	Asthma	
Vision impairment	Reduced sense of smell	Reduced sense of taste	
Back/Neck problems	Unusual facial features/Skin conditions	Dentures	

Other condition(s) affecting respirator use Prescription medication to control a condition

- (b) Have you had previous difficulty while using a respirator? ☐ **Yes** ☐ **No**

- (c) Do you have any concerns about your future ability to use a respirator safely? ☐ **Yes** ☐ **No**

A “YES” answer to (a), (b), or (c) indicates further assessment by a health care professional required prior to respirator use.

Signature of respirator user:

Supervisor's initials:

Date:

Note: there is a Single “Yes” or “No” for the entire litany of health issues

If you check “Yes”, then you need a follow-up w/ a healthcare professional

In 5[a], there are a litany of medical conditions listed to which the employee is to check a universal “yes” or “no”. Presumably, this is for concerns of medical privacy - the employer would not know for which condition[s] the worker answered in the affirmative, only that a ‘yes’ was recorded in Part 5a, in which case the worker is automatically forwarded to a health care professional.

⁶ Part 6.15(1)(b)

⁷ **Fibrogenic Dust Exposure (Asbestos & Silica) Workers Medical Screening Guideline**, December 2008

⁸ Note: SK Occupational Health & Safety Regs do require a health survey prior to respirator use – Part VII, Section 88.2d; my correspondence on this subject was w/ Carla Sanson, Government of SK, Hygiene Research Office, Occupational Health & Safety Branch, Ministry of Labour Relations and Workplace Safety; Carla.Sanson@gov.sk.ca; 306.787.4485;

Well, if we just pause right here, some obvious issues come to mind:⁹

- Would an employee, who just wants to “get to work”, honestly read all the medical conditions listed in this format? (*or just check “No” and move on*)
- Even if a worker was litigious enough to read the entire list, would the worker really mark a universal “yes”, even if that were true, since that means a delay in clearance and getting to work? (i.e., must now go see a health care worker before we process request)
- Is the health care professional to which worker is referred an occupational physician facility, or is it [more likely] your family physician?¹⁰
- And who is paying for this medical follow-up? The province or the employer?¹¹

And what of clarifications on the form? To use myself as another example, I am prescribed a very mild dose of medication for high blood pressure, which I take every morning. Very common. When I went for my annual exam two weeks ago, my blood pressure was a textbook 120 / 80. *So, when Annex E Part 5a lists ‘hypertension’, do I have that?*

And whom would I ask then and there completing this form? An employer representative administering the form? (So much for worker confidentiality in that case). Blood Pressure is a rather benign example, but you could easily imagine trickier situations.

The Advantages of Confidential On-Line Clearances:

Well, wouldn’t it be advantageous if one [confidentially] checked ‘yeah’ or ‘nay’ for each individual medical condition? Wouldn’t that give a far better feel for how said condition[s] would (or would not) address respirator medical stresses on the individual? And if one had a question (like my blood pressure), wouldn’t it be convenient for that clarification to be just a phone call away?

Had I checked “yes” for hypertension on the CSA form, I would need a follow-up per the form... *but would that medically really be necessary?* What if we could flush obvious follow-ups “here and now” during the questionnaire? Honestly, I would check ‘No’ on the CSA form above and move on, just to be done with it. But that isn’t ideal either. *The on-line process allows one to be more honest!*

Our On-line Health questionnaire effectively “fishes out” the **CSA** health information in *Annex E* in a more thorough and straightforward fashion, in a relatively quick and inexpensive manner for non-SCBA respirator use¹², *and it does it all confidentially!* Even though **DC 17** has purchased the site use, I could not see an individual’s answers if I wanted to; *I simply do not have access, period!* All “I” (the employer) gets is a clearance letter.

⁹ Many of these were ‘kicked around’ at PAC meeting

¹⁰ My father was a Board Certified practicing OB/GYN for 4 decades in Louisiana, and assure you that he would have been dumbfounded reading OSHA language pertaining to occupational stresses, etc. Occupational medicine is not your typical physician’s area of expertise. Occupational health professionals are required for these sorts of issues, not family GP’s

¹¹ To be fair, our on-line survey could run into this pickle too, although we did not during these 2 years of clearances; more on that later in this report

¹² Note: Examinetics on-line system requires an actual medical exam for SCBA respirator clearances (except for escape SCBA)

DC17 On-Line Employer Respirator Clearance Letter:

Examined, Inc.
10561 Barkley Place
Suite 400
Overland Park, KS 66212
T 913.748.2000
F 913.748.2001
www.examined.com

examined

insightXonsite

Saturday, Jul 23, 2016

Source: On-line

"Name"

RESPIRATOR CLEARANCE NOTIFICATION TO EMPLOYEE

Virtually identical letter
sent to the EMPLOYEE

TRAINING EXAMPLE
PAT-DC 17 (AB,SK,MB,NT,NU)

XID: 16197858

The following individual has participated in the Medical Evaluation for Respirator Clearance Use program recommended by CSA Z94.4-11 Selection, Use, and Care of Respirators, Annex E Health Surveillance.

Based on this Medical Evaluation, and follow-up review by Examined, this individual has been cleared to wear the following types of respirators:

- Disposable particulate filter mask
- Half-face negative pressure respirator
- Full-face negative pressure respirator
- Powered air purifying respirators (PAPR)
- SCBA for escape use only
- Positive Pressure respirator

Respirators covered by
this health clearance
(SCBA not covered)

The following restrictions apply: SCBA use is not allowed (except for emergency escape).

Additionally, this individual must immediately be re-evaluated if:

- Employee report any signs or symptoms that might affect ability to wear a respirator
- A change in workplace conditions resulting in a substantial increase in physical demand
- Respiratory protection program, including fit testing & program evaluation, indicates a need for re-evaluation
- Your supervisor or the respirator program administrator recommends re-evaluation
- Although you have received medical clearance to wear a respirator, CSA Z94.4-11 requires that the respirator to be used must be completed before using any respirator.

Note: CSA
language
replaces the
previous USA
OSHA lingo

Conditions for
re-evaluation

This recommendation has been mailed to the above individual, along with an explanation that the specific model(s) of respirator(s) to be worn are determined by the employer.

Fit Test still
mandatory

IF YOUR EMPLOYEE HAS TO WEAR A RESPIRATOR OTHER THAN THE ONES THAT WERE APPROVED ABOVE, INSTRUCT THEM TO CONTACT EXAMINED MEDICAL REVIEW NURSE AT (913) 323-2441.

Sincerely Yours,



Kent W. Peterson, MD
Medical Director



Jack Richman, MD, FRCPC
Indian Medical Director

Screening Event: 368059
Level B

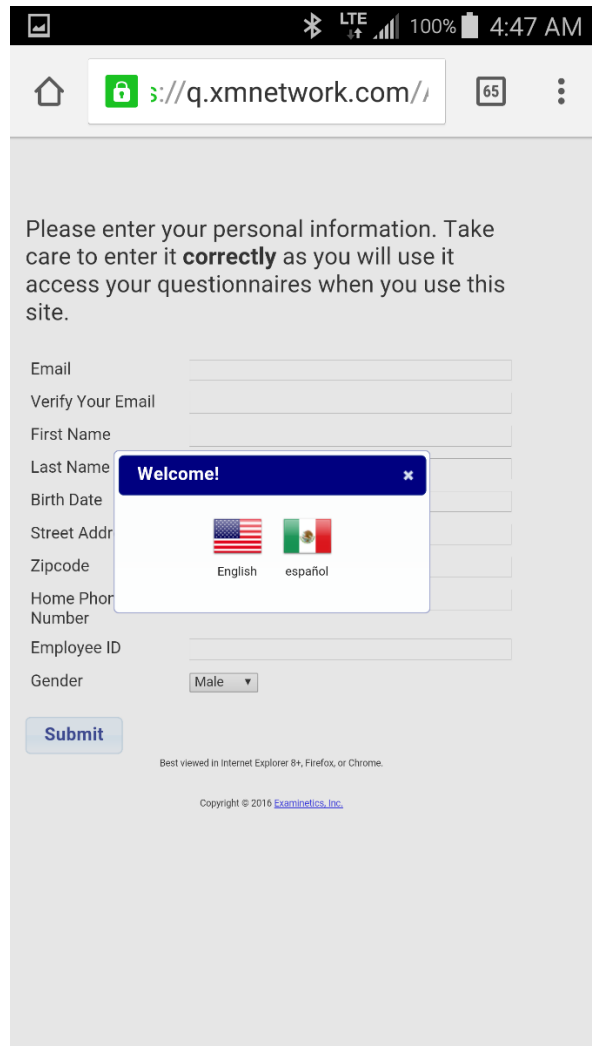
Physician Signatures

OSHA Respiratory Lingo “Out”, CSA Z94.4-11 “In”

Note that all the USA OSHA jargon has been removed and replaced w/ **CSA Z94.4-11 Selection, Use, and Care of Respirators, Annex E Health Surveillance** terminology.

DC 17 On-Line Health Surveillance Process

So, how does all this work? ... The process starts with a text link or email from me to the individual (or to the company who then disseminates accordingly).¹³ At that point, it is a trivial click and go, and the following website loads:



The screenshot shows a mobile browser interface with a status bar at the top displaying LTE, 100% battery, and 4:47 AM. The address bar shows the URL <https://q.xmnetwork.com/>. The main content area has a heading "Please enter your personal information. Take care to enter it **correctly** as you will use it access your questionnaires when you use this site." Below this is a registration form with fields for Email, Verify Your Email, First Name, Last Name, Birth Date, Street Address, Zipcode, Home Phone Number, Employee ID, and Gender (with a dropdown menu currently set to "Male"). A "Submit" button is at the bottom of the form. A blue pop-up window titled "Welcome!" is overlaid on the form, showing two options: "English" with the American flag and "español" with the Mexican flag. At the bottom of the page, there is a note "Best viewed in Internet Explorer 8+, Firefox, or Chrome." and a copyright notice "Copyright © 2016 Examintics, Inc."

ENGLISH = American Flag
SPANISH = Mexican Flag
(to fully Canadianize this process, I suppose a French Option could be added)

Once a Flag (i.e., Language) is chosen, you simply enter your personal information as shown below:

¹³ DC17's Examintics Link: <https://q.xmnetwork.com/Access.aspx?ReturnUrl=%2F%3ftoken%3dd60u5617&token=d60u5617>; you are welcome to try it.

Best viewed in Internet Explorer, or, Firefox, or Chrome.

Email	christopher.hooter@gmail.com
Verify Your Email	christopher.hooter@gmail.com
First Name	Training
Last Name	Example
Birth Date	
Street /	
Zipcode	
Home Phone Number	
Employer	
Gender	

Submit

1 2 3 4 5 6 7 8 9 0

q w e r t y u i o p

a s d f g h j k l

↑ z x c v b n m ↵

Sym English(US) Go

Enter Personal Information

At "Submit", an email is promptly generated to the submitted address; you can stop here and come back later, or just continue (the latter is the usual path)

Christopher Hooter

From: XM_Help@examinetics.com
Sent: July 23, 2016 05:55
To: christopher.hooter@gmail.com
Subject: Online Health Questionnaire: Your new Personal Access ID

Welcome to Examinetics Online Questionnaire service for Employees of INT'L UNION OF ALLIED TRADES. Completing this questionnaire will take approximately 10-15 minutes.

Getting Started: This online service is private and secure; you will need to prove your identity with personal information (address, phone number, employee ID, etc.).

Short on Time: You will be able to save your questionnaire and return at a later time to complete, if necessary. It will be up to you to remember to return and complete the questionnaire.

Problems / Help: Should you have problems logging in, you can reply to this email, or send us a question [here](#).

Start your questionnaire by clicking [here](#) or by following this link:
<https://q.xmnetwork.com/Access.aspx?token=qhdi8hq1>

Thank you,

Online Questionnaire Service
examinetics
10561 Barkley Place, Suite 400
Overland Park, KS 66212

The next page to load is a security page to ensure it is still 'you' completing the survey:

Personal access ID if need to log back in again

Your Personal Access ID: **qhdj8hq1** (

your new Personal Access ID! Please [bookmark](#) this page and copy the Person Access ID down as you will need it to acc your questionnaires.

Please verify your id information from an

First Name **GAILYN**

Last Name **WILKINS**

Birth Date **12/11/1971**

Enter

Best viewed in Internet Explorer 8+, Firefox, or Chrome.

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Match these to the appropriate dropdown (First Name [= Training] shown for illustration; Last Name & Birth Date are similar)

MAKEEN	
TRAINING	
DELRIX	<input type="radio"/>
JOI	<input type="radio"/>
LOETTE	<input type="radio"/>
ADELINE	<input type="radio"/>
STEVE STOJAN	<input type="radio"/>
YANELLI	<input type="radio"/>
DARCEY	<input type="radio"/>

Your Personal Access ID: **qhdj8hq1** ✓ T

your new Personal Access ID! Please [bookmark](#) this page and copy the Person Access ID down as you will need it to acc your questionnaires.

Please verify your identity by selecting yc information from among the options:

st Name **TRAINING**

st Name **EXAMPLE**

Birth Date **06/30/1994**

Enter

Best viewed in Internet Explorer 8+, Firefox, or Chrome.

Copyright © 2016 [Examintetics, Inc.](#)

Now, we roll into a heart of the questionnaire:

Mobile status bar: LTE, 99% battery, 4:54 AM

Browser address bar: <https://q.xmnetwork.com/>

Navigation tabs: Demographics, Personal, Past Respirator Use, Current Respirator, Heart, Lung

Welcome!

Welcome to the Examinetics On-Line Respirator Questionnaire. You are asked to complete this form to receive a clearance in the event that you need to wear a respirator or mask while you are at work. After you are cleared, you will be properly fitted with a respirator or mask.

This should take about 10-15 minutes to complete. Please answer the questions honestly. Your information is confidential and will be retained on our secured site.

We recommend that you complete the questionnaire in the order the questions are presented to you. If you cannot complete the questionnaire in one setting, you can click on the LOGOUT button found at the left of the page.

Once you start the questionnaire, you will see a progress bar which will advise your position within the test towards completion. If you have any problems, or have a question, you can send us an email by clicking on XM_Help@examinetics.com.

Continue

Gender:

☒ M
☐ F

Date of Birth: 06/30/1994

Employee ID: 0987654321

There are different 'pages' [Demographics, Personal, Prior Respirator Use, Current Respirator Use, Heart, Lungs, etc.] in the questionnaire. Each 'page' has several questions.

You can do them in any order, although a 'next' button will normally prompt you to go in order



* required question

Your questionnaire is saving but there are fields you need to fill out. Click [here](#) to go to the next required question.

Submit Print Previous Next

Demographics Personal Past Respirator Use Current Respirator Heart **Lungs** Lungs Cont Other

Have you had a chronic cough in the past year?

- ☐ Yes
☒ No

Do you CURRENTLY have coughing that produces phlegm (thick Sputum) of the year?

- ☐ Yes
☒ No

Do you CURRENTLY have coughing that occurs mostly when you are lying down?

- ☐ Yes
☒ No

Have you CURRENTLY coughed up blood?

- ☐ Yes
☒ No

Do you CURRENTLY have coughing that wakes you early in the morning?

- ☐ Yes
☒ No

Do you CURRENTLY have chest pain when you breathe deeply?

- ☐ Yes
☒ No

Do you CURRENTLY have wheezing (whistling in the chest)?

- ☐ Yes
☒ No

Have you EVER had chronic bronchitis?

- ☐ Yes
☒ No

Have you EVER had emphysema?

- ☐ Yes
☒ No

Have you EVER had chronic hay fever?

- ☐ Yes
☒ No

Have you EVER had lung cancer?

- ☐ Yes
☒ No

Have you EVER had asthma?

- ☐ Yes
☒ No

Have you EVER had pneumonia?

- ☐ Yes
☒ No

Have you EVER had pneumothorax?

- ☐ Yes
☒ No

Have you EVER had tuberculosis?

- ☐ Yes
☒ No

Click Next, or Previous, etc., when complete the page

Your questionnaire is saving but there are fields you need to fill out. Click [here](#) to go to the next required question.

Submit Print Previous Next

A “YES” on individual questions will trigger a subset of follow-up questions, which will fish-out more relevant information to determine if follow-up is required.

This **page** (& the following) covers medical questions of the “**Lungs**”. Other pages cover other medical issues, past respirator work use, etc.

Have you EVER worn a respirator in the past?

- ☒ Yes
☐ No

What type of respirator did you wear (mark all)

- ☐ Disposable particulate filter mask (non-c
☐ Half-face cartridge respirator
☐ Full-face cartridge respirator
☐ Powered air purifying respirator
☐ Supplied air (airline) respirator
☐ Self contained breathing apparatus (SCB

Have you had eye irritation that interfered with occasion? ❌

- ☐ Yes
☐ No

Have you had chronic eczema, psoriasis or se with your use of a respirator on more than 1 o

- ☐ Yes
☐ No

Have you had anxiety that interfered with your



- ☐ Yes

Example of a follow-up question[s] prompted by a "YES"

Had the answer above been "No", these follow-up questions would not have appeared

In my personal example of blood pressure, the on-line follow-ups were obvious and to the effect:

- Are being treated for it? (yes)
- Is it still high? (no)
- Next serious of questions (I was issued clearance)
- Note: again, honestly, I would have checked 'no' on the CSA form just to avoid the hassle; here, I was able to be completely forthright

So, once 'you' answer all these questions, hit 'submit'

the questionnaire.

affirmed consent by clicking "I AGREE."

BY TYPING MY FULL NAME BELOW AND CLICKING THE BUTTON, I ACKNOWLEDGE THAT I HAVE READ, UNDERSTAND, AND AGREE TO THE TERMS AND CONDITIONS ABOVE, AND THAT I AM AGREEING TO BE BOUND TO THESE TERMS AND CONDITIONS BY SUBMITTING MY ELECTRONIC SIGNATURE.

Signature: Training Example (Type Full Legal Name)

Yes

copy of your answers to take with you at this time.

Once your questionnaire has been processed, you will be able to view and print your clearance letter.

Thank you for your participation.

Status: Processed

Click here to view your clearance letter.

Log Out

Have you EVER had any of the following conditions?

Do you currently have any of the following conditions?

Breathing or lung trouble

Heart trouble

Blood pressure

Seizures

Hit **SUBMIT** Then "Sign" Then "Click" to see your employee clearance letter

examinetics

RESPIRATOR CLEARANCE NOTIFICATION TO EMPLOYEE

TRAINING EXAMPLE

UPRAT-OC-17 (ABSR-MB-MT-NJ)

You recently participated in the Medical Evaluation for Respirator Clearance Use program as recommended by CSA Z94.4-11 Selection, Use, and Care of Respirators, Annex E Health Surveillance.

Based on this Medical Evaluation, and follow-up review by Examinetix, you are cleared to wear the following type of respirator:

- Disposable particulate filter mask
- Half-face negative pressure respirator
- Full-face negative pressure respirator
- Powered air purifying respirators (PAPR)
- SCBA for escape use only
- Positive Pressure respirator

The following restrictions apply: SCBA use is not allowed (except for emergency escape)

Immediate re-evaluation of your ability to wear a respirator must occur if:

- You report any signs or symptoms that might affect your ability to wear a respirator.
- A change in workplace conditions resulting in a substantial increase in physical demands.
- The respiratory protection program, including fit testing & program evaluation, indicates a need.
- Your supervisor or the respirator program administrator recommends re-evaluation.

A copy of your clearance status for respirator use has been provided to your employer. The specific brand (s) of respirator(s) to be worn will be determined by your employer.

Although you have received medical clearance to wear a respirator, CSA Z94.4-11 training and a fit test on the respirator to be used must be completed before using any respirator.

If you have any questions about what to do next, please contact your supervisor. If you have any questions about your clearance results, call the Medical Review Nurse at (913) 323-2441.

IF YOU WEAR A RESPIRATOR OTHER THAN THE ONES THAT WERE APPROVED ABOVE, CALL EXAMINETICS MEDICAL REVIEW NURSE AT (913) 323-2441.

Thank you for participating in the Medical Evaluation for Respirator Use Program.

Sincerely Yours,

Kent W. Peterson, M.D.
Medical Director

Jack Rothman, MD, FACOEM
Canadian Medical Director

Screening Event: 06/09/16
Level: 9

MP1309 Print Date: 7/23/2016 Examinetix, Inc. 10561 Barkley Place, Suite 400, Overland Park, KS 66212, 913.748.2000

The EMPLOYEE letter – virtually identical to the EMPLOYER letter previously shown

I get the EMPLOYER letter; I do NOT get the EMPLOYEE letter

And the individual gets a completion email.

Christopher Hooter

From: XM_Help@examinetix.com
Sent: July 23, 2016 06:15
To: christopher.hooter@gm
Subject: Your Online Health Questionnaire clearance status has recently changed

Participant Name: TRAINING EXAMPLE
Questionnaire Date: 7/23/2016
Questionnaire: Respirator Clearance

Your Online Health Questionnaire clearance review is complete.

You may log back in to view and print your clearance letter: <https://q.xmnetwork.com?token=qhdj8hq1>.

If you have any questions, please contact our support line at (913) 748-2011 or [email our help desk](mailto:email.our.help.desk).

Thank you,

Online Questionnaire Service
examinetix
10561 Barkley Place, Suite 400
Overland Park, KS 66212

Potential Criticisms of our On-Line Process

One criticism of the on-line process, hypothetical in nature, is that workers could “not be completely truthful” when answering their health questions. Would a worker admit to (let’s just say) asthma if it meant disqualification from respirator clearance, respirator use, and potential employment!?

The honest answer is sure they could. However, just as alluded to previously, workers could just as easily (or maybe more easily) “fib” on the **CSA Annex E** form as well. And as mentioned earlier, would all workers really read the entire litany of potential medical conditions lumped under a single ‘yes’ or ‘no’ on the CSA form? Well, that isn’t an issue w/ the on-line process as it asks potential conditions in a more active manner, one at a time ... with appropriate follow-up to any ‘yes’, one condition at a time.

Honestly, only an occupation medical exam could potentially catch all shortcomings – online or CSA - but even then a visit to the occupational clinic might not necessarily catch everything either.

Bottom line: no system is perfect, but we like this process. We think the on-line process more effectively ‘fishes out’ potential medical conditions (than the CSA form), and so we highly recommend it... and will continue to use this w/in our District.

Clearances (More)

Most who completed the on-line survey had their clearance letters immediately generated. They received an *employee clearance letter*, while I received an *employer clearance letter* (examples above). There were a few whose questionnaires prompted a phone call to **Examinetics** for a short follow-up for clarification on answer[s]. But to my knowledge, these were straightforward with clearances promptly issued.¹⁴

Also to my knowledge, nobody to date required an actual medical exam re this clearance process. I attribute this to a couple things. First, the follow-up questions smoothly fish out the proper follow-up information (e.g., my blood pressure). Second, there is an exertion question concerning work activity – light, moderate, high. So, although you could [potentially] have some ‘yes’ medical condition[s] coupled with ‘light’ exertion work tasks that aren’t an issue.

Similarly, there are possible “degrees” of clearances. For example, a worker could [theoretically] be approved for a half mask only, but not approved for a full-face, etc. So, the process is more thorough in general and has more “nimbleness” than the CSA form re follow-up exams.

On-Line Clearance Process, Conclusion

Bottom line, **DC 17** really likes this system, and have fully employed it! It is one of the real legacies of this project, and we feel it does ‘raise the bar’.

Related Matter – Tight Fitting Respirators, Fit Tests, & Facial Hair

Respirator health clearances may all be good, but an on-going issue in this project was *tight fitting respirators, fit tests, and facial hair*. I mean, it’s a problem, and it isn’t going away.

And it isn’t an issue just for the formal fit test. What is ‘actually’ happening at construction sites? While this program emphasizes over and over that facial hair and tight fitting respirators are a “challenging couple”, *I only see one way around this: loose fitting respirators*.

Powered Air Purifying Loose Fitting Respirators can have a protection factor of 1000, just like Supplied Air, Continuous Flow Loose Fitting Respirators, but without the need of supplied air. So, this is doable.

¹⁴ One shared this with me; while I knew this was possible, I would never have known otherwise in this specific case. Again, I don’t have access to any confidential information – I only get the Employer Clearance Letter; that’s it

However, Powered Air Purifying Respirators (loose or tight fitting) are expensive in general, and can be very expensive in some cases.

But unless employers want to enforce 'facial trends' of employees as a condition of work – that could be tricky – loose fitting respirators provide an equally effective alternative, albeit not inexpensive.

Something else to keep an eye on ...

Financial Report

Preface:

My budget of ~\$70,000 was very short of actual money / effort spent on this project. In these financials, I give an accounting of where I was \$short\$. Now, none of this suggests **DC 17** is not appreciative to **WCB** for this grant. *We most certainly are.* Your grant monies kept us focused on a real need and weak area in construction [while I would have otherwise most certainly have gotten ‘side-tracked’ on other things]. So, I am very thankful to **WCB** for this grant. I think it was a huge success, and my impression from our attendees and PAC members are likewise. *But here, with the benefit of hindsight, I am just providing **WCB** an honest accounting of the project, and why / where this effort totaled far more than \$70,000 requested in the proposal.*

- **Bottom Line:** if I had to budget this all over again, I would not ‘quote’ it for a penny less than \$100,000, and \$125,000 more likely

Introduction:

As a former construction estimator and project manager for many years, budgets (= estimates) never quite play out as originally intended. *The glaring \$shortfall\$ in my budget was my \$time\$.* While I never intended to fully bill me in completely – after all, our members are benefiting from **WCB**’s monies here - the truth is I spent **several man-months** more on this project than anticipated. *My time allocation alone, properly accounted for¹⁵, would eat up the \$70,000 budget of the grant.*

There were two primary factors at play here soaking up my time:

1. **Program Development:** most of my anticipated costs for program development were buried in the \$112.50 / student costs¹⁶. Even if you allocated all that [\$112.50 / head x 200 =] \$22,500 to me exclusively – so excluding obvious other things buried in the same line item like **DC 17** administration staff’s efforts, classroom use, other equipment used for this project, etc. - ~\$20,000 was woefully \$insufficient\$ to develop, amend, instruct, tweak, revise, re-revise, etc. a program *from scratch*. And ‘from scratch’ was the key here. ... I was just \$off\$ here. No other way to sugarcoat it.
2. **Administration:** administration was more than anticipated. If a project / grant is \$1,000,000, and one spends \$100,000 on administration of that grant (including reports like this), then 10% isn’t a huge deal in the grand scheme of things. But, if the grant is only \$70,000, and if it still requires the same type of administrative “enthusiasm”, then administration will inevitably take up a bigger fraction of the total. Consider the following:
 - a. Since my initial reports were too ‘brief’ (those were what I originally [incorrectly] envisioned), I started spending more time on subsequent ones. I am not suggesting that this level of reporting is unnecessary or overly burdensome – I understand that **WCB** must assure its funds are being spent appropriately, and that you must brief others on the progress, issues to date, etc. – I am only stating the obvious: I underestimated the \$effort\$ involved.
 - b. Unlike universities and the like – grants are what “they do” – this was **IUPAT DC 17**’s first swing at the pitch here. Going forward, we shall be better prepared for the process.

¹⁵ I am including \$Chris\$ @ \$40 / hour; actually, my wage burden is > \$60 / man hour.

¹⁶ \$11,250 to train 100 students, per year, or \$22,500 total

c. Note: this report alone took at least a man-week.

Final Report Financial Format

Previous Reporting - If I Were \$Lite\$ on a Budget Item:

In my previous ~quarterly **WCB** project breakdown \$reporting\$, if I were \$lite\$ in one area, I would report that I shifted \$resources\$ from ‘over there’ to help \$cover\$ ‘here’. Such was always annotated either in my report or on the attached respective excel forms based off my original **December 2014 Work Plan** at project inception.

Previous Reporting - Shifted \$\$\$ Around To Stay On Budget:

Or, if I had monies left over on a budgeted item, I might report those monies spent on \$Chris\$ (rather than the item) to begin to cover what was becoming more and more obvious as time went on – again, all annotated in previous reporting – that \$Chris\$ was the big shortfall in my estimate. For example, we ultimately didn’t have any medical follow-ups¹⁷. Hey, shift that budgeted money item to \$Chris\$, because that is where it is desperately needed.

Previous Reporting - If I Were \$Over\$ on a Budget Item:

Also, if I was over budget on an item, in general **L739** would just ‘eat’ those costs in my **WCB** reporting. For example, if I budgeted \$600 for a PAC meeting, but if Dave Martin PAC Chair actually invoiced me \$750, we would ‘eat’ the \$150 difference. This happened all the time.

Revised Financial Format

But, after discussions with Joanne for this final report, I understand **WCB** wants an item by item reporting, whether on, under, or over budget for an item. So, in this, our final report, I present financials by topic as listed in my original **December 2014 Project Work Plan**¹⁸. Also, as many resources from multiple avenues went into this project, I have broken them down as follows:

- **Direct Project Costs** – an item explicit in the budget¹⁹
 - As previously mentioned, the only originally budgeted \$Chris\$ time was buried in classroom time @ \$112.50 / head (and even that wasn’t “just Chris”)
- **Direct Project \$Chris\$ Costs** – explicit \$Chris\$ project time beyond anticipated
 - My actual wage burden (all in) is ~\$2500 / week, which is > \$60 / hour; *however, I only carried \$40 hourly for \$me\$.*
- **Affiliated Project Costs** – related project costs from which this respirator program benefited
- **Donations** – items in the budget that were donated by 3M to help the grant

Alternatively stated, a **DIRECT COST** is an explicit item directly related to this grant. **AFFILIATED COSTS** benefit the program, but less directly. **DONATIONS** are dollars directly benefiting the program, but were just that – donations – and posed no costs, direct or affiliated, to the program. A summary of those financial are shown here:

¹⁷ For reasons of confidentiality, I wouldn’t necessarily know if an exam was required. But to my knowledge, there was none.

¹⁸ An updated Work Plan was submitted with each report, including this one.

¹⁹ On my spreadsheets, we are colour coded: **Direct Costs** are Purple, **Affiliated Costs** Blue, & **Donations** Green

Specify Key Project Milestones	\$Budget\$	\$Direct\$ (Chris)	\$Affiliated Project Cost\$	\$Donations\$
Project Advisory Committee				
Establish PAC Members	\$ 600	\$ -	\$ 3,200	
Initial PAC Meeting	\$ 600	\$ 600	\$ 3,200	
Followup Meeting w/ PAC	\$ 600	\$ 667	\$ 3,200	
2015 1st Quarter: PAC	\$ 600	\$ 84	\$ 3,200	
2015 2nd Quarter: PAC	\$ 600	\$ 137	\$ 3,200	
2015 3rd Quarter: PAC	\$ 600	\$ 30	\$ 3,200	
2015 4th Quarter: PAC	\$ 600	\$ 1,200	\$ 3,200	
2016 1st Quarter: PAC	\$ 600	\$ 964	\$ 3,200	
2016 2nd Quarter: PAC	\$ 600	\$ 900	\$ 3,200	
2016 3rd Quarter: PAC	\$ 600	\$ -	\$ 3,200	
2016 4th Quarter: PAC	\$ 600	\$ -	\$ 3,200	

My Itemized Dec 2014 Work Plan, end of project Final Update

Most of \$this\$ is Dave Martin, PAC Chair

Unanticipated – but very real - \$Chris\$ costs are in 2 week increments @ \$40 / hr charge out (80 x \$40 = \$3200); 22 Chris-man-weeks annotated under PAC; 2 more 2 week increments (= 26 weeks total) under **Research / Consulting / Conferences**

Respiratory Training Classes

Initial Purchases For Instruction-References & Student Manuals	\$ 5,015	\$ 3,084		
Initial Purchases - Medical Screening	\$ 5,000	\$ 6,477		
Followup Medical Screenings (Budget)	\$ 4,000	\$ -		
Initial Purchases - Equipment	\$ 13,110	\$ 7,494	\$ 2,602	\$ 750
2015 Pre-Construction Season	\$ 4,500	\$ 2,813		
2015 Classes, Construction Season	\$ 2,250	\$ 4,388		
2015 Classes, Late Season	\$ 4,500	\$ 4,838		
2016 Pre-Construction Season	\$ 4,500	\$ 12,713		
2016 Classes, Construction Season	\$ 2,250	\$ 4,050		
2016 Classes, Late Season	\$ 4,500	\$ -		

Knowledge Transfer Outreach

2015 Knowledge Transfer Outreach	\$ 2,500	\$ 2,0
2016 Knowledge Transfer Outreach	\$ 6,000	\$ 2,9

Research / Consulting / Conferences

Research Consulting	\$ 1,400	\$ 2,919	\$ 3,200	\$ 6,000
SSPC Conference (silica, heavy metals, solvents, etc.)	\$ 1,415	\$ 257	\$ 257	
Research Consulting	\$ 1,400	\$ 1,089	\$ 3,200	\$ 1,089
SSPC Conference (silica, heavy metals, solvents, etc.)	\$ 980	\$ 1,302	\$ 1,302	

Sub Totals

	\$ 69,920	\$ 61,080	\$ 41,600	\$ 5,251	\$ 6,750
	\$Budget\$	\$Direct Project Cost\$	\$Direct\$ (Chris)	\$Affiliated Project Cost\$	\$Donations\$
TOTAL, I			12,680		
TOTAL (Direct + Affiliations)				\$ 114,681	

\$102,680 is the WCB project cost!

Another ~\$12,000 came from other affiliated and donated sources

Or, if you prefer the WCB Breakdown:

WCB Breakdown	\$Budget\$	\$Direct Project Cost\$	\$Direct\$ (Chris)	\$Affiliated Project Cost\$	\$Donations\$
Salaries & Benefits	\$ 31,900	\$ 37,391	\$ 41,600	\$ 1,089	\$ 6,000
Materials & Supplies	\$ 5,015	\$ 3,084	\$ -	\$ -	\$ -
Equipment	\$ 13,110	\$ 7,494	\$ -	\$ 2,602	\$ 750
Advertizing	\$ 8,500	\$ 5,076	\$ -	\$ -	\$ -
Travel, Accommodation & Meals	\$ 2,395	\$ 1,560	\$ -	\$ 1,560	\$ -
Medical Screening	\$ 9,000	\$ 6,477	\$ -	\$ -	\$ -
Totals	\$ 69,920	\$ 61,080	\$ 41,600	\$ 5,251	\$ 6,750
	Total, \$Direct\$		\$ 102,680		
	Total (Direct + Affiliated + Donations)				\$ 114,681

DC 17 Employee Time & Wage Burden

When **DC 17** purchased \$5000_{USD} for on-line respirator clearances for this project, that was a straight-forward \$5000_{USD} cost, easy to illustrate w/ receipts. But what of employee's time spent on this project?²⁰ How would I do that? Well, to quantify with a receipt **DC17** staff 'billings', I created INVOICES from **DC17** to "**Respirator Project**" to appropriately allocate those labour costs to this project.²¹

But what about **wage burden**? Putting on my construction estimator's hat again, wage burden can be quite difficult to "nail down", but here is how I did it:

- **Hourly Wage**
 - If they are hourly, then I just carried the hourly wage.
 - If they are salaried, then I took the annualized salary / 2080 hours to get an effective hourly wage.
 - No overtime rates were included.
- **Stat & Holiday**
 - If someone is salaried, then I did not include Stat & Holiday in their wage burden.
 - If someone is not salaried, but truly hourly²² (e.g., help @ CSAM Conference), then I did include 4.5% for stat and 6% for holiday
- **Pension Contribution**
 - Paid per respective CBA
- **Health & Welfare Contribution**

²⁰ Not Dave Martin, PAC Chair – he was contracted and he just sent me an Invoice from Martin & Associates. Here, I refer to actual **DC17** employees?

²¹ There are DC17 INVOICES to RESPIRATOR PROGRAM for Christian Thioux, Ashley Wollman, Nicole Dolinski, and myself in these financials

²² Christian Thioux and myself are salaried, even though our salaries are based on some hourly rate @ so many hours / annum

- \$1.35 / hour for most of the duration of this project²³
- **Employer CPP Contribution**
 - Took the maximum employer CPP contribution for the year (i.e., \$2544.30 for 2016) and divided that by 2080 hours = \$1.22 / man-hour
 - Note: this is not how CPP contributions actually play out in ‘real time’. CPP contributions, employer and employee, are paid at higher rates than this until it is paid in full for the year, and then they are no longer deducted. But this is how I included in DC17 wage burdens.
- **Employer EI Contribution**
 - Similar to CPP, only the numbers different: \$1337.06 / 2080 = \$0.64 / man-hour
- **Workers Comp Insurance**
 - Low for us office types
- **General Liability**
 - We have overhead liability insurance costs here. However, I did not include, as it was just too complicated to chase all that. But in reality, it is a cost.
- **Office Footprint / Overhead**
 - Certainly for me, I have an office at DC17 and everything that comes with that office. I spent X-man-months on this project. For that time, in an actual ‘construction estimate’ I would include that office footprint in “overhead” – rent / mortgage, utilities, building insurance, etc. – plus other “overhead” operating costs (office administrators, payroll, etc.). But I did not include any of that here.

PAC Costs

Specify Key Project Milestones	\$Budget\$	Project Cost\$	\$Direct\$ (Chris)	Project Cost\$	\$Affiliated Project Cost\$	\$Donations\$
Aka, “PAC” \$600: Martin & Associates, Invoice Date January 29, 2015	Establish PAC Members	\$ 600	\$ -	\$ 3,200		
\$667.30: Martin & Associates, Invoice Date March 16, 2105, \$600 + working Lunch for PAC, Oscars Deli, \$67.30			600	\$ 3,200		
\$84.02: Lunch for PAC meeting (Pizza Hut)			667	\$ 3,200		
\$136.61: Tims (\$10.50) + Lunch (\$126.11) for PAC meeting			84	\$ 3,200		
\$30.17: Breakfast – Peter, Dave, Chris (Southwood Golf & Country)			137	\$ 3,200		
\$1200: Martin & Associates \$600 November 12 2015 & \$600 December 8, 2015			30	\$ 3,200		
\$964.42: Martin & Associates Invoice Feb 24 2016 (CSAM The Safety Conference) & Lunch discussions (Baileys, \$64.42)			1,200	\$ 3,200		
\$900: Martin & Associates Invoice May 2 2016 (\$300) & June 10, 2016 (\$600)			964	\$ 3,200		
			900	\$ 3,200		
			-	\$ 3,200		
	2016 4th Quarter: PAC	\$ 600	\$ -	\$ 3,200		

Additional \$Chris\$ costs in 80 hour increments invoiced @ [only] \$40 / hour
\$40 x 80 = \$3200

²³ Actually increased to \$1.40 in middle of 2016, but I didn’t worry about that

PAC, Direct Project Costs

PAC costs, as shown, were mostly from the great work by our PAC Chair, Dave Martin. From application to reporting to expectations to meetings, Dave's help was instrumental. I have never navigated a public grant process before, and Dave was an invaluable member for that effort.

Other PAC costs included food and lunch purchases during or following up w/ respirator meetings.

PAC, Direct Chris Costs

I could easily allocate **6 Chris-man-months** beyond anticipated for this project. Let's just call that 24 weeks (6 months @ 4 weeks / month). So, in an effort to smear that around, I have allocated 2 weeks / PAC meeting at [only] \$40 / Chris-hour²⁴ (80 hours x \$40 / hour = \$3200) + another 4 weeks under Research.

²⁴ My actual direct wage burden is >\$60 / hour, and you could make this case – w/ office overhead included – it approaches \$70; but here, I only invoiced myself at \$40 / Chris-hour. Consider the difference **DC17's** contribution to the effort.

Respiratory Training & Associated Purchases

Specify Key Project Milestones	\$Budget\$	Project Cost\$	\$Direct\$ (Chris)	Project Cost\$	\$Affiliated Project Cost\$	\$Donations\$
Respiratory Training Classes						
Initial Purchases For Instruction - References & Student Manuals	\$ 5,015	\$ 3,084			\$34.51 Staples + (\$61.59 + \$76.28 + \$150.29 + \$81.93) DollaRama + \$3.29 Safeway+ \$157.50 WCA + (\$1676.92 + \$841.29) Kwik Kopy Printing = \$3083.36	
Initial Purchases - Medical Screening	\$ 5,000	\$ 6,477			\$2500USD @ 1.2739 = \$3185 \$2500USD @ 1.3168 = \$3292 \$0 Medical Screenings Total Medical = \$6477.00	
Followup Medical Screenings (Budget)	\$ 4,000	\$ -				
		7,494			\$ 2,602	\$ 750
2015 Pre-Construction Season	\$ 4,500	\$ 2,813				
2015 Classes, Construction Season	\$ 2,250	\$ 4,388				
2015 Classes, Late Season	\$ 4,500	\$ 4,838				
2016 Pre-Construction Season	\$ 4,500	\$ 12,713				
2016 Classes, Construction Season	\$ 2,250	\$ 4,050				
2016 Classes, Late Season	\$ 4,500	\$ -				

\$3294.11 Safety Express INV 80-00495917 (respirators) + \$5.56 Home Depot (fitting) + \$2592.92 Stone Tucker INV 12218 (occupational personal monitoring equipment) + \$261.03 Safety Express INV 80-00246512 (Fit Test Solution) + \$1339.98 Safety Express INV 80-00266367 (Respirators) = \$7493.36

\$2450.89 Stone Tucker INV 80-+00492697 (Occupational Monitoring Calibration Gear) + \$151.20 Stone Tucker INV 12219 (Lead Paint Test Swabs) = \$2602.09

3M Qualitative Fit Test Gear (Donated by Don Cove, 3M Safety Specialist)

\$112.50 / head x 256 students = \$28,800 (sum here = \$28,802 shown as there are some 50C roundups)

Knowledge & Outreach

Knowledge Transfer Outreach	\$Budget\$	Project Cost\$
2015 Knowledge Transfer Outreach	\$ 2,500	\$ 2,000
2016 Knowledge Transfer Outreach	\$ 6,000	\$ 2,979

\$750 (June 11 2015) & \$600 (Oct 13 2015) Martin & Associates, Dave Martin, PAC Chair) + \$426.27 Ft Qu'Appelle Career Fair + \$320 (\$40 x 8 hours) Ashley Wollman Dec 22 2015 class at WCA = \$2096.27

\$698.25 CSAM The Safety Conference Registration + \$1280 Christian Thioux setup and booth manning (\$32 @ 40 hrs) + \$120 Truck for week + \$510 Ashley Wollman @ CSAM (\$30 x 17 hrs) + \$11 Parking + \$40 gas + \$320 Nicole Dolinski = \$2979.25 total

Research & Consulting and Conferences

In our original submission, we maintained that **Painters** was in a unique position to deliver airborne hazard and respirator training. *As the Director of Training of the Painters Union in the Canadian Prairies, there is nothing I do that does not at least 'touch' airborne hazards and appropriate safety protocols – from exotic coating's safety data sheets to abrasive blasting, it is just the nature of the tasks of our crafts to generate airborne risks.* Sure, there are other safety concerns: falls, electrocution, crush, pinch, burns, heat stress, frost bite, hydraulic injection, skin absorption, ingestion, eye & hearing protection, etc. *But I can't think of a single task that a Painter, especially an Industrial Painter – and we have hundreds of these in our Hall – performs that does not require a respirator at least handy.*

Research

Well, on the Research side, **IUPAT DC 17** coupled with our International's training arm (**Finishing Trades Institute, FTI**) to train me up as a Lead Instruction for **SSPC's**²⁵ *C3 Supervisor / Competent Person for DeLeading Industrial Structures*. *C3* is a 32 hour course that focusses on Lead Paint Abatement on major steel structures – bridges, tanks, etc. *C3* is a mandatory course in the USA for serious industrial and marine lead abatement projects in the USA (hence **FTI's** interest). *C3* is littered w/ biological effects of airborne particulates, not limited to but including:

- Airborne Respiratory dust
- Airborne Lead dust
- Airborne Hexavalent Chromium Dust
- Airborne Arsenic Dust
- Airborne Beryllium Dust
- Airborne Silica Dust
- Airborne Coal Slag Dust

Managing these hazards, *C3* then extensively deals with:

- Trade Triggers Tasks for Airborne Dust Generation
- Occupational Airborne Monitoring
- Environmental Airborne Monitoring
- Engineering Controls to reduce airborne exposure
- Administrative Controls to reduce airborne exposure
- Work Practices to reduces airborne exposure
- Decontamination Procedures

In other words, C3 is directly related to the goals of this WCA Grant. Indeed, I could not have put this program together w/o *C3*. Or to put another way, *Airborne Hazards and Respirator Training* would not have been nearly the course it is w/o this *C3* experience. So, under Research for this project, I included costs involved to achieve **Lead Instructor Status** for *SSPC C3*. Note that these are inherently 'shared costs' between **DC17**, **FTI**, and this grant.

C3 is a 'bear' of course. It requires four [4] observed teaches to achieve Lead Instructor Qualification. And having done it, I can attest – there is LOTS to this, and it takes every bit of 4 observes to get comfortable with the material. But four instructs means 4 trips: 4 flights, 4 hotel-weeks, 20 day per diem

²⁵ Formerly the **Steel Structures Painting Council**, now simply **SSPC**, **The Society of Protective Coatings**, and **NACE International** (formerly **National Association of Corrosion Engineers**) are the primary standards organizations for Industrial Coatings. Every coatings spec in North America contains a litany of **SSPC** & / or **NACE** standards for which the work is to meet. Historically, **SSPC** were 'bridge and structural steel' focused, while **NACE** was 'oil & gas', but those segregations have essentially vanished over the decades. If you are a serious player in industrial painting, you must know these **SSPC / NACE** standards.

days, to say nothing of 4 weeks of wage and hidden costs from 4 weeks out of action for my District. These trips included:

- Saskatoon, Week January 26, 2015
- Las Vegas, Week February 2, 2015
- New Hampshire, Week March 17, 2015
- Vancouver, Week May 10, 2015

Again, I tried to share costs fairly. **FTI** paid for flights and hotels to New Hampshire and Vancouver, so I only allocated a few hundred dollars to this grant for that effort; **the difference was donated**. The more expensive trip was Las Vegas (~\$3000), of which I allocated ~\$2000 **direct** to this grant. Specifics below.

Conferences

I attended 3 conferences relevant to this program:

- NACE Calgary, February 2015
- SSPC 2016 Conference, January 2016, San Antonio
- NACE 2016 Conference, March 2016, Vancouver
- Global Petroleum Show Calgary, June 2016

Again, I tried to spread costs around fairly:

- For NACE Calgary 2015, only my \$flight\$ was included here, and that was split $\frac{1}{2}$ **direct**, $\frac{1}{2}$ **affiliated**
- For SSPC 2016, split this, $\frac{1}{2}$ **direct**, $\frac{1}{2}$ **affiliated**
- For NACE 2016 Vancouver (I was already in Vancouver) and Global Petroleum Show, I split these costs $\frac{1}{2}$ **Direct** & $\frac{1}{2}$ **affiliated**

For a breakdown of Research & Conferences, see below:

<div> <div>\$420.67 (C3 Saskatoon January 26-30, 2015) + \$2112.96 (C3 Las Vegas Feb 4-7, 2015) + \$255.70 (C3 New Hampshire March 17-20, 2015) + \$129.48 (C3 Vancouver May 10 – 14, 2015) = \$2918.81 total</div> <div>Additional \$Chris\$ costs in 80 hour increments invoiced @ [only] \$40 / hour</div> <div>\$2000 FTI flights & hotel + \$4000 DC17 (Chris Wage, etc.)</div> </div>				
Research / Consulting / Con				
Research Consulting	\$ 1,700	\$ 2,300		\$ 6,000
SSPC Conference (silica, heavy metals, solvents, etc.)	\$ 1,415	\$ 2,100	\$ 257	\$514.76 NACE Convention, Calgary, Feb 25, 2016, ½ direct, ½ affiliated
Research Consulting	\$ 1,400	\$ 1,000	\$ 3,200	\$2178.90: Presentation @ SSPC Conference, January 2016, San Antonio: ½ Direct, ½ Affiliated
SSPC Conference (silica, heavy metals, solvents, etc.)	\$ 980	\$ 1,302	\$ 1,302	\$1709.08 NACE Convention Vancouver March 5-7, 2016 + \$895.36 Global Petroleum Show June 5 – 8, 2015, ½ direct, ½ affiliated

Financials - Receipts

All receipts are included in this report as appendices, segregated per subject matter:

- Expenses: Project Advisory Committee, Dave Martin, PAC Chair
- Expenses: Project Management – Author, Manager, & Administrator, Chris Hooter
- Expenses: Initial Purchases for Instruction, References, and Student Manuals
- Expenses: Medical Screening
- Expenses: Equipment
- Expenses: Classes
- Expenses: Knowledge, Transfer and Outreach
- Expenses: Research, Consulting and Conferences

Thoughts / Conclusion

You never know how these things are going to play out until you ‘dive in’. But honestly, I could not be happier with the direction this project went and more appreciative to **WCB** for making this all possible. While \$70,000 didn’t nearly cover the costs for this project, your \$grant\$ kept me “on-course”. *The reporting process kept us focused on the original goals, as we would have certainly gotten side-tracked w/o that external ‘discipline’ to keep us fixated.* Furthermore, this course / project has ‘taken root’ as a standard offering by this Hall, and [again] your grant monies were essential to that effort.

Going forward, this course will be offered as envisioned to Apprentices – a course in and of itself, worthy of the attention it deserves. To seasoned tradesmen, it is probably unrealistic, long term, to expect employers to release workers all day for a not-really-required respirator course. But coupled w/ WHMIS - and the GHS changes to WHMIS – there are great training windows to provide this information, as this material is hand-in-glove with WHMIS themes. This approach has allowed me to train tradesmen in respirators that I would otherwise not have had an opportunity. Most likely, this is the long-term approach for experienced workers. Not that they already know this material – they do not! But, combining this with WHMIS is the most effective way to get the information out there.

On behalf of **IUPAT Local 739 & District Council 17**, I again express our appreciation for your time, energy, and financial dedication to this project. Together, let’s continue to *raise the bar* for workers in Manitoba and the Canadian Prairies more generally!

Regards,



Chris Hooter

Director of Training

International Union of Painters and Allied Trades, District Council 17