

PROPOSAL

Project ID: 29468

Project Name: Protectowire System Replacement

Americold –	
T.	X

Date: 8/30/2018

Proposed Equipment / Services

proposes the following budget to furnish and install the equipment required to replace the Protectowire Detection System. The design shall be a direct replacement of the existing system with the exception of the cable in the racks. The cable within the racks will be installed differently than before. FM Global standards do not pertain to this project, therefore, we will utilize UL listed spacing on the Protectowire cable. This spacing allows us to install two levels of cable within each rack as is existing currently. We will install the cable in the flue space only. The cable will be attached to the rack framework with special retaining clips and fasteners. This method of installation will ensure that the cable will stay protected and free from damage cause by the pallets. All system components including conduit and wiring shall be replaced. Once the installation begins, we will need to have at least two complete rows of racks cleared of product on a daily basis in order to maintain efficiency and maximize downtime. The product needs to be removed only from the two levels where the existing sprinkler mains are located. Once rack work is complete, work on the ceiling will begin. Total price includes labor, materials, equipment, and applicable sales tax.

Sequence of work:

- 1. Install new control units
- 2. Replace conduit and wiring to a particular zone prior to new cable installation
- 3. Install new Protectowire in at least two complete racks per day. The existing cable shall be removed prior to moving to the next set of racks.
- 4. The system shall be deactivated and reactivated within the respective zone on a daily basis
- 5. Replace roof conduit and wiring to a particular zone prior to a new cable installation.
- 6. Install new cable on existing sprinkler piping in a particular zone.
- 7. Once new cable is complete in a particular zone, the existing cable shall be removed.

Equipment to be installed:

- Four (4) conventional zone Protectowire control units complete with batteries
- 51,000 feet of 155 degree Protectowire detection cable
- 240 moisture proof junction boxes complete with terminal strip
- 48 strain relief connectors
- 4 rolls of sealant tape
- 4 rolls of 33+ tape
- 100 splice connectors
- 13,000 double loop cable straps
- 6,500 rack mount cable clamps
- 8,600 feet 3/4th inch conduit
- 860 couplings
- 120 connectors
- 60 4" square boxes complete with cover
- 200 feet of 1/2in sealtite flexible conduit
- 16,000 feet 2-conductor #16 FPLP cable

Exclusions:

- AC Power to the control units (existing)
- Remote signal wiring to the building fire alarm system (existing)
- Patching and painting
- Overtime or weekend labor unless mutually agreed upon.

Total after all optional deductions:	\$460,505.00
If all <u>CEILING LEVEL</u> Protectowire is able to be reused, deduct:	(\$167,070.00)
If all existing conduit and wiring is able to be reused, deduct:	(\$44,440.00)
If all existing Protectowire control units are able to be reused, deduct:	(\$12,850.00)
Total	\$684,865.00



PROPOSAL

Project ID: 30981 Project Name: Fire Alarm Replacement

Americold –	
	l
ТХ	

Date: 8/30/2018

Proposed Equipment / Services

proposes the following budget for the replacement of the fire alarm system at the Americold – facility. This proposal is in supplement to proposal 29468 for the replacement of the Protectowire system. The design shall be a direct replacement for the existing system. The system to be installed is manufactured by Fire Control Instruments (FCI). Because we will be utilizing the existing conduit as much as possible, the owner may need to hire a fire watch during the times that the system will be out of service. This will be kept to a minimum by replacing the system in sections. Total price includes materials, equipment, labor, and tax.

- Sequence of work
 - Remove and replace control unit. The new control unit will be placed on a temporary stand until the existing is ready to be removed permanently.
 - Install jumper circuits to bypass sections in order to install on the new control system.
 - Replace devices in each section as it is worked.
 - Replace cable as required.
 - The system shall be deactivated and reactivated as required on a daily basis.
 - Engineered drawings shall be submitted to the city for approval.
 - Once the installation is complete, the system shall be tested with the city.
- Included equipment
 - o (1) analog addressable control unit, complete with batteries
 - (1) radio communicator complete with batteries
 - o (13) aux power supplies complete with batteries
 - o (2) remote annunciators
 - o (21) smoke detectors
 - o (7) duct mounted smoke detectors complete with sampling tubes
 - o (32) addressable manual pull stations
 - (99) addressable monitor modules
 - o (16) addressable relay modules

- o (13) Strobes
- o (73) weatherproof horn/strobes
- (104) weatherproof strobes
- o (26,000) feet of fire alarm cable
- Excluded
 - AC power to the control unit (existing)
 - Patching and painting
 - Overtime or weekend work

Total:	257,120.00
If all existing notification appliance circuit power panels are able to be reused, deduct:	(\$7,230.00)
If all existing audio/visual devices, including wiring are able to be reused, deduct:	(\$75,310.00)

Total including all optional deductions: \$174,580.00



Budget Proposal

Proposal Date:	10/25/18	Project Name:	Americold
Submitted To:	Americold	Project Address:	
Street Address:		Unit, Floor, Bldg. #:	
City, State, Zip	TX	Project City, State, Zip:	TX
Attention:		E-mail Address:	
Telephone:		Fax:	

We hereby submit specification and estimates for :

Budget price for the necessary fire sprinkler work to remove the existing piping, thaw out the ice and reinstall the piping with new couplings and heads as needed for overhead systems 2,7,14 and rack systems 2,4,5,7,10 and 14. Our price includes all labor, material and lift rental.

Labor is figured for normal working hours (Mon- Fri. 7:00-3:30pm)

Scope of work: Remove all piping with ice, thaw out and let dry, re-install with new grooved couplings as needed and fire sprinkler heads.

Replace broken blocking valve on system 14 overhead and rack system.

Set up systems and put back in service for normal use.

Replacement of the Pre-Action Valves.

Owners Responsibilities

Owner/Occupant to notify 3rd party monitoring and disable alarms prior to start of work.
Owner/Occupant to protect or prepare all work areas.
Owner/Occupant to provide access to all areas pertaining to work.

Specifically Excluded from Proposal

Any electrical work, remodel taxes, removal and/or replacement of ceiling tiles, any raising/lowering/relocating of existing pipe for other trades, bonds, adequate water supply, painting, system monitoring, drain down fees, demo due to other trades, flex heads, center of tile, fire alarms, integrity of existing sprinkler system, protection for eaves/overhangs, combustible areas, concealed sprinklers, fire caulking, hydraulic calculations, permit, shop drawings, fire watch, any work not specified in scope of work above.

We Propose hereby to furnish material and labor - Complete in accordance with above specifications, for the sum of			
\$563,724.00	\$563,724.00 Five Hundred Sixty- Three Thousand Seven Hundred Twenty- Four Dollars		
plus applicable taxes			
If nontaxable please provide tax exempt certificate with signed proposal			
NOTE This proposal may be withdrawn by American Fire Protection Group, Inc. if not accepted within 30 days of the proposal date.			

PAYMENT TO BE MADE MONTHLY as the work progresses to the value of One Hundred Percent (100%) of all work complete and material on job site. The entire amount must be paid in full, within thirty (30) days after completion of work. All material guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders and will become an extra charge over and above the estimate. All agreements are contingent upon accidents or delays beyond our control. Owner is required to carry fire, tornado and other necessary insurance. Our Workers are fully covered by Workmen's Compensation Insurance.

Proposal Submitted By:

******PROPOSAL/ TERMS & CONDITIONS ACCEPTANCE******

Printed Name (Required)

E-mail Address (Required)

Signature (Required)

Date (Required)

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NOTE This proposal may be withdrawn by

TERMS AND CONDITIONS

The Work Authorization, together with these Terms and Conditions, constitute the entire agreement ("Agreement") of the parties.

- 1. This Agreement is for work performed on this Work Authorization only. If Customer wants (The Company) to make any additional repairs, alterations or replacements as a result of the work performed, the Company will do so for additional compensation to be agreed upon in writing by the parties.
- 2. The Company does not know and does not represent whether the current fire protection system on the property of Customer ("Property") was originally designed and installed in such a way that the system will perform as originally intended or is suitable and sufficient for its intended purpose given the way in which the Property has been or will be used. In other words, the Property has been or may be used in ways such that the configuration of partition walls, the location of and types of materials (including the presence of hazardous materials) and other conditions of the Property's use are such that the fire protection system is inadequate, insufficient or unsuitable for the Property. THIS AGREEMENT IS NOT A GUARANTEE OR WARRANTY THAT THE SYSTEM WILL IN ALL CASES (A) PROVIDE THE LEVEL OF PROTECTION FOR WHICH IT WAS ORIGINALLY INTENDED, (B) IS FREE OF ALL DEFECTS AND DEFICIENCIES, (C) AND IS IN COMPLIANCE WITH ALL APPLICABLE CODES. Customer agrees that it has not retained Company to make these assessments unless otherwise specifically indicated.
 - 3. The Company will be permitted, at all reasonable times, to enter the Property to conduct the work as outlined in this Agreement.
- 4. TO THE FULLEST EXTENT PERMITTED BY LAW, CUSTOMER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS COMPANY AND ITS AFFILIATES, AGENTS AND EMPLOYEES FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES, LOSSES, INJURIES OR LIABILITIES, OF ANY KIND, RESULTING FROM OR IN ANY MANNER RELATED TO OR CONNECTED WITH THE WORK PERFORMED BY THE COMPANY UNDER THIS AGREEMENT (WHETHER ARISING DURING OR FOLLOWING THE PERFORMANCE OF THE WORK), AND ALL ACTIVITIES RELATED THERETO, OR OCCURRING OR RESULTING FROM THE USE BY THE COMPANY OR ITS AGENTS OR EMPLOYEES OF MATERIALS, EQUIPMENT, INSTRUMENTALITIES OR OTHER PROPERTY, WHETHER THE SAME BE OWNED BY THE CUSTOMER, THE COMPANY OR THIRD PARTIES, EXCEPT FOR AND TO THE EXTENT OF CLAIMS AND LIABILITIES ARISING SOLEY OUT OF THE COMPANY'S NEGLIGENT ACTS OR OMISSIONS BUT SUBJECT TO THE LIMITATION IN PARAGRAPH 5. a. BELOW. CUSTOMER SHALL INDEMNIFY COMPANY FOR COMPANY'S LEGAL FEES, COSTS AND DISBURSEMENTS PAID OR INCURRED TO ENFORCE THE PROVISIONS OF THIS PARAGRAPH. CUSTOMER FURTHER AGREES TO OBTAIN MAINTAIN AND PAY FOR SUCH INSURANCE COVERAGE AND ENDORSEMENTS, INCLUDING COMPLETED OPERATIONS COVERAGE, AS WILL INSURE THE PROVISIONS OF THIS PARAGRAPH AND,UPON REQUEST, SHALL PROVIDE COMPANY WITH EVIDENCE THEREOF.
 - 5. IF THE ABOVE INDEMNIFICATION IS UNENFORCEABLE IN THE STATE IN WHICH THE WORK IS PERFORMED, THEN THE FOLLOWING LIMITED LIABILITY LANGUAGE APPLIES:
 - a. CUSTOMER AGREES THAT THE LIABILITY OF COMPANY, IT'S OFFICERS, DIRECTORS, EMPLOYEES, PARENT COMPANY, SUBSIDIARIES, AFFILIATES, CONSULTANTS, SUBCONTRACTORS AND VENDORS TO CUSTOMERS AND OR OTHER OCCUPANTS OR VISITORS OF THE PROPERTY, ARISING OUT OF THE COMPANY'S NEGLIGENT ACTS OR OMISSIONS, SHALL BE LIMITED TO THE LESSER OF \$ 10,000.00 OR THE AMOUNT OF THE CONTRACT/PRICE OF WORK PERFORMED BY THE COMPANY. THIS LIMITATION OF LIABILITY SHALL APPLY TO ALL JUDGMENTS, CLAIMS, LIABILITY, COSTS, EXPENSES, LEGAL FEES AND ALL DAMAGES OR LOSSES OF ANY NATURE, SUSTAINED BY CUSTOMER, CONTRACTOR OR SUBCONTRACTOR, OR ANY OTHER PARTY CLAIMING BY OR THROUGH THEM. THIS LIMITATION DOES NOT APPLY TO CLAIMS OF INTENTIONAL, WILLFUL OR WANTON ACTS.
- 6. IT IS UNDERSTOOD AND AGREED BY THE CUSTOMER THAT THE COMPANY IS NOT AN INSURER AND THAT INSURANCE COVERAGE SHALL BE OBTAINED BY THE CUSTOMER AND THAT THE AMOUNTS PAYABLE TO THE COMPANY HEREUNDER ARE BASED UPON THE VALUE OF THE SERVICES TO BE RENDERED AND ARE UNRELATED TO THE VALUE OF THE CUSTOMER'S PROPERTY AND THE PROPERTY OF OTHERS LOCATED ON THE PREMISES. CUSTOMER AGREES TO LOOK EXCLUSIVELY TO THE CUSTOMER'S INSURANCE TO RECOVER FOR INJURY OR DAMAGE IN THE EVENT OF ANY LOSS OR INJURY AND THE CUSTOMER RELEASES AND WAIVES ALL RIGHT OF RECOVERY AGAINST COMPANY ARISING BY WAY OF SUBROGATION.
- 7. While the Company will make every reasonable effort to prevent the discharge of water into or onto areas of landscaping, decorative pavement, etc., it is the Customer's responsibility to provide sufficient and readily accessible means to accept the full flow of water that may be required by tests as determined by the type of inspection.
 - 8. This Agreement may not be assigned by Customer without the written consent of the Company.
 - 9. Neither party shall be liable to the other for indirect, incidental, consequential or punitive damages arising out of the work.
 - 10. If payment for work provided in this Agreement is not received by the Company within 30 days from Customer's receipt of an invoice for the work, Customer shall pay interest at the rate of 8% per annum on all past due sums, together with all costs of collection, including attorney's fees.
 - 11. This Agreement constitutes the entire agreement of the parties. If any provision hereof shall be invalid, the remaining provisions shall survive and be enforceable against the parties. The law of the state where the work is performed will govern. This Agreement supersedes all prior agreements. This Agreement may be modified only by a written instrument signed by both parties.

Bill to Name:	PO#
Address:	Accepted by:

Page 2 of 4

City, State and Zip Code: _____

Printed Name :_____

Break down per system.

Rack System 2	Total \$108,673.00		
	Material \$37,374.00	Heads \$18,924.00	Couplings \$18,450.00
	Labor \$71,299.00		
Rack System 4	Total \$71,120.00		
	Material \$24,426.00	Heads \$12,368.00	Couplings \$12,058.00
	Labor \$46,694.00		
Rack System 5	Total \$72,495.00		
	Material \$24,899.00	Heads \$12,607.00	Couplings \$12,292.00
	Labor \$47,596.00		
Rack System 7	Total \$64,104.00		
	Material \$22,006.00	Heads \$11,143.00	Couplings \$10,863.00
	Labor \$42,098.00		
Rack System 10	Total \$60,802.00		
	Material \$20,868.00	Heads \$10,566.00	Couplings \$10,302.00
	Labor \$39,934.00		
Rack System 14	Total \$104,545.00		
	Material \$35,951.00	Heads 18,203.00	Couplings \$17,748.00
	Labor \$68,594.00		

Overhead System 2	Total \$33,290.00		
	Material \$11,382.00	Heads \$2,160.00	Couplings \$ 9,223.00
	Labor \$21,908.00		
Overhead System 7	Total \$33,290.00		
	Material \$11,382.00	Heads \$ 2,160.00	Couplings \$9,223.00
	Labor \$21,908.00		
Overhead System 14	Total \$15,405.00		
	Material \$5,216.00	Heads \$990.00	Couplings \$4,226.00
	Labor \$10,189.00		

Optional price to air test piping @ 125 lbs before

installing the piping back in the cooler/ freezer

Add \$42,249.00 plus tax



January 23, 2019
Re: Americold
Texas

I am pleased to submit our proposal for the above referenced project.

Our proposal includes the following scope of work for the fire alarm system.

Fire Alarm Scope of Work

- Furnish and install Outdoor conduit around the sides and back of the facility.
- Include a lift for our scope.
- Furnish and install additional test boxes inside the freezer areas.

Our Proposal Does Not Include

- 120VAC power required for our system.
- Any electrical conduit or raceways that may be needed other than stub ups from panels, pull stations, and flex at all risers.
- Monitoring and phone lines.
- Builders risk insurance or bond.
- Any concrete cutting, trenching or underground conduit.
- Any painting, Patching, or ceiling tiles.
- Any additional devices that may be required by the AHJ or requested by the owner.
- Any labor or materials associated with the fire sprinkler systems other than the interfaces as described herein.
- Any labor or materials associated with any other building systems not specifically described herein.
- Smoke control system, full smoke coverage, exhaust fan, or fire smoke damper control.
- Audio-visual devices anywhere in the facility.

Clarifications

- Delays or additional mobilizations caused by owner or contractor will be charged additionally.
- Price is predicated on reasonable access, parking, and staging area for tools and materials in close proximity to work area.
- The quoted price is firm for *60 days. Our proposal is based on current market prices. We reserve the right to increase or decrease our price if market changes occur after *60 days.
- Proposal is based on all work being performed during normal work hours which are M-F, 7:00am until 4:00pm.
- Proposal is based on a non-voice system. If voice is required additional costs will be added.
- Construction schedule to be provided and agreed between parties.
- The work will be performed under the supervision of a NICET Level II in Alarm.
- Proper tax-exempt documents required or tax will be added at time of billing.
- Proposal is based on re-using the existing Power supplies, strobes horn strobes and associated wiring, raceways, and back boxes that can be utilized.



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We will perform the work as described for a cost of:

\$9,586.00

Nine Thousand Five Hundred Eighty-Six Dollars

Taxes = \$791.00

Total lump sum = \$10,377.00

Our terms are Net 30 days (W.A.C.)

If you have any questions, please call me at

If the job requires additional expenses we will not exceed the above estimate without (1) notifying you of the progress made and what remains to complete the work, and (2) your prior consent. All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alterations or deviations from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. The owner is to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's compensation insurance. A list of exclusions follows; painting & patching; overtime or after-hours work; a/c power or electrical interfaces; any required shutdown or interface connections; non-productive or customer initiated hold-ups; repairs or replacement parts caused by other trades, actions beyond our control or component failure on existing systems. The customer is to provide and maintain phone lines for all communicators. This proposal may be withdrawn by us if not accepted within Sixty (60) days.

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature: ____

_____ Date of Acceptance: ______ P.O.#____

.#_____



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SUBCONTRACTORS AND VENDORS TO CUSTOMERS AND OR OTHER OCCUPANTS OR VISITORS OF THE PROPERTY, ARISING OUT OF THE COMPANY'S NEGLIGENT ACTS OR OMISSIONS, SHALL BE LIMITED TO THE LESSER OF \$ 10,000.00 OR THE AMOUNT OF THE CONTRACT/PRICE OF WORK PERFORMED BY THE COMPANY. THIS LIMITATION OF LIABILITY SHALL APPLY TO ALL JUDGMENTS, CLAIMS, LIABILITY, COSTS, EXPENSES, LEGAL FEES AND ALL DAMAGES OR LOSSES OF ANY NATURE, SUSTAINED BY CUSTOMER, CONTRACTOR OR SUBCONTRACTOR, OR ANY OTHER PARTY CLAIMING BY OR THROUGH THEM. THIS LIMITATION DOES NOT APPLY TO CLAIMS OF INTENTIONAL, WILLFUL OR WANTON ACTS.

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7. While the Company will make every reasonable effort to prevent the discharge of water into or onto areas of landscaping, decorative pavement, etc., it is the Customer's responsibility to provide sufficient and readily accessible means to accept the full flow of water that may be required by tests as determined by the type of inspection. 8. This Agreement may not be assigned by Customer without the written consent of the Company.

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10. If payment for work provided in this Agreement is not received by the Company within 30 days from Customer's receipt of an invoice for the work, Customer shall pay interest at the rate of 8% per annum on all past due sums, together with all costs of collection, including attorney's fees.

11. This Agreement constitutes the entire agreement of the parties. If any provision hereof shall be invalid, the remaining provisions shall survive and be enforceable against the parties. The law of the state where the work is performed will govern. This Agreement supersedes all prior agreements. This Agreement may be modified only by a written instrument signed by both parties.

ASBESTOS INSPECTION REPORT

for

AMERICOLD 240 Chester Street St. Paul, Minnesota 55107



prepared by:



Inspection Dates: September 11-12, 2012

RES Project #12237

Steven T. Charron Minnesota Certified Inspector Certification #: AI12082 Amy J. Williams, President EPA Accredited Inspector Certificate #: BIR/0189

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- SECTION 2: Summary of Findings
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- SECTION 4: Laboratory Results and Credentials
- SECTION 5: Inspector's Credentials

INTRODUCTION

I. SCOPE

Reliable Environmental Solutions, Inc. (RES) performed an asbestos inspection of the Americold facility located at 240 Chester Street, St. Paul, Minnesota on September 11-12, 2012. The purpose of the inspection was to identify asbestos containing materials located at the above referenced facility.

II. INSPECTION PROTOCOL

The inspection was performed in accordance with the Asbestos Hazard Emergency Response Act (AHERA), the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Occupational Safety and Health Administration (OSHA) regulations. Personnel performing the inspection are accredited by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). Credentials of the on-site licensed inspector are located in Section 5 of this report.

The intent of the inspection is to survey all areas; however, inaccessible areas that would require destructive methods to uncover suspect materials, such as pipe chases and EPDM (rubber) roofing materials, may not have been surveyed. Any suspect material discovered during a renovation or demolition that has not been identified in this report must be sampled.

III. SAMPLING PROTOCOL

Bulk samples of materials suspected of containing asbestos were collected in a random manner. The Summary of Findings located in Section 2 of this report identifies these suspect materials and the number of samples collected for each suspect material. Materials which tested positive or were assumed to be positive for asbestos are highlighted in yellow.

Between three and seven samples were collected from each homogeneous material. A homogeneous material is a material that is uniform in color and texture and installed at the same time. The number of samples collected is dictated by AHERA based on the type of material sampled. Materials are grouped in one of three categories including Surfacing, Thermal and Miscellaneous. State of the art practices require three negative results to state that a material is negative; whereas, one positive result will result in the entire homogeneous area being identified as positive.

IV. ANALYSIS PROTOCOL

Samples were analyzed by McCall and Spero, Inc. of Louisville, Kentucky. McCall and Spero, Inc. is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Credentials for the laboratory are located in Section 4 of this report. Samples were analyzed by Polarized Light Microscopy (PLM) according to AHERA protocol.

Friable materials found to contain less than ten percent asbestos are recommended to be point counted according to the NESHAP regulations. The Transmission Electron Microscopy (TEM) method has proven to be a more reliable method for a similar cost; therefore, RES recommends utilizing TEM in lieu of point counting if additional testing is performed.

Certain non-friable materials are difficult to properly ascertain the asbestos content with the PLM method; therefore, in some circumstances the laboratory will recommend TEM analysis to determine if these materials are actually negative. Some state regulatory agencies will use TEM analysis to determine if a material contains asbestos; therefore, the laboratory has recommended that the non-friable materials identified with double asterisks (**) be further analyzed by TEM.

V. SUMMARY

The Americold facility located at 240 Chester Street, St. Paul, Minnesota was inspected for asbestos containing materials. The materials found to contain asbestos are listed below:

SCA – Sprayed-on acoustical ceiling texture, located on the first floor of the Summit Foods/Madison Foods first floor offices and entrance contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This surfacing material was non-friable and in good condition at the time of sampling.

TTA – Joint compound on paper wrap over fiberglass tank insulation, located in the south engine room contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This thermal material was non-friable and in fair condition at the time of sampling.

 $MCB - 2' \times 2'$ ceiling tile, fissures and pinholes, located in the north dock office contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was friable and in good condition at the time of sampling.

MFA – 12" X 12" floor tile and mastic, white with gray specks, located on the first floor of the former Baldinger's Bakery offices contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MFC – 9" X 9" floor tile and mastic, white with gray streaks, located in the Summit Foods/Madison Foods first floor offices contains 2-5% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in poor condition at the time of sampling. The inspector observed loose and missing tiles and areas of exposed floor tile mastic.

MFD – Linoleum, gray 12" X 12" square pattern, located in the kitchen on the second floor of the Summit Foods/Madison Foods offices contains 2% chrysotile asbestos as analyzed by Polarized Light Microscopy. The asbestos was found in the mastic beneath the linoleum. This miscellaneous material was non-friable and in good condition at the time of sampling.

MFE – 9" X 9" floor tile and mastic, tan (beneath carpet), located in the second floor center offices contains 3-5% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MFF – 12" X 12" floor tile and mastic, white with gray streaks, located in the north Schwans storeroom of the second floor center offices contains 2-3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MFG – 12" X 12" floor tile and mastic, white with tan specks, located at the north end of the second floor center offices and in the south offices area contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MML – Carpet mastic, located in the second floor center offices and south offices contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MMS – Glue pucks, black, located on paneled walls in the second floor center offices north hallway contains 5% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in fair condition at the time of sampling.

MMZ – Exterior caulk, tan, located around windows and doors of the center offices contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MMAE – Window glazing, black, located around windows in the second floor of the former Baldinger's Bakery offices contains 5% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

MXA – Drywall and compound, located throughout the facility contains 3% chrysotile asbestos as analyzed by Polarized Light Microscopy. This miscellaneous material was non-friable and in good condition at the time of sampling.

SFA – Concrete block insulation (vermiculite), located in the north dock area was sampled by RES and tested negative for asbestos content, however the Minnesota Department of Health and the Minnesota Pollution Control Agency strongly recommends assuming vermiculite insulation contains asbestos. There is no dependable way of determining the asbestos content of vermiculite. This thermal material was friable and was in poor condition at the time of sampling.

MMK – Fire doors, located throughout the facility were assumed to be asbestos containing. Sampling may damage fire doors and eliminate fire rating. This miscellaneous material was non-friable and in good condition at the time of sampling.

SUMMARY OF FINDINGS BY PLM ANALYSIS

НОМО		ACM			
AREAS	DESCRIPTION	ASSUMED	POS	NEG	NOTES
<mark>SCA</mark>	SPRAYED-ON ACOUSTICAL CEILING TEXTURE		<mark>3</mark>		
TTA	JOINT COMPOUND ON PAPER WRAP OVER FIBERGLASS TANK INSULATION		<mark>3</mark>		
MCB	2' X 2' CEILING TILE, FISSURES AND PINHOLES		<mark>3</mark>		
<mark>MFA</mark>	12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY SPECKS		<mark>3</mark>		
MFC	9″ X 9″ FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS		<mark>3</mark>		
MFD	LINOLEUM, GRAY 12" X 12" SQUARE PATTERN		<mark>3</mark>		
MFE	9″ X 9″ FLOOR TILE AND MASTIC, TAN (BENEATH CARPET)		<mark>3</mark>		
MFF	12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS		<mark>3</mark>		
<mark>MFG</mark>	12" X 12" FLOOR TILE AND MASTIC, WHITE WITH TAN SPECKS		<mark>3</mark>	1	
MML	CARPET MASTIC		1	<mark>3**</mark>	
MMS	GLUE PUCKS, BLACK (ON PANELED WALLS)		<mark>3</mark>		
MMZ	EXTERIOR CAULK, TAN (ON WINDOWS)		<mark>2</mark>	<mark>1**</mark>	
MMAE	WINDOW GLAZING, BLACK		<mark>3</mark>		
MXA	DRYWALL AND COMPOUND		<mark>3</mark>		
<mark>SFA</mark>	CONCRETE BLOCK INSULATION	<mark>X*</mark>		<mark>3</mark>	VERMICULITE INSULATION

*The Minnesota Department of Health and Minnesota Pollution Control Agency strongly recommends assuming that vermiculite insulation contains asbestos. There is no dependable way of determining the asbestos content of vermiculite.

**EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by Polarized Light Microscopy (PLM) that fall into one of five dominantly non-friable categories by reanalyzed by an additional method, such as Transmission Electron Microscopy (TEM) (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/R-93/116).

SUMMARY OF FINDINGS BY PLM ANALYSIS

НОМО	SUMIMARY OF FINDINGS BY	ACM			
AREAS	DESCRIPTION	ASSUMED	POS	NEG	NOTES
<mark>MMK</mark>	FIRE DOORS	X			
TJA	PIPE JOINT INSULATION ON FIBERGLASS LINES			3	
MCA	2' X 4' CEILING TILE, SMOOTH PATTERN			3	
MCC	2' X 2' CEILING TILE, DEEP FISSURES AND PINHOLES			3	
MCD	2' X 4' CEILING TILE, TEXTURED PATTERN			3	
MCE	1' X 1' CEILING TILE, SPLINED, FISSURES AND PINHOLES			3	
MCF	2' X 4' CEILING TILE, LONG FISSURES AND PINHOLES			3	
MCG	2' X 4' CEILING TILE, SMALL FISSURES AND PINHOLES			3	
MCH	2' X 4' CEILING TILE, VARIOUS PINHOLES			3	
MCJ	2' X 4' CEILING TILE, LARGE TEXTURED PATTERN			3	
МСК	2' X 2' CEILING TILE, FISSURES AND PINHOLES (RECESSED)			3	
MCL	2' X 2' CEILING TILE, TEXTURED (RECESSED)			3	
MCM	2' X 4' CEILING TILE, FISSURES AND PINHOLES			3	
MFB	CERAMIC FLOOR TILE, BROWN BRICK PATTERN (MORTAR BED)			3**	
MFH	12" X 12" FLOOR TILE AND MASTIC, GRAY WITH BLACK AND WHITE SPECKS			3**	
MFI	12" X 12" FLOOR TILE AND MASTIC, GRAY WITH DARK GRAY STREAKS			3**	

^{**}EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by Polarized Light Microscopy (PLM) that fall into one of five dominantly non-friable categories by reanalyzed by an additional method, such as Transmission Electron Microscopy (TEM) (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/R-93/116)

SUMMARY OF FINDINGS BY PLM ANALYSIS

HOMO AREAS	DESCRIPTION	ACM			
		ASSUMED	POS	NEG	NOTES
MMA	CONCRETE FLOOR PATCH, GRAY			3**	
MMB	WALL ADHESIVE, TAN			3**	
MMC	INTERIOR CAULK, WHITE (ON DOORS)			3**	
MMD	CONCRETE FLOOR PATCH, RED			3**	
MME	WALLBOARD (OVER FOAM INSULATION)			3**	
MMF	VINYL BASE MASTIC			3**	
MMG	1" X 1" CERAMIC FLOOR TILE, RED (MORTAR BED)			3**	
MMH	4" X 4" CERAMIC WALL TILE, PINK (ADHESIVE)			3**	
MMI	1" X 1" CERAMIC FLOOR TILE, GREEN (MORTAR BED)			3**	
MMJ	4" X 4" CERAMIC WALL TILE, GREEN (ADHESIVE)			3**	
MMN	SINK COATING, WHITE			3**	
MMO	EXTERIOR CAULK, BLACK (ON NORTH ROOFTOP CONDENSERS)			3**	
MMP	EXTERIOR CAULK, BLACK (ON ROOFTOP FAN UNITS)			3**	
MMQ	EXTERIOR CAULK, WHITE (ON METAL WALLS)			3**	
MMR	EXTERIOR CAULK, TAN (ON BLOCK WALLS)			3**	
MMT	CONCRETE FLOOR PATCH, GRAY			3**	

^{**}EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by Polarized Light Microscopy (PLM) that fall into one of five dominantly non-friable categories by reanalyzed by an additional method, such as Transmission Electron Microscopy (TEM) (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/R-93/116).

SUMMARY OF FINDINGS BY PLM ANALYSIS

НОМО	DESCRIPTION	ACM			
AREAS		ASSUMED	POS	NEG	NOTES
MMU	EXTERIOR CAULK, GRAY (ON GLYCOL LINES)			3**	
MMV	INTERIOR CAULK, GRAY (ON DOORS)			3**	
MMW	12" X 12" CERAMIC FLOOR TILE, GRAY (MORTAR BED)			3**	
MMX	1" X 1" CERAMIC FLOOR TILE, YELLOW (MORTAR BED)			3**	
MMY	4" X 4" CERAMIC WALL TILE, YELLOW (ADHESIVE)			3**	
MMAA	EXPANSION JOINTS, GRAY (ON CONCRETE WALL PANELS)			3**	
MMAB	EXTERIOR CAULK, TAN (ON WINDOWS)			3**	
MMAC	EXTERIOR CAULK, WHITE (ON SOUTH ROOFTOP CONDENSERS)			3**	
MMAD	EXPANSION JOINTS, WHITE (ON BRICK WALLS)			3**	
MMAF	STAIR TREAD MASTIC			3**	
MXB	DRYWALL (NO COMPOUND)			3	

^{**}EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by Polarized Light Microscopy (PLM) that fall into one of five dominantly non-friable categories by reanalyzed by an additional method, such as Transmission Electron Microscopy (TEM) (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/R-93/116).



Americold 022

FACILITY: Americold ST, Pavl, MN DATE: 9/12/12 SAMPLE #: SCA-1 FACILITY: Americold ST. Pavl, MN 9/12/12 DATE: SAMPLE #: SCA-2 FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: SCA-3

SCA-1

SPRAYED-ON ACOUSTICAL CEILING TEXTURE

SCA-2

SPRAYED-ON ACOUSTICAL CEILING TEXTURE

SCA-3

SPRAYED-ON ACOUSTICAL CEILING TEXTURE



Americold 024





FACILITY: Americuld ST. Paul, mu DATE: 9/12/12 SAMPLE #: TTA-3 TTA-1

JOINT COMPOUND ON PAPER WRAP OVER FIBERGLASS TANK INSULATION

TTA-2

JOINT COMPOUND ON PAPER WRAP OVER FIBERGLASS TANK INSULATION



JOINT COMPOUND ON PAPER WRAP OVER FIBERGLASS TANK INSULATION



Americold 026



FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MCB-1 FACILITY: Americold ST. Paul, MN 9/12/12 DATE: SAMPLE #: MCB-2 FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MCB-3

MCB-1

2' X 2' CEILING TILE, FISSURES AND PINHOLES

MCB-2

2' X 2' CEILING TILE, FISSURES AND PINHOLES

MCB-3

2' X 2' CEILING TILE, FISSURES AND PINHOLES



Americold 029



Americold 030



MFA-1

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY SPECKS



MFA-2

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY SPECKS

MFA–3

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY SPECKS

PHOTOGRAPH NOT AVAILABLE



FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MFC-1



FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MFC-3

MFC-1

9" X 9" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS

MFC-2

9" X 9" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS

MFC-3

9" X 9" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS



Americold 034







MFD-1

LINOLEUM, GRAY 12" X 12" SQUARE PATTERN

MFD-2

LINOLEUM, GRAY 12" X 12" SQUARE PATTERN

MFD-3

LINOLEUM, GRAY 12" X 12" SQUARE PATTERN



Americold 036




FACILITY: Americald St. Had, mit DATE: 9[12]12 SAMPLE #: MTE-3

MFE-1

9" X 9" FLOOR TILE AND MASTIC, TAN (BENEATH CARPET)

MFE-2

9" X 9" FLOOR TILE AND MASTIC, TAN (BENEATH CARPET)

MFE-3

9" X 9" FLOOR TILE AND MASTIC, TAN (BENEATH CARPET)







12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS



MFF-2

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS



MFF-3

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH GRAY STREAKS



Americold 040





MFG-1

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH TAN SPECKS

MFG-2

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH TAN SPECKS





MFG-3

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH TAN SPECKS



MFG-4

12" X 12" FLOOR TILE AND MASTIC, WHITE WITH TAN SPECKS



Americold 044



Americold 045



Americold 046





Americold 048



MML-1 CARPET MASTIC

MML-2 CARPET MASTIC

MML-3 CARPET MASTIC



MML-4

CARPET MASTIC







MMS-1

GLUE PUCKS, BLACK (ON PANELED WALLS)

MMS-2

GLUE PUCKS, BLACK (ON PANELED WALLS)



MMS-3

GLUE PUCKS, BLACK (ON PANELED WALLS)



Americold 053



MMZ-1

EXTERIOR CAULK, TAN (ON WINDOWS)

MMZ-2

EXTERIOR CAULK, TAN (ON WINDOWS)

MMZ-3

EXTERIOR CAULK, TAN (ON WINDOWS)





MMAE-1 WINDOW GLAZING, BLACK

MMAE-2 WINDOW GLAZING, BLACK



9/12/12

SAMPLE #: MMAE-2

DATE:

MMAE-3 WINDOW GLAZING, BLACK



Americold 057



Americold 058











FACILITY: Americold ST, Paul, MN DATE: 9/12/12

SAMPLE #: MXA-2

MXA–1 DRYWALL AND COMPOUND

MXA-2 DRYWALL AND COMPOUND



MXA–3 DRYWALL AND COMPOUND



Americold 064







SFA-1

CONCRETE BLOCK INSULATION

SFA-2 CONCRETE BLOCK INSULATION

SFA-3 CONCRETE BLOCK INSULATION



Americold 066



Americold 067



Americold 068



Americold 069



Americold 070



MMK-0 FIRE DOORS



Americold 072


Americold 073



Americold 074

FACILITY: Americad ST. Pavl, MN DATE: 9/12/12 TJA-1 SAMPLE #:



TJA–1

PIPE JOINT INSULATION ON FIBERGLASS LINES

TJA-2

PIPE JOINT INSULATION ON FIBERGLASS LINES



TJA-3

PIPE JOINT INSULATION ON FIBERGLASS LINES



Americold 076



MCA-1

2' X 4' CEILING TILE, SMOOTH PATTERN

MCA-2

2' X 4' CEILING TILE, SMOOTH PATTERN

PHOTOGRAPH NOT AVAILABLE

MCA-3

2' X 4' CEILING TILE, SMOOTH PATTERN



Americold 078



FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MCC-2

FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MCC-3

MCC-1

2' X 2' CEILING TILE, DEEP FISSURES AND PINHOLES

MCC-2

2' X 2' CEILING TILE, DEEP FISSURES AND PINHOLES

MCC-3

2' X 2' CEILING TILE, DEEP FISSURES AND PINHOLES



Americold 080



FACILITY: Americold ST. Paul, MW DATE: 9/12/12 SAMPLE #: MCD -1





MCD-1

2' X 4' CEILING TILE, TEXTURED PATTERN

MCD-2

2' X 4' CEILING TILE, TEXTURED PATTERN

MCD-3

2' X 4' CEILING TILE, TEXTURED PATTERN



Americold 083

FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SK .PLE #: MCE-1 FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MCE-2 FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MCE-3

MCE-1

1' X 1' CEILING TILE, SPLINED, FISSURES AND PINHOLES

MCE-2

1' X 1' CEILING TILE, SPLINED, FISSURES AND PINHOLES

MCE-3

1' X 1' CEILING TILE, SPLINED, FISSURES AND PINHOLES



Americold 085





MCF-1

2' X 4' CEILING TILE, LONG FISSURES AND PINHOLES

MCF-2

PHOTOGRAPH NOT AVAILABLE

2' X 4' CEILING TILE, LONG FISSURES AND PINHOLES



MCF-3

2' X 4' CEILING TILE, LONG FISSURES AND PINHOLES



Americold 088



Americold 089





MCG-1

2' X 4' CEILING TILE, SMALL FISSURES AND PINHOLES

MCG-2

2' X 4' CEILING TILE, SMALL FISSURES AND PINHOLES



MCG-3

2' X 4' CEILING TILE, SMALL FISSURES AND PINHOLES





Americold 092





Americold 094







MCH-1

2' X 4' CEILING TILE, VARIOUS PINHOLES

MCH-2

2' X 4' CEILING TILE, VARIOUS PINHOLES



2' X 4' CEILING TILE, VARIOUS PINHOLES



Americold 096





MCJ-1

2' X 4' CEILING TILE, LARGE TEXTURED PATTERN



MCJ-2

2' X 4' CEILING TILE, LARGE TEXTURED PATTERN

MCJ-3

2' X 4' CEILING TILE, LARGE TEXTURED PATTERN

PHOTOGRAPH NOT AVAILABLE



Americold 099



FACILITY: A mericold Sr. Pa.; min DATE: AILLA SAMPLE #: MCK-2 FACILITY: A mericold Sr. Pa.; min

DATE:

SAMPLE #: MCK-3

MCK-1

2' X 2' CEILING TILE, FISSURES AND PINHOLES (RECESSED)

MCK-2

2' X 2' CEILING TILE, FISSURES AND PINHOLES (RECESSED)

MCK-3

2' X 2' CEILING TILE, FISSURES AND PINHOLES (RECESSED)



Americold 101



Americold 102



MCL-1

2' X 2' CEILING TILE, TEXTURED (RECESSED)

MCL-2

2' X 2' CEILING TILE, TEXTURED (RECESSED)

MCL-3

2' X 2' CEILING TILE, TEXTURED (RECESSED)





FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MCM-2



MCM-1

2' X 4' CEILING TILE, FISSURES AND PINHOLES

MCM-2

2' X 4' CEILING TILE, FISSURES AND PINHOLES

MCM-3

2' X 4' CEILING TILE, FISSURES AND PINHOLES



Americold 106



FACILITY: Americold ST. Pavl, MN 9/12/12 SAMPLE #: MFB-1



MFB-1

CERAMIC FLOOR TILE, BROWN BRICK PATTERN (MORTAR BED)

MFB-2

CERAMIC FLOOR TILE, BROWN BRICK PATTERN (MORTAR BED)

FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MFB-3

MFB-3

CERAMIC FLOOR TILE, BROWN BRICK PATTERN (MORTAR BED)


Americold 109

Americold 110

FACILITY: Americald ST. Paul, MN DATE: SAMPLE #:

FACILITY: Americold ST. Paul, MN 9/12/12 DATE: SAMPLE #: MFH-2

FACILITY: A Mericuld ST. Paul, MN 9/12/12 DATE: SAMPLE #: MFH-1

MFH–2

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH BLACK AND WHITE SPECKS

MFH–3

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH BLACK AND WHITE SPECKS

MFH-1

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH BLACK AND WHITE SPECKS



Americold 111

FACILITY: Americald ST. Paul, MN DATE: 9/12/12 SAMPLE #: MFI-1

FACILITY: Americold St. Paul, MN DATE: 9/12/12 SAMPLE #: WFI-2

FACILITY: A mericold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MFI-3

MFI-1

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH DARK GRAY STREAKS

MFI-2

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH DARK GRAY STREAKS

MFI-3

12" X 12" FLOOR TILE AND MASTIC, GRAY WITH DARK GRAY STREAKS



Americold 113







MMA-1

CONCRETE FLOOR PATCH, GRAY

MMA–2 CONCRETE FLOOR PATCH, GRAY

MMA–3 CONCRETE FLOOR PATCH, GRAY



Americold 115

FACILITY: Americold ST. Paul, MN 9/12/12 DATE: SAMPLE #: MMB-1 FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MMB-2 FACILITY: Americold ST. Pavl, MN DATE: 512/12 SAMPLE #: MMB-3

MMB-1

WALL ADHESIVE, TAN

MMB-2 WALL ADHESIVE, TAN

MMB-3 WALL ADHESIVE, TAN



Americold 117



Americold 118



Americold 119



Americold 120



FACILITY: Americad ST. Pavl, MN

SAMPLE #: MMC2

MMC-1

INTERIOR CAULK, WHITE (ON DOORS)

MMC-2 INTERIOR CAULK, WHITE (ON DOORS)



MMC-3

INTERIOR CAULK, WHITE (ON DOORS)









MMD-1

CONCRETE FLOOR PATCH, RED

MMD-2 CONCRETE FLOOR PATCH, RED

MMD-3

CONCRETE FLOOR PATCH, RED



Americold 124





FACILITY DATE: SAMPLE #



FACILITY: Americuld ST. Paul, m.N. DATE: glublu SAMPLE #: MME-3 MME-1

WALLBOARD (OVER FOAM INSULATION)

MME-2 WALLBOARD (OVER FOAM INSULATION)

MME-3

WALLBOARD (OVER FOAM INSULATION)



Americold 128







Americold 131





FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MMF-1 FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MMF-2 FACILITY: A mericula ST. Paul, min DATE: 12/12 SAMPLE #: MMF-3

MMF-1

VINYL BASE MASTIC

MMF-2 VINYL BASE MASTIC

MMF-3 VINYL BASE MASTIC



Americold 135



Americold 136



Americold 137





FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MMG-1



FACILITY: A mericold St. Pasi; mn DATE: 9/12/12 SAMPLE #: MMG-3 MMG-1

1" X 1" CERAMIC FLOOR TILE, RED (MORTAR BED)

MMG-2

1" X 1" CERAMIC FLOOR TILE, RED (MORTAR BED)



1" X 1" CERAMIC FLOOR TILE, RED (MORTAR BED)



Americold 141



Americold 142



Americold 143








MMH-1

4" X 4" CERAMIC WALL TILE, PINK (ADHESIVE)

MMH-2

4" X 4" CERAMIC WALL TILE, PINK (ADHESIVE)



MMH-3

4" X 4" CERAMIC WALL TILE, PINK (ADHESIVE)



Americold 147



Americold 148



Americold 149





MMI-1

1" X 1" CERAMIC FLOOR TILE, GREEN (MORTAR BED)

MMI-2

1" X 1" CERAMIC FLOOR TILE, GREEN (MORTAR BED)



MMI-3

1" X 1" CERAMIC FLOOR TILE, GREEN (MORTAR BED)



Americold 151



Americold 152



Americold 153





FACILITY: A menceld ST. Bat; min DATE: 9/12/12 SAMPLE #: MM J-3 MMJ-1

4" X 4" CERAMIC WALL TILE, GREEN (ADHESIVE)

MMJ-2

4" X 4" CERAMIC WALL TILE, GREEN (ADHESIVE)

MMJ-3

4" X 4" CERAMIC WALL TILE, GREEN (ADHESIVE)





FACILITY: Americald St. Pavl, mil. DATE: g/j.2./2. SAMPLE #: MMN - 2.

FACILITY: Americold ST. Pavl, MN DATE: 9/12/12 SAMPLE #: MMN - 3

MMN-1

SINK COATING, WHITE

MMN-2 SINK COATING, WHITE

MMN-3 SINK COATING, WHITE







FACILITY: Américal STP. Paul, min DATE: 9/12/12 SAMPLE #: MMO-3 MMO-1

EXTERIOR CAULK, BLACK (ON NORTH ROOFTOP CONDENSERS)

MMO-2

EXTERIOR CAULK, BLACK (ON NORTH ROOFTOP CONDENSERS)



EXTERIOR CAULK, BLACK (ON NORTH ROOFTOP CONDENSERS)



Americold 159



MMP-1

EXTERIOR CAULK, BLACK (ON ROOFTOP FAN UNITS)

MMP-2

EXTERIOR CAULK, BLACK (ON ROOFTOP FAN UNITS)

MMP-3

EXTERIOR CAULK, BLACK (ON ROOFTOP FAN UNITS)



Americold 161





FACILITY: Awringd Sto Roul, min DATE: 9-12-12 SAMPLE #: MAR Q-3 MMQ-1

EXTERIOR CAULK, WHITE (ON METAL WALLS)

MMQ-2

EXTERIOR CAULK, WHITE (ON METAL WALLS)

MMQ-3

EXTERIOR CAULK, WHITE (ON METAL WALLS)



Americold 163

FACILITY: AMERICOLD ST. Paul, MN DATE: 9/12/12 SAMPLE #: MMR-1 FACILITY: Americold ST. Poul, min DATE: 9/12/12 SAMPLE #: MMR-2

FACILITY: Americold

SAMPLE #: MMR 3

DATE:

ST. Paul, MN

9/12/12

MMR-1

EXTERIOR CAULK, TAN (ON BLOCK WALLS)

MMR-2

EXTERIOR CAULK, TAN (ON BLOCK WALLS)

MMR-3

EXTERIOR CAULK, TAN (ON BLOCK WALLS)



Americold 165



Americold 166

FACILITY: Americold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MMT-1 FACILITY: Americold ST. Paul, MN 9/12/12 DATE: SAMPLE #: MMT-2 FACILITY: AMericold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MMT-3

MMT-1

CONCRETE FLOOR PATCH, GRAY

MMT-2 CONCRETE FLOOR PATCH, GRAY

MMT–3 CONCRETE FLOOR PATCH, GRAY



Americold 168



MMU-1

EXTERIOR CAULK, GRAY (ON GLYCOL LINES)

MMU-2

EXTERIOR CAULK, GRAY (ON GLYCOL LINES)

MMU-3

EXTERIOR CAULK, GRAY (ON GLYCOL LINES)



Americold 170



MMV-1

INTERIOR CAULK, GRAY (ON DOORS)

MMV-2

INTERIOR CAULK, GRAY (ON DOORS)

MMV-3

INTERIOR CAULK, GRAY (ON DOORS)





MMW-1

12" X 12" CERAMIC FLOOR TILE, GRAY (MORTAR BED)

MMW-2

12" X 12" CERAMIC FLOOR TILE, GRAY (MORTAR BED)

MMW-3

12" X 12" CERAMIC FLOOR TILE, GRAY (MORTAR BED)





MMX-1

1" X 1" CERAMIC FLOOR TILE, YELLOW (MORTAR BED)

MMX-2

1" X 1" CERAMIC FLOOR TILE, YELLOW (MORTAR BED)

MMX-3

1" X 1" CERAMIC FLOOR TILE, YELLOW (MORTAR BED)







FACILITY: Americold

DATE:

ST. Paul, Mil

9/12/12

SAMPLE #: MMY-3

MMY-1

4" X 4" CERAMIC WALL TILE, YELLOW (ADHESIVE)

MMY-2

4" X 4" CERAMIC WALL TILE, YELLOW (ADHESIVE)

MMY-3

4" X 4" CERAMIC WALL TILE, YELLOW (ADHESIVE)



Americold 178





MMAA-1

EXPANSION JOINTS, GRAY (ON CONCRETE WALL PANELS)

MMAA-2

EXPANSION JOINTS, GRAY (ON CONCRETE WALL PANELS)

MMAA-3

EXPANSION JOINTS, GRAY (ON CONCRETE WALL PANELS)




MMAB-1

EXTERIOR CAULK, TAN (ON WINDOWS)

MMAB-2

EXTERIOR CAULK, TAN (ON WINDOWS)

MMAB-3

EXTERIOR CAULK, TAN (ON WINDOWS)



Americold 182







MMAC-1

EXTERIOR CAULK, WHITE (ON SOUTH ROOFTOP CONDENSERS)

MMAC-2

EXTERIOR CAULK, WHITE (ON SOUTH ROOFTOP CONDENSERS)

MMAC-3

EXTERIOR CAULK, WHITE (ON SOUTH ROOFTOP CONDENSERS)





MMAD-1

EXPANSION JOINTS, WHITE (ON BRICK WALLS)

MMAD-2

EXPANSION JOINTS, WHITE (ON BRICK WALLS)

MMAD-3

EXPANSION JOINTS, WHITE (ON BRICK WALLS)







FACILITY: Americald Minericald DATE: St. Paul, min. 9/12/12 SAMPLE #: MMAF-3 MMAF–1 STAIR TREAD MASTIC

MMAF-2 STAIR TREAD MASTIC

MMAF–3 STAIR TREAD MASTIC



Americold 188





MXB–1

DRYWALL (NO COMPOUND)

E FACILITY: A mericold ST. Paul, MN DATE: 9/12/12 SAMPLE #: MXB-2

MXB-2 DRYWALL (NO COMPOUND)



MXB-3 DRYWALL (NO COMPOUND)



E-mail: customerservice@mselabs.com • Website: www.mselabs.com

Date:	September 24, 2012
Attention:	Bill Williams Reliable Environmental Solutions, Inc.
Subject:	Analysis of bulk samples for asbestos mineral fibers by Polarized Light Microscopy (PLM) with Dispersion Staining (EPA/600/R-93/116)
RE:	MSE-P9172RES Americold - St. Paul, MN 240 Chester Street Project RES# 12237

Dear Mr. Williams :

McCall & Spero Environmental, Inc. has completed the analyses of the bulk samples we received from your offices on September 17, 2012. These samples represent the bulk samples from the Americold - St. Paul, MN 240 Chester Street Project.

The PLM bulk analysis was performed according to the "Method of the Determination of Asbestos in Bulk Building Materials", R. L. Perkins and B. W. Harvey (EPA/600/R-93/116).

The results for the one hundred ninety eight (198) samples are summarized in the following report. Please note that for samples consisting of two or more distinct components, each component is analyzed and reported individually (EPA 40 CFR Part 61 [FRL-4821-71]).

Thank you for consulting McCall & Spero Environmental, Inc. Should you have any questions concerning these results, please contact our office.

Sincerely, J. Scott Board, B.S.

Laboratory Director



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Project Name: Americold - St. Paul, MN 240 Chester Street Project RES# 12237 McCall & Spero Environmental Project No. MSE-P9172RES

MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
001	SCA-1 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
002	SCA-2 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
003	SCA-3 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
004	SFA-1 Miscellaneous	ND	ND	100%	Gray
005	SFA-2 Miscellaneous	ND	ND	100%	Gray
006	SFA-3 Miscellaneous	ND	ND	100%	Gray
007	TJA-1 Miscellaneous	ND	Cellulose / 5% Glass / 10%	85%	Gray
008	TJA-2 Miscellaneous	ND	Cellulose / 5% Glass / 10%	85%	Gray
009	TJA-3 Miscellaneous	ND	Cellulose / 5% Glass / 10%	85%	Gray
010	TTA-1 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
011	TTA-2 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
012	TTA-3 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
013	MCA-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
014	MCA-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
015	MCA-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray

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MSE #	SAMPLE #	ASBESTOS	OTHER FIBROUS	% NON-FIBROUS	
P9172RES-	DESCRIPTION	TYPE & %	MATERIAL & %	MATERIAL	COLOR
016	MCB-1 Miscellaneous	CH / 3%	Cellulose / 2% Glass / 80%	15%	Gray
017	MCB-2 Miscellaneous	CH / 3%	Cellulose / 2% Glass / 80%	15%	Gray
018	MCB-3 Miscellaneous	CH / 3%	Cellulose / 2% Glass / 80%	15%	Gray
019	MCC-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
020	MCC-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
021	MCC-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
022	MCD-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
023	MCD-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
024	MCD-3 Miscellaneous	ND	Cellulose / 95%	5%	Brown
025	MCE-1 Miscellaneous	ND	Cellulose / 95%	5%	Brown
026	MCE-2 Miscellaneous	ND	Cellulose / 95%	5%	Brown
027	MCE-3 Miscellaneous	ND	Cellulose / 95%	5%	Brown
028	MCF-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
029	MCF-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
030	MCF-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray

McCall & Spero Environmental, Inc.

Americold 193

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
031	MCG-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
032	MCG-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
033	MCG-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
034	MCH-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
035	MCH-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
036	MCH-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
037	MCJ-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
038	MCJ-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
039	MCJ-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
040	MCK-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
041	MCK-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
042	MCK-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
043	MCL-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
044	MCL-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
045	MCL-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
046	MCM-1 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
047	MCM-2 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
048	MCM-3 Miscellaneous	ND	Cellulose / 40% Glass / 40%	20%	Gray
049 (A)	MFA-1 (A) Tile	ND**	Cellulose / 2%	98%	Gray
049 (B)	MFA-1 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
050 (A)	MFA-2 (A) Tile	ND**	Cellulose / 2%	98%	Gray
050 (B)	MFA-2 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
051 (A)	MFA-3 (A) Tile	ND**	Cellulose / 2%	98%	Gray
051 (B)	MFA-3 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
052	MFB-1 Miscellaneous	ND**	ND	100%	Brown
053	MFB-2 Miscellaneous	ND**	ND	100%	Brown
054	MFB-3 Miscellaneous	ND**	ND	100%	Brown
055 (A)	MFC-1 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray
055 (B)	MFC-1 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black
056 (A)	MFC-2 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
056 (B)	MFC-2 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black
057 (A)	MFC-3 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray
057 (B)	MFC-3 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black
058 (A)	MFD-1 (A) Vinyl	ND	Cellulose / 20% Glass / 2%	78%	Gray
058 (B)	MFD-1 (B) Mastic	CH / 2%	Cellulose / 2%	96%	Yellow / Black
059 (A)	MFD-2 (A) Vinyl	ND	Cellulose / 20% Glass / 2%	78%	Gray
059 (B)	MFD-2 (B) Mastic	CH / 2%	Cellulose / 2%	96%	Yellow / Black
060 (A)	MFD-3 (A) Vinyl	ND	Cellulose / 20% Glass / 2%	78%	Gray
060 (B)	MFD-3 (B) Mastic	CH / 2%	Cellulose / 2%	96%	Yellow / Black
061 (A)	MFE-1 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
061 (B)	MFE-1 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black
062 (A)	MFE-2 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
062 (B)	MFE-2 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black
063 (A)	MFE-3 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
063 (B)	MFE-3 (B) Mastic	CH / 5%	Cellulose / 2%	93%	Black

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MSE #	SAMPLE #	ASBESTOS	OTHER FIBROUS	% NON-FIBROUS	<u> </u>
P9172RES-	DESCRIPTION	TYPE & %	MATERIAL & %	MATERIAL	COLOR
064 (A)	MFF-1 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray
064 (B)	MFF-1 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
065 (A)	MFF-2 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray
065 (B)	MFF-2 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
066 (A)	MFF-3 (A) Tile	CH / 2%	Cellulose / 2%	96%	Gray
066 (B)	MFF-3 (B) Mastic	CH / 3%	Cellulose / 2%	95%	Black
067 (A)	MFG-1 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
067 (B)	MFG-1 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
068 (A)	MFG-2 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
068 (B)	MFG-2 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
069 (A)	MFG-3 (A) Tile	CH / 3%	Cellulose / 2%	95%	Gray
069 (B)	MFG-3 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
070 (A)	MFG-4 (A) Tile	ND**	Cellulose / 2%	98%	Gray
070 (B)	MFG-4 (B) Mastic	ND**	Cellulose / 2%	98%	Black / Yellow
071 (A)	MFH-1 (A) Tile	ND**	Cellulose / 2%	98%	Gray

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
071 (B)	MFH-1 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
072 (A)	MFH-2 (A) Tile	ND**	Cellulose / 2%	98%	Gray
072 (B)	MFH-2 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
073 (A)	MFH-3 (A) Tile	ND**	Cellulose / 2%	98%	Gray
073 (B)	MFH-3 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
074 (A)	MFI-1 (A) Tile	ND**	Cellulose / 2%	98%	Gray
074 (B)	MFI-1 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
075 (A)	MFI-2 (A) Tile	ND**	Cellulose / 2%	98%	Gray
075 (B)	MFI-2 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
076 (A)	MFI-3 (A) Tile	ND**	Cellulose / 2%	98%	Gray
076 (B)	MFI-3 (B) Mastic	ND**	Cellulose / 2%	98%	Yellow
077	MMA-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
078	MMA-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
079	MMA-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
080	MMB-1 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow

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			1		
MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
081	MMB-2 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
082	MMB-3 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
083	MMC-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
084	MMC-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
085	MMC-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
086	MMD-1 Miscellaneous	ND**	Cellulose / 2%	98%	Tan / Red
087	MMD-2 Miscellaneous	ND**	Cellulose / 2%	98%	Tan / Red
088	MMD-3 Miscellaneous	ND**	Cellulose / 2%	98%	Tan / Red
089	MME-1 Miscellaneous	ND**	Glass / 2%	98%	Gray
090	MME-2 Miscellaneous	ND**	Glass / 2%	98%	Gray
091	MME-3 Miscellaneous	ND**	Glass / 2%	98%	Gray
092	MMF-1 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
093	MMF-2 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
094	MMF-3 Miscellaneous	ND**	Cellulose / 2%	98%	Brown
095	MMG-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray

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	SAMPLE #	ASBESTOS	OTHER FIBROUS	% NON-FIBROUS	
MSE # P9172RES-	DESCRIPTION	TYPE & %	MATERIAL & %	MATERIAL	COLOR
096	MMG-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
097	MMG-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
098	MMH-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
099	MMH-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
100	MMH-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
101	MMI-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
102	MMI-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
103	MMI-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
104	MMJ-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
105	MMJ-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
106	MMJ-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
107	MML-1 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
108	MML-2 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Yellow / Black
109	MML-3 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
110	MML-4 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow

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			1		
MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
111	MMN-1 Miscellaneous	ND**	ND	100%	White
112	MMN-2 Miscellaneous	ND**	ND	100%	White
113	MMN-3 Miscellaneous	ND**	ND	100%	White
114	MMO-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
115	MMO-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
116	MMO-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
117	MMP-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
118	MMP-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
119	MMP-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
120	MMQ-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
121	MMQ-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
122	MMQ-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
123	MMR-1 Miscellaneous	ND**	Cellulose / 5%	95%	Gray / Black
124	MMR-2 Miscellaneous	ND**	Cellulose / 5%	95%	Gray / Black
125	MMR-3 Miscellaneous	ND**	Cellulose / 5%	95%	Gray / Black

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
126	MMS-1 Miscellaneous	CH / 5%	Cellulose / 5%	90%	Black
127	MMS-2 Miscellaneous	CH / 5%	Cellulose / 5%	90%	Black
128	MMS-3 Miscellaneous	CH / 5%	Cellulose / 5%	90%	Black
129	MMT-1 Miscellaneous	ND**	Cellulose / 2%	98%	Yellow
130	MMT-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
131	MMT-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
132	MMU-1 Miscellaneous	ND**	ND	100%	Gray
133	MMU-2 Miscellaneous	ND**	ND	100%	Gray
134	MMU-3 Miscellaneous	ND**	ND	100%	Gray
135	MMV-1 Miscellaneous	ND**	ND	100%	Gray
136	MMV-2 Miscellaneous	ND**	ND	100%	Gray
137	MMV-3 Miscellaneous	ND**	ND	100%	Gray
138	MMW-1 Miscellaneous	ND**	Cellulose / 2%	98%	Pink
139	MMW-2 Miscellaneous	ND**	Cellulose / 2%	98%	Pink
140	MMW-3 Miscellaneous	ND**	Cellulose / 2%	98%	Pink

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
141	MMX-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
142	MMX-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
143	MMX-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
144	MMY-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
145	MMY-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
146	MMY-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
147	MMZ-1 Miscellaneous	CH / 3%	Cellulose / 2%	95%	Gray
148	MMZ-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
149	MMZ-3 Miscellaneous	CH / 3%	Cellulose / 2%	98%	Gray
150	MMAA-1 Miscellaneous	ND**	ND	100%	Gray
151	MMAA-2 Miscellaneous	ND**	ND	100%	Gray
152	MMAA-3 Miscellaneous	ND**	ND	100%	Gray
153	MMAB-1 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
154	MMAB-2 Miscellaneous	ND**	Cellulose / 2%	98%	Gray
155	MMAB-3 Miscellaneous	ND**	Cellulose / 2%	98%	Gray

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
156	MMAC-1 Miscellaneous	ND**	ND	100%	Gray
157	MMAC-2 Miscellaneous	ND**	ND	100%	Gray
158	MMAC-3 Miscellaneous	ND**	ND	100%	Gray
159	MMAD-1 Miscellaneous	ND**	ND	100%	Gray
160	MMAD-2 Miscellaneous	ND**	ND	100%	Gray
161	MMAD-3 Miscellaneous	ND**	ND	100%	Gray
162	MMAE-1 Miscellaneous	CH / 5%	Cellulose / 2%	93%	Gray
163	MMAE-2 Miscellaneous	CH / 5%	Cellulose / 2%	93%	Gray
164	MMAE-3 Miscellaneous	CH / 5%	Cellulose / 2%	93%	Gray
165	MMAF-1 Miscellaneous	ND**	Cellulose / 2%	98%	Brown
166	MMAF-2 Miscellaneous	ND**	Cellulose / 2%	98%	Brown
167	MMAF-3 Miscellaneous	ND**	Cellulose / 2%	98%	Brown
168	MXA-1 Miscellaneous	CH / 3%	Cellulose / 10%	87%	Gray
169	MXA-2 Miscellaneous	CH / 3%	Cellulose / 10%	87%	Gray
170	MXA-3 Miscellaneous	CH / 3%	Cellulose / 10%	87%	Gray

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MSE # P9172RES-	SAMPLE # DESCRIPTION	ASBESTOS TYPE & %	OTHER FIBROUS MATERIAL & %	% NON-FIBROUS MATERIAL	COLOR
171	MXB-1 Miscellaneous	ND	Cellulose / 20%	80%	Gray
172	MXB-2 Miscellaneous	ND	Cellulose / 20%	80%	Gray
173	MXB-3 Miscellaneous	ND	Cellulose / 20%	80%	Gray

NOTES:

ND = None Detected	CH = Chrysotile	A = Amosite	AC = Actinolite
CR = Crocidolite	AN = Anthophyllite	TR = Tremolite	

For samples consisting of separate components, each component is analyzed and reported separately.

Results apply only to items tested. Quantification is accurate to within \pm 10%. Results from this report must not be reproduced, except in full, with the approval of McCall & Spero Environmental, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

** EPA recommends that bulk materials found negative for asbestos or less than one percent asbestos by polarized light microscopy that fall into one of five dominantly nonfriable categories be reanalyzed by an additional method, such as transmission electron microscopy. (EPA Notice of Advisory, FR Vol. 59, No. 146 & Test Method EPA 600/ R-93/ 116).

Analyst: J. Scott Board, B.S.

CHAIN OF CUSTO	DY RECORD FOR ASBESTOS BULK SAMPLES
5. Inspectors Name: <u>STRUM</u> 7. Sample Numbers: <u>SCA-1,2</u> <u>MCC-1,2,3</u> , <u>MCD-1,2,3</u> , <u>W</u> <u>MCK-1,2,3</u> , <u>MCD-1,2,3</u> , <u>M</u> <u>MTFE-1,2,3</u> , <u>MFF-1,2,3</u> , <u>W</u> COMMENTS : <u>MTFE-1,2,3</u> , <u>W</u>	4. Date Collected: <u>912-12</u> Charles 6. License #:
 Sample Numbers Relinquished: Relinquished by: S.Cha Signature: S.Cha Method of Transmission: Fa Date and Time: <u>114</u> Sample Numbers Received: Received by: <u>Scotta</u> Signature: <u>Scotta</u> Conditions of Samples upon Received 	Representing: Reliable Env. Solutions, Inc. SDEX 5.00Pm. Mark Representing: Mark Representing:
Date and Time: <u>9/,7/,7/,7</u> Reason for obtaining Samples: 10. Sample Numbers Relinquished: Relinquished by:	PLM
Signature: Method of Transmission: Date and Time: Sample Numbers Received: Received by: Signature: Conditions of Samples upon Rec	Representing:
Date and Time: Reason for obtaining Samples: 11. Sample Numbers Relinquished:	
Signature: Method of Transmission:	Representing:
Received by: Signature: Conditions of Samples upon Rec	eipt:

	CHAIN OF CUSTOR	OY RECORD FOR	ASBESTOS BULK SAMPLES
3. B 5. Ir 7. S <i>M</i> <u>M</u> G G	$\frac{1}{1} \frac{1}{2} \frac{1}$	5-1,23 MmL-1,2 MS-1,23 MMT-1,-	4. Date Collected: <u>9/12/12</u> 6. License #: <u>NE-1,23, MME-1,23, MMG-1,23,</u> <u>3,4, MMN-1,53, MMO-1,23, MMP-1,23,</u> 23, MMV-1,23, MMV-1,23,
	Sample Numbers Relinquished:	1	,
9.	Relinquished by: <u>S. Marrier</u> Signature: <u>Stand Phen</u> Method of Transmission: <u>Fo</u> Date and Time: <u>1114/12</u>		Representing: <u>Reliable Env. Solutions, Inc.</u>
	Sample Numbers Received: Received by: Signature: Conditions of Samples upon Rec Date and Time: Reason for obtaining Samples:	eipt: <u>OIC</u>	Representing: MS K
10.	Sample Numbers Relinquished: Relinquished by: Signature: Method of Transmission: Date and Time:		Representing:
	Sample Numbers Received: Received by: Signature: Conditions of Samples upon Rece Date and Time: Reason for obtaining Samples:		Representing:
11.	Sample Numbers Relinquished: Relinquished by: Signature: Method of Transmission:		Representing:
-	Received by: Signature: Conditions of Samples upon Rece	pipt:	
		and the second s	

National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

McCall and Spero Environmental, Inc. 1831 Williamson Court, Suite 100 Louisville, KY 40223-4201 Mr. R. Dale McCall, M.S. Phone: 502-244-7135 Fax: 502-244-7136 E-Mail: dale@mselabs.com URL: http://www.mselabs.com

BULK ASBESTOS FIBER ANALYSIS (PLM)

NVLAP LAB CODE 101895-0

NVLAP Code Designation / Description

18/A01 EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2012-07-01 through 2013-06-30

Main P. M.

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

Effective dates

Page 1 of 1





Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101895-0

McCall and Spero Environmental, Inc.

Louisville, KY

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2012-07-01 through 2013-06-30

Effective dates



For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)



ASBESTOS INSPECTOR Certified by: State of Minnesota Department of Health Expires: 08/09/2013 Steven T Charron 6 Meadow En Lincoln IL 62656

Director, Env. Health Div.

No. Al12082 Issued: 08/16/2012

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Certificate No: 5LM08091217IR

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Expiration Date: August 9, 2013

This is to certify that Steven Charron

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has attended and successfully completed an

ASBESTOS INSPECTOR **REFRESHER TRAINING COURSE**

permitted by the State of Minnesota under Minnesota Rules 4620.3702 to 4620.3722 and meets the requirements of Section 206 of Title II of the Toxic Substances Control Act (TSCA) conducted by

Lake States Environmental, Ltd.

White Bear Lake, MN on August 9, 2012 Examination Date: August 9, 2012

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Lake States Environmental, Ltd P. O. Box 645. Rice Lake, WI 54868 (800) 254-9811

Training Instructor

Recommendation Summary

%	Title	Recommendation	Action Taken	Person Responsible	Assigned To	Due Date	Date Completed
100%	Severity: A (0-6 Months) Item 1: C1-1, C2-1, C3-1, C4-1, B3-1, B2- 1, B1-1	Recommend to label the unit(s) per code.	added labels		Brisson, John	3/31/2017	12/28/2016
	Severity: A (0-6 Months) Item 2: C1-1, C2-1, C3-1, C4-1	Recommend to replace label and install new heat shield.			Brisson, John	3/31/2017	3/9/2017
	Severity: A (0-6 Months) Item 3: B3-1	oil separator per code.	added label		Brisson, John	3/31/2017	12/28/2016
100%	Severity: A (0-6 Months) Item 4: B2-1	Recommend to label per code.	added label		Brisson, John	3/31/2017	12/28/2016
100%	Severity: A (0-6 Months) Item 5: B1-1	Recommend to label per code.	added label		Brisson, John	3/31/2017	12/28/2016
100%	Severity: A (0-6 Months) Item 6: V2-1	Recommend to terminate wire correctly, or install new wire.	wire was terminated correctly		Brisson, John	4/30/2017	4/28/2017
100%	Severity: A (0-6 Months) Item 7: COND-1-1	Recommend to replace the belt or bearing.	Replaced belt		Brisson, John	6/30/2017	6/23/2017
100%	Severity: A (0-6 Months) Item 8: COND-1-1	Recommend to change the bearing lubrication frequency. Greasing frequency has been reduced Condensers will be cleaned in late spring of 2018 Condensers will be pressure washed in the late spring	New grease and time between greasing was established for this condenser		Brisson, John	6/30/2018	12/27/2017
100%	Severity: A (0-6 Months) Item 9: ER#1	Recommend to repair the louver.	New emergency ventilation was installed project was complete 12/28/2017		Brisson, John	12/30/2017	12/28/2017
100%	Severity: A (0-6 Months) Item 10: ER#1	Recommend tho eliminate the Auto mode.	eliminated auto function		Brisson, John	6/30/2017	4/4/2017
100%	Severity: A (0-6 Months) Item 11: Z5-1	Recommend to install valve tags.	Added new tag		Brisson, John	2/28/2017	3/7/2017
100%	Severity: A (0-6 Months) Item 12: Z5-1	Recommend to install a cover.	Added new cover		Brisson, John	2/28/2017	3/7/2017
100%	Severity: A (0-6 Months) Item 13: Z1-1	Recommend to install pipe labels.	Added new label		Brisson, John	2/28/2017	3/7/2017
100%	Severity: A (0-6 Months) Item 14: Z1-1	Recommend to remove the ice consider re- insulating.	Removed ice		Brisson, John	2/28/2017	2/8/2017
100%	Severity: A (0-6 Months) Item 15: Z2-1	Recommend to remove the ice, consider re- insulating.	Removed ice		Brisson, John	2/28/2017	2/8/2017

100%	Severity: A (0-6 Months)	Recommend to repair	Ice management is in	Brisson, John	9/30/2020	4/14/2020
	Item 16: Z2-1	the insulation. Insulation	place and ice is			
		will be repaired by the	periodically removed			
		end of February Capital	from the piping			
		project for 2020				
100%	Severity: A (0-6 Months)	Recommend to remove	Removed ice	Brisson, John	2/28/2017	2/8/2017
	Item 17: Z3-1	the ice, consider re-				
		insulating.				
100%	Severity: A (0-6 Months)	Tested 28 points		Brisson, John	3/31/2018	3/27/2018
	Item 18: General Safety-NDT Piping	between the 2 engine				
		rooms point 1 insulation				
		was removed we will				
		monitor again in 6				
		months point 11 testing				
		preformed monitor again				
		in 6 months point 22				
		testing was preformed				
		tested at 4% wall loss				
		point 33 tested no further				
		pipe wall loss point 39				
		tested no further pipe wall loss				
100%	Severity: B (0-12 months)	Recommend to scrape,	Completed task	Brisson, John	8/31/2017	8/30/2017
10070	Item 1: C3-1	prime and paint affected	Completed task	Disson, sonn	0/01/2011	0/30/2017
		area.				
100%	Severity: B (0-12 months)	Recommend to scrape,	Completed task	Brisson, John	8/31/2017	8/29/2017
10070	Item 2: B3-1	prime and paint the			0/01/2011	0,20,2011
		affected area.				
100%	Severity: B (0-12 months)		New steel was welded to	Brisson, John	7/31/2019	6/18/2019
	SP Item 3: COND-1	members when replacing		,		
		condener or have a PE	bracing was welded in on			
		confirm structural	three I beams for			
		information. This is a	condenser base			
		capital project for 2019				
		This project will be				
		completed by 7/31/2019				
		capital funds were				
		available				
100%	Severity: B (0-12 months)		re paint all pipes	Brisson, John	11/29/2017	11/20/2017
	Item 4: COND1-1	all paints.				
100%	Severity: B (0-12 months)	Recommend to repair	Ice management is in	Brisson, John	4/30/2020	4/14/2020
	Item 5: Z4-1	the insulation.	place ice is removed			
			periodically from piping			
100%	Severity: C (0-18 Months)		New emergency	Brisson, John	12/31/2017	12/28/2017
	Item 1: Ventilation Calculations	ventilation calculations	ventilation was installed			
		for facility Engine	meets all current IIAR-2			
		Room(s).	standards			

Recommendation Summary

%	Title	Recommendation	Action Taken	Person Responsible	Assigned To	Due Date	Date Completed
100%	Severity: A (0-6 Months) Item 1: C1-2	Recommend to label the oil seperator per code.	labeled oil seperator		Brisson, John	3/30/2017	3/31/2017
100%	Severity: A (0-6 Months) Item 2: C1-2	Recommend to install a handle.	installed handle		Brisson, John	12/30/2016	7/6/2016
100%	Severity: A (0-6 Months) Item 3: C2-2	Recommend to change the label.	labeled oil seperator		Brisson, John	3/30/2017	3/31/2017
100%	Severity: A (0-6 Months) Item 4: C3-2	Consider labelling unit per code.	labeled unit		Brisson, John	3/30/2017	12/20/2016
100%	Severity: A (0-6 Months) Item 5: C3-2 OS	Consider labelling unit per code.	label oil seperator		Brisson, John	3/30/2017	3/31/2017
100%	Severity: A (0-6 Months) Item 6: C3-2	Recommend to scrape, prime and paint.	Completed task		Brisson, John	8/31/2017	8/30/2017
100%	Severity: A (0-6 Months) Item 7: B1-2	Recommend to install label per code.	labeled unit		Brisson, John	3/30/2017	12/20/2016
100%	Severity: A (0-6 Months) Item 8: B1-2	Consider installing outer cover.	New insulation and jacketing was installed on this piping		Brisson, John	8/31/2017	8/23/2017
100%	Severity: A (0-6 Months) Item 9: B1-2	Recommend to replace the cap.			Brisson, John	12/30/2016	7/6/2016
100%	Severity: A (0-6 Months) Item 10: B2	Recommend to install label per code.	Labeled unit		Brisson, John	3/30/2017	12/20/2016
100%	Severity: A (0-6 Months) Item 11: B2-OS	Recommend to install unit label per code.	added new label		Brisson, John	4/30/2017	4/25/2017
100%	Severity: A (0-6 Months) Item 12: V2-2	Recommend to label the pumps per code.	relabeled ammonia		Brisson, John	4/30/2017	4/28/2017
100%	Severity: A (0-6 Months) Item 13: V2-2	Recommend to repair/replace bad pump.	Pump is locked out and totally flat we do not need this pump.		Brisson, John	3/30/2017	12/20/2016
100%	Severity: A (0-6 Months) Item 14: V2-2	Recommend to install pipe labels.	added pipe labels		Brisson, John	4/30/2017	4/28/2017
100%	Severity: A (0-6 Months) Item 15: HE-1	Recommend to plug the hole.			Brisson, John	3/30/2017	12/20/2016
100%	Severity: A (0-6 Months) Item 16: HE1-2	Recommend to install a label per code.	labeled heat exchanger		Brisson, John	3/30/2017	3/31/2017
100%	Severity: A (0-6 Months) Item 17: V3-2	Recommend to locate vessel nameplate.	vessel nameplate is under the insulation have picture of label		Brisson, John	4/30/2017	4/27/2017
100%	Severity: A (0-6 Months) Item 18: V3-2	Recommend to install valve tag.	installed new tag		Brisson, John	4/30/2017	4/28/2017
100%	Severity: A (0-6 Months) Item 19: V3-2	Consider repairing pump if it is not operational.	Valves were closed when pump is not running and marked with red ribbons pumps are cycled		Brisson, John	4/30/2017	4/27/2017

100%	Severity: A (0-6 Months)	Recommend to locate	added new label	Brisson, John	4/30/2017	4/28/2017
100 /6	Item 20: V4-2	vessel nameplate.		BIISSON, JOHN	4/30/2017	4/20/2017
100%	Severity: A (0-6 Months)	Recommend to review	re labeled vessel	Brisson, John	4/30/2017	4/28/2017
10070	Item 21: V4-2	for appropriate		Disson, com	4/00/2011	-1/20/2017
		terminology.				
100%	Severity: A (0-6 Months)	Recommend to scrape,	Completed task	Brisson, John	8/31/2017	8/30/2017
10070	Item 22: C1-2	prime and paint.		Disson, com	0/01/2011	0/00/2017
100%	Severity: A (0-6 Months)		ordered new label	Brisson, John	4/30/2017	4/11/2017
10070	Item 23: V-1	the label.		Briddori, dorin	1/00/2011	
100%	Severity: A (0-6 Months)	Recommend to evaluate		Brisson, John	12/30/2016	7/7/2016
10070	Item 24: COND2-2	lubrication frequency.		Disson, com	12/00/2010	1/1/2010
100%	Severity: A (0-6 Months)	Recommend to install	installed junction box	Brisson, John	4/30/2017	4/28/2017
10070	Item 25: DK-1	junction box or protect		Disson, com	4/00/2011	-1/20/2017
		connectors.				
100%	Severity: A (0-6 Months)	Recommend to install	installed new guard	Brisson, John	4/30/2017	4/28/2017
10070	Item 26: DK-1	guards.	Installed new guard	Disson, sonn	4/30/2017	-7/20/2017
100%	Severity: A (0-6 Months)	Recommend to secure	installed new label	Brisson, John	4/30/2017	4/28/2017
10070	Item 27: DK-1	the label properly.		Brisson, com	4/00/2011	-1/20/2011
100%	Severity: A (0-6 Months)	Recommend to install a	added new valve tag	Brisson, John	4/30/2017	4/25/2017
10070	Item 28: New Z3W	valve tag.	added new valve tag	Disson, sonn	4/30/2017	-7/20/2017
100%	Severity: A (0-6 Months)	Recommend to confirm	added new ribbons on air	Brisson, John	4/30/2017	4/27/2017
10070	Item 29: 21E	valves are shut and	unit	Brisson, Com	4/00/2011	-,21,2011
		install ribbons/lock.				
100%	Severity: A (0-6 Months)		added new valve tags	Brisson, John	4/30/2017	4/28/2017
10070	Item 30: 24W	when valve is for 24W on		Brisson, Com	4/00/2011	-7/20/2017
	116111 50. 2411	unit/tag.				
100%	Severity: A (0-6 Months)	Recommend to install	added pipe labels	Brisson, John	4/30/2017	4/25/2017
10070	Item 31: BF-2	pipe labels.		Disson, sonn	4/30/2017	
100%	Severity: A (0-6 Months)		labeled pump	Brisson, John	4/30/2017	4/28/2017
10070	Item 32: V3-2	pump.		Briddeni, denin	1/00/2011	1/20/2011
100%	Severity: A (0-6 Months)	Tested 28 points		Brisson, John	3/31/2018	3/27/2018
10070	Item 33: General Safety -NDT Piping	between the 2 engine		Briddeni, denin	0/01/2010	0,21,2010
		rooms point 1 insulation				
		was removed we will				
		monitor again in 6				
		months point 11 testing				
		preformed monitor again				
		in 6 months point 22				
		testing was preformed				
		tested at 4% wall loss				
		point 33 tested no further				
		pipe wall loss point 39				
		tested no further pipe				
1000/	$\mathbf{S}_{\text{overtify}} = \mathbf{P} \left(0 + 0 + 0 + 0 \right)$	wall loss	Now guard made and	Drissen Jahr	10/00/0047	10/07/0047
100%		Suggest to cover the belt		Brisson, John	12/29/2017	12/27/2017
	Item 1: C1-2	with a guard. Site is short	Installed			
		staffed will complete in				
4000/		december			44/00/0047	44/04/0047
100%	Severity: B (0-12 months)	Recommend to cover the	Re painted piping	Brisson, John	11/30/2017	11/21/2017
	Item 2: C2-2	belt with a guard.				

100%	Severity: B (0-12 months) Item 3: B1-2	Belt guard does not cover motor/belt. Project will be completed in december	New guard was made and installed	Brisson, John	12/29/2017	12/26/2017
100%	Severity: B (0-12 months) Item 4: V2-2	Suggest to locate	We have a picture of the name plate and it matches the Y1A	Brisson, John	6/30/2017	6/9/2017
100%	Severity: B (0-12 months) Item 5: V2-2	Recommend to scrape, prime and paint affected area.	completed task	Brisson, John	8/31/2017	8/29/2017
100%	Severity: B (0-12 months) Item 6: V3-2	Recommend to develop an insulation replacement program	Insulation and jacketing replaced with new	Brisson, John	12/29/2017	12/14/2017
100%	Severity: B (0-12 months) Item 7: C1-2		monitoring condenser piping will be painted to limit corrosion	Brisson, John	8/31/2017	8/30/2017
100%	Severity: B (0-12 months) Item 8: DK-3	Recommend to repair the insulation.	repaired the insulation	Brisson, John	12/29/2017	12/19/2017
100%	Severity: B (0-12 months) Item 9: Z2-W	Recommend to repair the insulation. This is a	Insulation will be replaced with capital funds project will be completed by 9/30/2019 Bad insulation was replaced	Brisson, John	12/31/2019	12/19/2019
100%	Severity: B (0-12 months) Item 10: Z1W	Recommend to repair the insulation. This is a capital funded project for 2018 This is a capital project that was approved for 2019 capital funds project will be completed by 9/30/2019 This will have to be a capital funded project for 2019	Bad insulation was replaced	Brisson, John	12/31/2019	12/19/2019
100%	Severity: B (0-12 months) Item 11: C1-2	Recommend to scrape, prime and paint.	duplicate item	Brisson, John	7/31/2017	7/28/2017
100%	Severity: C (0-18 Months) Item 1: C1-2	Recommend to monitor cracking to determine if repairs are needed.	welded base will monitor	Brisson, John	12/30/2017	12/26/2017
100%	Severity: C (0-18 Months) Item 2: Ventilation Calculations	Recommend to complete ventilation calculations for facility Engine Room(s).	New emergency ventilation installed meets all current IIAR-2 standards	Brisson, John	12/29/2017	12/28/2017
100%	Severity: D (0-24 Months) Item 1: Z1E	Unit not used in last 30 years. Recommend ensure it is locked out.	Unit is locked out and pumped out and all isolation valves closed	Brisson, John	12/30/2017	12/6/2017


5228 KNOX AVENUE SOUTH MINNEAPOLIS, MINNESOTA 55419 (612) 925-4404 FAX (612) 920-2896 e-mail:cmartin@irtest.com website:www.irtest.com

INFRARED ELECTRICAL SYSTEMS SURVEY

Prepared For:	Americold Logistics (2304) 240 Chester Street St. Paul, MN 55107
Building Surveyed:	Americold Logistics (2304) 240 Chester Street St. Paul, MN 55107
Date of Survey:	May 13, 2020
Prepared By:	Infrared Consulting Services, Inc. 5228 Knox Avenue South Minneapolis, MN 55419

I hereby certify that the above-stated project was performed by myself and/or under my direction, and I agree with the results and conclusions of this survey.

11/1 Mate

By_

Charles O. Martin Infrared Consulting Services, Inc.

NATIONWIDE CONSULTING SERVICES



5228 KNOX AVENUE SOUTH MINNEAPOLIS, MINNESOTA 55419 (612) 925-4404 FAX (612) 920-2896 e-mail:cmartin@irtest.com website:www.irtest.com

INFRARED ELECTRICAL SYSTEMS SURVEY EQUIPMENT AND PROCEDURES

PURPOSE:

The purpose of the infrared electrical systems survey is to locate and document thermal anomalies (hot spots) in the electrical systems. These hot spots can then be repaired before they cause an outage, damage to equipment, or a fire. This survey is typically scheduled on an annual basis. Facilities with data centers, computer rooms, or other critical equipment have it done 2-4 times per year.

ITEMS SURVEYED:

Typically items included in the survey area: outside transformers, main service and switchgear, bus duct, substations, power distribution panels, motor control centers, power breaker panels, capacitor banks, machine disconnects, and lighting breaker panels. A survey may also include bearings, radiant heat or cooling panels, steam and hot water lines, refractory, duct insulation, and other specified items, including underground utilities.

EQUIPMENT:

The survey is performed with high resolution infrared imaging equipment that detects invisible infrared wavelengths in the 8 to 14 micron range of the electromagnetic spectrum. This equipment is fully portable and has the ability to record the digital thermal image.

PROCEDURES AND REPORT:

The electrical equipment is scanned in an organized manner with panel covers removed as needed during the survey. All equipment scanned during the survey is noted on a summary checklist, which lists whether the equipment is on line, contains a problem, or is functioning properly. Any thermal anomalies identified as problems are documented with thermograms and matching color photographs, location, temperature rise, probable cause, and recommendation for repair in a bound report.

The following severity level colors highlight each problem detected on both the summary/checklist and problem pages.

SEVERITY LEVEL COLOR CHART:



 $\Delta T = 0^{\circ}F - 10^{\circ}F$: Repair When Convenient $\Delta T = 10^{\circ}F - 25^{\circ}F$: Schedule to Repair Next Shutdown $\Delta T = 25^{\circ}F - 50^{\circ}F$: Schedule Repairs Within the Next Month

 $\Delta T = 50^{\circ}F - 75^{\circ}F$: Schedule Repairs Within the Next Week

 $\Delta T = Over 75^{\circ}F$: Repair Immediately

NATIONWIDE CONSULTING SERVICES



Photograph 1



LOCATION: North Ergine Room

ITEM:	Booster B3-1 Starter					
	Center Ø Lo	ad Side Cable Connection (Smaller Cable) Off Heater Strip				
TEMPERAT	URE RISE;	40°F				
PROBABLE	CAUSE:	Loose or Corroded Wire Connection				
RECOMME	NDATION:	Inspect, Clean, and Tighten				

 $\Delta T = 0^{\circ}F - 10^{\circ}F$: Repair When Convenient

 $\Delta T = 11^{\circ}F - 25^{\circ}F$: Schedule to Repair Next Shutdown $\Delta T = 26^{\circ}F - 50^{\circ}F$: Schedule Repairs Within Next Month



ΔT = 51°F – 75°F: Schedule Repairs Within Next Week ∆T = Over 75°F: Repair Immediately



Photograph 2



LOCATION: South Engine Room

ITEM:	Bucket for C	3-2				
	Center Ø Line Side Cable Connections at Lug on vain Breaker					
TEMPERA	TURE RISE:	<u>6°F</u>				
PROBABLE CAUSE:		Loose or Corroded Wire Connection				
RECOMMENDATION:		Inspect, Clean, and Tighten				

 $\Delta T = 0°F - 10°F$: Repær When Convenient $\Delta T = 11°F - 25°F$: Schedule to Repair Next Shutdown

 ΔT = 26°F – 50°F: Schedule Repairs Within Next Month



 $\Delta T = 51^{\circ}F - 75^{\circ}F$: Schedule Repairs Within Next Week $\Delta T =$ Over 75°F: Repair Immediately



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INFRARED ELECTRICAL SYSTEMS SURVEY

SUMMARY CHECKLIST

AMERICOLD LOGISTICS (2304) St. Paul, MN

Escorted By: Jeff Date: May 13, 2020 No. of Problems Detected: 2

AREA	ITEM	NOT ON LINE	_ОК_	PROB. #	SPEC. NOTES
N ENGINE RM	Compressor C1		_ <u>x</u>		
	Compressor C2		_ <u>x</u>		
	Compressor C3		X		
u .	Compressor C4	X			
u	Booster B1		<u>X</u>		
u	Booster B2	X			
u	Booster B3-1			#1	
	MCC #1		X		
	Service				
n	Main		x		
	Panelboard		x		
	Panel B-6		x		
	Panel B-5		<u>x</u>		
0	Panel B-4		X		
n	All Motor Bearings		X		
N DOCK	Panel B8		_x_		
	Panel B7		X		
236 DOCK	Panel B15		X		
236 OFFICE	Panel B16		X		

AREA	ITEM	NOT ON LINE	_ок_	PROB. #	SPEC. NOTES
236 OFFICE	Panel B17		X		
"	Panel B18		X		
п	Panel B19	1	X		
и	Panel B20		X		
236 OFFICE (OLD)	Panel B21		X	4	
	Panel B22		X		
u	Panel B23		X		-
	Panel B24		X		
238 OFFICE	Panel B9		X		
	Panel B10		X		
	Panel B11		X		
	Panel B12	, <u> </u>	<u>x</u>		
	Panel B14 & B43		X		
MAINT OFFICE	Panel B1		<u>X</u>		
	Panel B2		X		
n.	Disconnect		X		
FRONT DOCK	Panel B25		<u> </u>		
.	Panel B26		X		
	Panel B28	·	X		
BACK DOCK	Panel B41		X		
	Panel B42		X		
BOILER RM	Starter: Core Pump	X			
	Starter: Center Pump		<u>x</u>	<u></u>	
	South Pump Motor		X		
	Disconnect/Contactor: North Pump	·	X		
S ENGINE RM	Compressor C1		X		()
	Compressor C2		X		·
	Compressor C3		<u>X</u>		······································

AREA	ITEM	NOT ON LINE	OK	PROB. #	SPEC. NOTES
S ENGINE RM	Booster B1		<u> </u>		··
n	Booster B2		X		
<u> </u>	Booster B3		X		
а п	MCC #2	÷		#2	
.0	MCC #1		X		
	Panel B36		X		
	Panel B37		X		
3 0 0	Panel B38		X		3
	Disconnect: MD-14		<u>X</u>	<u> </u>	. <u> </u>
302	Disconnect: MD-13		X		
	Disconnect: MD-12		X		
	Disconnect: MD-11		X		
	Disconnect: MD-10	······	X		·
	Disconnect: MD-16		X		
250 DOCK	Panel B35	·	X		
<u>.</u>	Panel B34	·	<u>x</u>		
300	Panel B31		X		
	Panel B32		_ <u>x</u> _		
3 19 32	Panel B33		X		·
2 ND FL OFFICE	Disconnect: MD-4		<u>X</u>		
30/3	Disconnect: MD-5		X		
	Disconnect: MD-6		X		
302	Panel BB1	<u></u> 0	X	·	
TRAVEL AGENCY	Panel BB2	S 3	X		





Monthly Fire Extinguisher Inspection



Revised: June 29, 2020

Inspection, maintenance and testing

Fire extinguishers shall be inspected when initially placed in service and thereafter at approximately 30day intervals. Fire Extinguishers shall be inspected, manually or by electronic means, at more frequent intervals when circumstances require.

- OSHA 29 CFR 1910.157(e)(1) The employer shall be responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace.
- OSHA 29 CFR 1910.157(e)(2) Portable extinguishers or hose used in lieu thereof under paragraph (d)(3) of this section shall be visually inspected monthly.



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Inspection Record keeping

- ✓ Personnel making inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action.
- ✓ At least monthly, the date the inspection was performed and the initials of the person performing the inspection shall be recorded.
- ✓ Records shall be kept on a tag or label attached to the fire extinguisher and on an inspection checklist (see AMC Fire Protection Safety Policy) is maintained on file.
- ✓ Ensure the all posted evacuation maps have the correct placement of extinguishers





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3

Location in designated place

- Is the Fire Extinguisher in its designated place?
- No obstruction to access or visibility?





Pressure Indicating Device

Pressure gauge reading or indicator in the operable range or position.

Check for:

- Immovable, jammed, missing pointer
- Deformed, or broken crystal
- Illegible or faded dial
- Corrosion
- Dented case or crystal retainer
- Immovable or corroded pressure indicating stem





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Physical Inspection

Examination for obvious physical damage including:

- Corrosion
- Mechanical Damage (dent abrasion)
- Paint Condition
- Presence of repairs (welds, soldering)
- Damaged Threads
- Broken Hanger attachment
- Broken Handle Lug







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Monthly Visual Inspection

Operating instructions on nameplate legible and facing outward and Safety seals/tamper indicators must not be not be broken or missing. Check:

- Illegible Wording
- Corrosion or loose plate
- Verifying operating instructions on nameplates are legible and face outward.
- Broken, missing safety seals and tamper indicators.
- "Hazard" labels and marking must be clear.





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Monthly Visual Inspection

Nozzles and Horns

Check for:

- Deformed, Damaged or Cracked
- Blocked opening
- Damaged threads
- Hose obstruction
- Hydrostatic test date





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Maintenance Check



- ✓ Monthly inspections can be done by AMC associates. All other inspections/certifications must be accomplished by a licensed contractor. Contractor should be licensed to perform the inspections per your local state and municipal requirements.
- ✓ Ensure Contractors provides serial number list of those inspected.
- ✓ Ensure you have adequate protection when fire extinguishers are removed for maintenance or recharging.

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Other Requirements



- **Annual Maintenance of Fire Extinguishers-**The certification of these inspections must be recorded on the fire extinguisher tag, including the inspection date and the inspector's initials.
- **Six-Year Inspections-**Six-year maintenance inspections are much like the annual inspections. The main difference is that during the six-year inspections, stored-pressure fire extinguishers are emptied of contents. A licensed professional must examine the mechanics, outlet hose and delivery system, after which the extinguisher is refilled, re-pressurized and marked with a tamper-resistant seal. These six-year inspections must be recorded on the regular hang tag and on a separate metallic label attached to the body of the extinguisher. Notations must include the month and date of the inspection, as well as the inspector's name and company affiliation.
- **Hydrostatic Materials Inspections-**Hydrostatic materials inspections are required at varying intervals. Hydrostatic inspections must be carried out by professionals with particular training in handling the fire-extinguishing agents. They must recharge and seal the extinguisher as soon as the hydrostatic testing is done. Five-year and 12-year inspections are recorded on the hang tag and the permanently attached metal tag on the cylinder. Inspectors must note the date, their name and company affiliation, the fire extinguisher's pressure level and the extinguishing agent used.



Don't forget to inspect the spare extinguishers!!!

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11





TRAINING FOR: Fire Extinguisher Inspection (2020 version)

have been instructed on

(Please Print Name)

Fire Extinguisher Inspection (2020 version)

I understand this training and I also understand that it is my responsibility to follow these procedures at all times.

DATE_8/31/20 SIGNED INSTRUCTOR (Sigi

METHOD USED TO TRAIN:

Verbal	>
Written	\circ
Test	\bigcirc
Skills Test	\bigcirc
Video	\bigcirc
Power Point	\bigotimes
AMC Policy	\bigcirc



TRAINING FOR: Fire Extinguisher Inspection (2020 version)

Kyer 1.04+ have been instructed on

(Please Print Name)

Fire Extinguisher Inspection (2020 version)

I understand this training and I also understand that it is my responsibility to follow these procedures at all times.

DATE____ 05.12. SIGNED

METHOD USED TO TRAIN:

Verbal	\bigcirc
Written	\bigcirc
Test	\bigcirc
Skills Test	\bigcirc
Video	\bigcirc
Power Point	\bigcirc
AMC Policy	\bigcirc

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Service Order PM - Extinguisher Inspection - Annual

Tech Clock IN/OUT IVR 844-347-3487 IVR# 261064

240 Chester Street St Paul, MN 55107	Service Order N S2011171103 - 1	Vendor ID: alisafegiobal		
Phone# 651-227-0741 Fax#	Customer PO:	Schedu	le Date:	Complete By: 1/15/2021
Scope Of Work: Conduct annual inspection on all extinguishers throughout lo odes/standards (review all areas with site manager).	ocation as required per NF	PA10 and a	any other ap	oplicable
	I Information	and the second		and the second second
ïre Equipment:				
Technician Work Performed: Clock in 7:05am check in Clock out 8:21am check out Extinguisher QTY 1 * RETURN TRYP	B:21am B:28am Inspection Deficiencie	Successful	ly Complet	ed? X N □ X
Qty Size/Type Recharge 6 YR (incl. rechg.)) Hydro	New	Last Hyd	Iro/Manuf. Date
2.5# ABC				
6 5# ABC				
26 10# ABC - 1				
15# ABC				
20# ABC				
5# Co2				
	+			
名 3 10# Co2			1	
3 10# Co2 15# Co2				
3 10# Co2 15# Co2 20# Co2				
3 10# Co2 15# Co2 20# Co2 K Class 100 Class				
3 10# Co2 15# Co2 20# Co2 K Class 2.5G Water				
3 10# Co2 15# Co2 20# Co2 K Class 100 Class				

Cintae 866-946-8973



Service Order PM - Extinguisher Inspection - Annual

Tech Clock IN/OUT IVR 844-347-3487 IVR# 261064

Service Location: Americold 2304 St Paul 240 Chester Street St Paul, MN 55107 Phone# 651-227-0741 Fax#				Service Order No: S2011171103 - 1		Vendor ID: allsafeglobal	
				Customer PO:	Schedu	le Date:	Complete By: 1/15/2021
		Insp	ection Resul	ts - Required			
echnici	an Parts Used:	Charles and the street		and a start of the start of the start	the a constants	the ground and subser is	at in an other the state of the
	nal Work Authorization cal						
Cintas A	Authorizing Agent Name	Anna					
				Explanation of	Deficienci	ies	
Qty	Part		-IN# ABC	bue			
	Pull Pin		10th COZ I	Ludra .			
	Gauge		-10#ABC -10#CO2 -5#CO2	14010			
	Service Collar	1	-2# 002 H	iydro			
	Valve Stem						
	Labels						
	Signs						
	Brackets						
	Tamper Seal						
	O-Rings	3	5-5C2 1-440068K				
	Hose Straps		1-440068K	0			
	Chemical Agent	L	1-KGORIN	g 2-216B			
		Techni	cian Acknov	vledgement - Re	quired		
34 1. A 1. C	and the second			and a loss of a loss of the second second second and		A CONTRACTOR OF CONTRACTOR	
\cap	C 1 .					1	1
111	U JCMOODI	and the second	Amu	xmepp1		112	72
Techr	nician Signature	Route	Print Na	ne T		Date	1
ly signat	ure represents and warrants the	at I have personally	performed the ins	pection and/or work spec	ified in this S	ervice Order,	supplied the parts
dicated	above (if any), and notified the oplicable laws, rules, and regula	customer of deficie	ncies (if applicable). I hereby certify and wa	arrant that all	work was per	formed in full compliance
uilding c	ode requirements, and local lice	ensing and/or perm	itting requirements.	I further certify and war			
e work	are properly trained, certified, ar	nd licensed to perfo	orm the work in the	given jurisdiction.			
		Custo	mer Acknow	ledgement - Re	quired		
$\overline{\mathbf{N}}$	I hereby acknowledge the	satisfactory co	mpletion of the a	above stated work		[Store Stamp
V	, noroby donnernedge are	cultoración y con		sore stated work.			otore otamp
		5				1	22 21
	A starter	S colly	MADÍ			1.	52-51
),u							-
Autho	prized Signature	Print Name	ruge :	Title		Date	

1

Fire Alarm-Security Domain v2-Bi-Monthly

Customer: Americold - Saint Paul Building: Americold - 240 Chester St. Address: 240 Chester St, Saint Paul, MN 55107

CUSTOMER NAME: Americold - Saint Paul BUILDING NAME: Americold - 240 Chester St BUILDING ADDRESS: 240 Chester St, Saint Paul, MN 55107 CONTACT NAME: John Brisson CONTACT RE-MAIL: john brisson@americold.com CONTACT ROLE: Facilities Manager CONTACT PHONE: 6512270741 INSPECTION TYPE: Fire Alarm-Security Domain v2 FREQUENCY: Bi-Monthly WORK ORDER: 87522524 **INSPECTION END DATE: 04/05/2021**

Johnson 圳

Controls

INSPECTOR (s): Gary L McDonald INSPECTOR LICENSE: PL005159 ACCOUNT NAME: Johnson Controls North America OFFICE ADDRESS: 2720 Arthur Street, Roseville, MN 55113 OFFICE PHONE: 612-244-6370 OFFICE LICENSE: TS651064 TIMEZONE: GMT-05:00

FIRE ALARM INSPECTION REPORT

General Inspection Notes

1. Replaced battery ticket 87603933

Building Notes

- Pull 2 NAC wires on Honeywell Firelite Unimode MS-9050UD
 Electrical Panel B-26 located on the left side of door to cooler work area. Breaker 20
 FACP Honeywell Firelite Unimode MS-9050UD revision 3.2

DEVICE DEFICIENCIES

No device deficiencies in this inspection.

INSPECTION RESULTS SUMMARY						
DEVICE TYPE	INVENTORY COUNT	PASSED	FAILED	CANNOT INSPECT		
Battery	2	2	0	0		
Panel	2	2	0	0		
Pull Station	6	6	0	0		
Smoke Detector	16	16	0	0		

	General Questions					
1,	UL Type	UUFX-Central Station Fire Alarm (FA)				
Trai	nsmission Type					
1.	Туре	DACT/A				
2.	Primary Communication Tested	Yes				
3.	Secondary Communication Tested	Yes				
Mor	nitoring Entity					
1.	Contact	Central Monitoring Station				
2. Telephone 1-800-289-2647		1-800-289-2647				
3.	CS# or Account #	H02-288-3029				
Aut	hority Having Jurisdiction					
1,	Name	National Dispatch Center				
2.	Telephone	1-866-494-9127				

Page 1 of 8



INSPECTION RESULTS SUMMARY								
DEVICE TYPE	INVENTORY COUNT	PASSED	FAILED	CANNOT INSPECT				
Battery	2	2	0	0				
Panel	2	2	0	0				
Pull Station	6	6	0	0				
Smoke Detector	16	16	0	0				

				SMOKE DETECT	ORS			
#	LOCATION	DESCRIPTION	ADDRESS	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT
1	Top of center stairs	Smoke Det 2nd Floor Hall	20	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
Sensiti	ivity Value					-		90
Notes • Visu	:: ual and functional inspe	ction						
2	North Hallway	Smoke Det 2nd Floor Hall North	7	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
Sensit	lvity Value							85
3	al and functional inspective of the second sec	Smoke Det 2nd Floor	6	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
		Hall North		Sinoke Detector		Gary E Micboniaid	04/03/2021	rasseu
Notes	ivity Value							95
• Visu	al and functional inspec	rtion						
4	North Hallway	Smoke Det 2nd Floor	8	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
4	North Hallway		8	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed 95
4 Sensiti Notes • Visu	vity Value : ial and functional inspec	Smoke Det 2nd Floor Hall North			-			95
4 Sensiti Notes • Visu 5	vity Value : ial and functional inspective North Hallway	Smoke Det 2nd Floor Hall North	8 10	Smoke Detector	1	Gary L McDonald	04/05/2021 04/05/2021	
4 Sensiti Notes • Visu 5 Sensiti	vity Value : aal and functional inspective North Hallway vity Value	Smoke Det 2nd Floor Hall North			-			95
4 Sensiti Notes • Visu 5 Sensiti Notes	vity Value : aal and functional inspective North Hallway vity Value	Smoke Det 2nd Floor Hall North			-			95 Passed
4 Sensiti Notes • Visu 5 Sensiti Notes	vity Value al and functional inspective North Hallway vity Value	Smoke Det 2nd Floor Hall North						95 Passed
4 Sensiti Notes • Visu 5 Sensiti Notes • Visu 6	vity Value : al and functional inspective North Hallway vity Value : al and functional inspective	Smoke Det 2nd Floor Hall North	10	Smoke Detector	-	Gary L McDonald	04/05/2021	95 Passed 95





Customer: Americold - Saint Paul Bullding: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107

				SMOKE DETECT	ORS			
#	LOCATION	DESCRIPTION	ADDRESS	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT
7	2nd Floor Hall North Room 3	Smoke Det 2nd Floor Hall North Room 3	11	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
ensitiv	rity Value	L						95
lotes: Visua	al and functional inspec	tion						
8	2nd Floor Hall North Room 6	Smoke Det 2nd Floor Hall North Room 6	9	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
ensitiv	rity Value				and the second s			95
otes: Visua	al and functional inspec	tion						
9	2nd Floor Hall North Room 9	Smoke Det 2nd Floor Hall North Room 9	13	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
ensitiv	ity Value							90
otes: Visua	al and functional inspec							
10	2nd Floor Hall North Room 9	Smoke Det 2nd Floor Hall North Room 9	14	Smoke Detector		Gary L McDonald	04/05/2021	Passed
nsitiv	ity Value							90
Visua	al and functional inspection of the second sec	tion Smoke Det 2nd Floor Hall South	5	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
nsitiv	l	Hair South						90
otes: Visua	il and functional inspec	tion						
12	South hallway	Smoke Det 2nd Floor Hall South	1	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
nsitiv	ity Value							90
otes: Visua	l and functional inspec	tion						
13	South hallway	Smoke Det 2nd Floor Hall South	2	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
nsitiv	ity Value							90
otes: Visua	l and functional inspec	tion						
14	South hallway	Smoke Det 2nd Floor Hall South	3	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed
nsitiv	lty Value							90
otes:				the stand of the stand of the stand	and the second second			
	l and functional inspec							



Fire Alarm-Security Domain v2–Bi-Monthly

Customer: Americold - Saint Paul Building: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107

SMOKE DETECTORS											
#	LOCATION	DESCRIPTION	ADDRESS	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT			
15	2nd Floor Hall South Office 15	Smoke Det 2nd Floor Office 15	4	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed			
sensiti	vity Value							90			
• Visu 16	al and functional inspec	tion Smoke Det Panel	19	Smoke Detector	-	Gary L McDonald	04/05/2021	Passed			
Sensiti	vity Value							90			
Notes • Visu	: al and functional inspec	tion	-								

DESCRIPTION FACP Honeywell Firelite Unimode MS-9050UD	Honeywell	MODEL Firelite Unimode M5-9050UD	DEVICE TYPE Panel	BARCODE	INSPECTOR Gary L McDonald	DATE OF TEST	RESULT Passed 2 B
Firelite Unimode MS-9050UD	Honeywell		Panel	-	Gary L McDonald	04/05/2021	2
							В
							Yes
							Yes
							Yes
							Yes
							Yes
							Yes
							Yes
							Yes
							Yes
received?							Yes
restored?							Yes
ed?							Yes
5	restored? ed?	restored?	restored? ed?	restored? ed?	restored? ed?	restored? ed?	restored? ed?





Customer: Americold - Saint Paul Building: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107

	ANNUNCIATOR PANELS											
#	LOCATION	DESCRIPTION	MANUFACTURER	MODEL	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT			
1	At FACP	Annunciator FACP Honeywell Firelite Unimode MS-9050UD	Honeywell	Firelite Unimode MS-9050UD	Panel	-	Gary L McDonald	04/05/2021	Passed			
Descr	ption								Annunciator FACP Honeywell Firelite Unimode MS-9050UD			
Locati	on								Main Entrance			
Is the	Is the time and date correct?											
Is it fu	Is it functional?											
Note • Vis	s: ual and functiona	l inspection										

	BATTERIES										
#	LOCATION	DESCRIPTION	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT				
1	Inside FACP	Battery 1 FACP Honeywell Firelite Unimode MS-9050UD	Battery	-	Gary L McDonald	04/05/2021	Passed				
Quantity	/ (Enter 2 if answering	for a set)					1				
Battery	Charger Test						Yes				
* 13.55v											
Item/Mo	em/Model Number										
Location	1						Lobby Inside FACP Honeywell Firelite Unimode MS-9050UI				
Manufa	turer						Power Sonic				
Manufa	cturer Date						07/07/2020				
Install D	ate						04/05/2021				
Volts							12.76v				
Amp Ho	urs						7.50a				
How ma	ny hours of backup po	wer are supplied by batteries	?				48				
Notes:											
• Visua	and functional inspec	tion									
• Teste	d on 02-01-21										



Fire Alarm-Security Domain v2-Bi-Monthly

Customer: Americold - Saint Paul Bullding: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107

Panels/Initiating Devices

ATION e FACP f answering f	DESCRIPTION Battery 2 FACP Honeywell Firelite Unimode MS-9050UD for a set)	DEVICE TYPE Battery	BARCODE	INSPECTOR Gary L McDonald	DATE OF TEST 04/05/2021	RESULT
fanswering f	Honeywell Firelite Unimode MS-9050UD	Battery	-	Gary L McDonald	04/05/2021	Passed
	for a set)					
st	land and the second					1
						Yes
er						477967
						Lobby Inside FACP Honeywell Firelite Unimode MS-9050UD
						Power Sonic
						11/14/2020
						04/05/2021
						12.75v
						7.60a
f backup pov	wer are supplied by batteries					48
	ackup pov		ackup power are supplied by batteries?			

• Tested on 02-01-21

#	LOCATION	DESCRIPTION	ADDRESS	DEVICE TYPE	BARCODE	INSPECTOR	DATE OF TEST	RESULT
1	Top of center stairs	Manual Pull Station 2nd Floor	21	Pull Station	(H)	Gary L McDonald	04/05/2021	Passed
• Vis	s: ual and functional inspe	ection						
2	By Dock North Door	Manual Pull Station Dock North	17	Pull Station	-	Gary L McDonald	04/05/2021	Passed
3	By Door 236	Manual Pull Station Door 236	15	Pull Station	-	Gary L McDonald	04/05/2021	Passed
4	By Door 238	Manual Pull Station Door 238	23	Pull Station		Gary L McDonald	04/05/2021	Passed
5	By Door 250	Manual Pull Station Door 250	16	Pull Station	-	Gary L McDonald	04/05/2021	Passed
6	At FACP	Manual Pull Station Panel	18	Pull Station	-	Gary L McDonald	04/05/2021	Passed

Notification Devices

Bulk operator

All Notification Devices that are NOT listed below have been marked as: Passed

Fire Alarm-Security Domain v2–Bi-Monthly

Customer: Americold - Saint Paul Building: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107



Notification Devices

There are no devices contained in this section

	an main an				
Inspector Signature	Dury MCDonald	Inspector Name	Gary McDonald	Date	04/05/2021

Fire Alarm-Security Domain v2–Bi-Monthly

Customer: Americold - Saint Paul Building: Americold - 240 Chester St Address: 240 Chester St, Saint Paul, MN 55107



DEVICE NOTE IMAGE APPENDICES

06/01/2021 Completion Confirmation Slip SMEYER Original

Order 10115364 SP Monthly Facility Check Scheduled Finish Date 06/08/2021

Funct. location2304-BLD-BLDG1Building 1EquipmentAssemblyPM planner grpFSMFacIty Serv MangrPM plant2304-012304John Brisson

Order Description Long Text: SP Monthly Facility Check Procedure Name: SP Facility Inspection Procedure:

OFFICE

打 All lights in working order. [] Emergency Lights Checked [] Fire Ext []#1 []#2 #3 Locker Room - Break Room - 2nd Floor Hallway [] All lights in working order. Fire Ext: 🔊 #31 🕅 #32 🕅 #33 🗗 #34 🔊 #35 Docks [] All lights in working order HInspect Fire Ext H #4 0 #5 1 #6 1 #21 1 #22 1 #23 1 #24 1 #25 1 #26 1 #27 #28 #29 []#36 MExit door in working order & Seals 240 Freezer/Cooler [] All lights in working order. Emergency Lights Checked [Exit Doors Blast [All lights in working order. Femergency Lights Checked Exit Doors 260 Freezer [[All lights in working order. I Emergency Lights Checked M Exit Doors Repack M All lights in working order. [] Inspect Door Dry/Cooler [] All lights in working order. Y Emergency Lights Checked Inspect Dry Exit Door [] Inspect Cooler Exit Door

> Rail Dock [1]] lights in working order

	[]Ir	nspect ra	il plates			
		Battery All li	Charging ghts in wo	rking order.		
Engine			.ghts in wo Sxt №#7 M	₽king order. #8		
	Ø A]	ne Room l lights spect Fi	2 in workin re Ext 🕅#	g order 30		
	[] Ir.	spect Fi	Warehouse re Ext M## Freezer	9 🕅 #10 🕅 #11	0 #12 № #13	10/#14
	[¶Ir	Office - spect Fi ights in	Warehouse re Ext 🅅 🛱 Office	15 № #16 № #17	₩#18 ₩#19	Э
	Fire	Office Ext: 🚯 ll Light	#26 s			
	Boil Fire	er House Ext: f	#20			
	Sho	P O				
Operatic Work center	on	0010 T2304-C	4	SPFacility C 2304	Check Scott Meyer	
Operations D	Descripti	on Long Text:				
Confirmation	numbe	r 6841	413			
Start date		6-1-2	\	End date	C	-2 -21
Hours worked	d	Ţ,	12,5	Time complet	ted	
Work Center		1230	4-04	Activity type		
Runtime hour	<i>"S</i>			Report abuse		
Confirmation	text		l	shts an	e ongo	un D
Spare Parts U	Used					

Spare Parts Goods Issue Complete? Yes / No





EGRESS, FIRE PREVENTION & FIRE PROTECTION



What We'll Talk About

- Escape Routes/Exits
- Emergency Action Plan
- Fire Prevention Plan
- Fires
- Fire Extinguishers
- Workplace Fire Prevention Tips





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Destruction!





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Workplace Fires

- On average kill more than 100 and injure more than 1,600 workers each year.
- There is a long and tragic history of workplace fires in this country caused by problems with fire exits and extinguishing systems.
- OSHA requires employers to provide proper exits, fire fighting equipment, and associate training to prevent fire deaths and injuries in the workplace.



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Escape Route

- "A continuous and unobstructed way of exit travel from any point in a building or structure to a public way (a street, yard, court or other open space leading to the street)"
- Three parts to an escape route:
 - the way of exit access;
 - the exit; and
 - the way of exit discharge



Escape Routes: General Requirements

- Fire alarms = required if a fire could start without providing adequate warning to occupants.
- Must be enough exits in proper arrangement for quick escape.
- Adequate and reliable illumination
- must be provided for all exit facilities.
- Escape Routes:
 - Minimum width = 28''
 - Minimum ceiling height = $7-\frac{1}{2}'$





Locking Exits

Must not install any lock or fastening device that impedes/prevents escape from the inside of any building





Locked and blocked exit

Access to Exits

- Exits must be readily accessible *at all times*.
- When room occupied by more than 50 people or contains high hazard contents, door from room:
 - To exit or escape route must be side-hinged swinging type
 - Swing in the direction of exit travel









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Maintaining Escape Routes





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Escape routes from all parts of a building must be continuously maintained free of all obstructions in case of emergency.

Blocked & Obstructed exit

Exit Marking

Exits *must be marked by a readily visible sign* when the exit or way to reach it is not immediately visible to occupants.



Exit Marking



If a door, passage, or stairway is not an exit or way of exit access, but may be mistaken for one, it must be identified by a sign reading "Not an Exit", "Storeroom", "To Basement", etc.



Exit Marking



Sign reading "Exit" with arrow indicating direction must be placed in every location where direction of travel to nearest exit is not immediately apparent.



Ingredients of a Fire



- There are three fundamental and essential "ingredients" necessary to produce the chemical reaction that is called fire:
 - <u>Oxygen</u> the catalyst
 - <u>Heat</u> the ignition source
 - Fuel solid, liquid, or gas that burns
- You remove one of these ingredients, you can extinguish the fire.

Fire Triangle/Tetrahedron

- Fire Triangle = Oxygen, heat, and fuel
- Fire Tetrahedron = Add chemical reaction
- Remove any of these items
 = No fire (fire goes out)
- Basic Fire safety/prevention = Keep fuel & ignition sources separate



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Portable Fire Extinguishers

If portable fire extinguishers are provided for associate use, employer must mount, locate, and identify them so workers can access without being injured.

Blocked

extinguisher



Do You See a Problem Here?







Letter classification on extinguisher designates class or classes of fire for which it will be effective.



COMMON COMBUSTIBLES WOOD, PAPER, CLOTH, ETC.

FLAMMABLE LIQUIDS & GASES GASOLINE, PROPANE &

LIVE ELECTRICAL EQUIPMENT COMPUTERS, FAX MACHINES

COMBUSTIBLE METALS MAGNESIUM, LITHIUM,

COOKING OILS & FATS

Extinguisher Classfication



- <u>Class "K" Fires</u>
- Grease made from animal fat.
- These fires usually burn very hot.
- Dangerous to extinguish.
- Special fire extinguishers used for these classes of fires.
- Usually in cooking or prcessing areas

Workplace Fire Prevention Tips



- <u>Eliminate Fire Hazards</u>: Keeping workspaces free of waste paper and other combustibles, replacing damaged electrical cords and avoiding overloaded circuits.
- <u>Prepare for Emergencies</u>: Making sure all smoke detectors work, knowing who to call in an emergency and participating in fire drills.
- <u>Report Fires and Emergencies Promptly</u>: Sounding the fire alarm and calling the fire department.
- <u>Evacuate Safely</u>: Leaving the area quickly in an emergency, using stairs instead of the elevator, and helping your coworkers.

Workplace Fire Prevention Tips



- Use and maintain wiring, tools, and equipment correctly. Keep everything oil and dust free.
- Uncoil an extension cord fully before use (use for temporary wiring ONLY). Be sure the amperage of the cord is appropriate for the job you are doing.
- Do not use equipment that delivers mild electrical shocks, gives off unusual heat or smells odd. If in doubt have it checked and repaired or replaced.
- Sweep up scraps of paper or material and dust as soon as possible.

Workplace Fire Prevention Tips

- Store flammable liquids in approved containers and locations.
- Do not use electrical equipment when flammable gases, vapors, liquids, dusts, or fibers are present.
- Insure trash is emptied frequently enough to prohibit a build up of combustibles in an area.





Using a Fire Extinguisher





Fire Extinguishers

- Not all fire extinguishers are the same.
- Use the proper class of fire extinguisher *only* on fires it was designed to extinguish.
- Know where fire extinguishers are located & what class they are.
- Number 1 thing = safety; only attempt to extinguish small fires!
- Never put a used fire extinguisher back in place-have it recharged.







General Requirements



- Fire extinguishers must be easily accessible <u>at all</u> <u>times</u>!
- Must not be obstructed by boxes, chairs, or other miscellaneous items.
- Should not be placed on the ground.
- Should be mounted in such a way they can't easily fall and injure someone.

Do You See a Problem?





Access to Fire Extinguisher Obstructed

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Any Problems Here?



Nothing should be placed in front, around, or next to a fire extinguisher

Marking Extinguisher Locations



• Fire extinguisher locator signs should be placed so extinguishers are easy to find during an emergency.





NGUIDOR

DEFUE



Fire Extinguisher Labels

- All fire extinguishers should have a label to indicate what class of fire they will extinguish.
- Most extinguishers use an international picture label.
- Become familiar with fire extinguisher labels *before* you need to use an extinguisher.





Pressure Gauge



Any problems here?

Extinguisher needs recharging



Needle on pressure gauge should be in "operable range."

Portable Fire Extinguishers



- General Requirements
 - Mount, locate and identify extinguishers so that they are readily accessible
 - Only approved extinguishers shall be used
 - Maintain extinguishers in a fully charged and operable condition

Class A Extinguisher

Class A Fires

- Extinguish these fires by
 - using heat absorbing (cooling) chemicals that retard combustion
 - interrupting the combustion chain reaction
- Common extinguisher contents
 - high pressure water
 - high pressure water solution







Class B Extinguishers

Class B Fires

- Extinguish these fires by
 - excluding oxygen (air)
 - inhibiting the release of combustible vapors
 - interrupting the combustion chain reaction
- Common extinguisher contents
 - dry powder chemical(s)





Class C Extinguishers

Class C Fires

- Extinguish these fires by
 - using nonconductive extinguishing agents
 - de-energizing electrical equipment and then treating the fire like a Class A or Class B fire
- Common extinguisher contents
 - the same as those for Class A and B fires







Class D Extinguishers

Class D Fires

- Extinguish these fires by
 - using a heat-absorbing extinguishing medium that does not react with the burning metal
- Common extinguisher contents
 - different dry powders that are effective for different kinds of combustible metals





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To Use a Fire Extinguisher



- Remember the word **P.A.S.S.**
- P <u>Pull the pin</u> on the fire extinguisher handle.
- A <u>Aim the nozzle/horn</u> of the extinguisher
- at the base/bottom of the fire.
- S <u>Squeeze the handles together</u> to make the extinguisher work.
- S <u>Sweep the extinguisher from side to side</u> as if using a broom.

How to Decide to Fight a Fire



- you don't know what is burning
- it is spreading rapidly
- you don't have the appropriate equipment
- your instincts tell you not to
- there is a chance that you might inhale toxic smoke





Fighting a Grease Fire



- Ammonium phosphate dry chemical can be used on Class A,B, and C fires, but should never be used on a fire in a commercial grease pit because of the possibility of reflash and because it will render the fryer's automatic fire-protection system less effective.
- Sodium bicarbonate dry chemical, suitable for fighting Class B and Class C fires, is preferred over other dry-chemical extinguishers for fighting grease fires. Where provided, always use the extinguishing system first.
Fighting a Grease Fire



- Potassium bicarbonate, urea-based potassium bicarbonate, and potassium chloride dry chemical are more effective and use less agent than sodium bicarbonate on the same fire.
- It is extremely dangerous to use water or an extinguisher labeled only for Class A fires on a fire involving flammable liquids (such as grease) or energized electrical equipment.

If You Decide to Fight a Fire

- Do not endanger yourself or others
- ALWAYS position yourself with an exit or means of escape at your back before you attempt to fight a fire



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After Using a Fire Extinguisher



- Never put the used extinguisher back up on the wall (even if used for only five seconds)!
- A fire extinguisher that's been used may not operate again due to the pressure inside leaking out.
- Notify the appropriate individual/department so the used extinguisher can be replaced and recharged as quickly as possible.

Conclusion

- Fire extinguishers are everywhere within buildings, work places, hotels, and hopefully YOUR HOME!
- Being comfortable using extinguishers involves being familiar with them.
- Make sure you know where the closest fire extinguisher is, what type it is, and what class of fire it can be used to extinguish.
- Remember, being able to use a fire extinguisher correctly could save your life or the lives of others!













Fire Watch in Place



Hot Work and Fire Watch

Training

Revised 6/25/2020

Hot Work Permit and Procedures



PURPOSES of this training are:

- To control NON-routine work conducted in the facility**
- To prevent accidents associated with welding and cutting in in the facility**
- To prevent accidents associated with welding and cutting in any area outside of the designated hot work area.
- To alert Operations employees of hot work being performed in their work area

** The term "facility" refers to Americold property (inside and/or outside of all buildings); all areas, especially where there is refrigeration piping, valves & equipment.



Hot works is part of the many safety program including but not limited to Process Safety Management.

- OSHA Standards: 29 CFR 1910.119(k) & 1910.252(a)
- EPA (RMP rule): Section 68.79
- OSHA Standard: 29 CFR 1910.252
- NFPA 101, 25 and 72

An OSHA & EPA compliant Hot Work Program requires that a hot work permit is issued and additional precautions are taken when:

- Welding*
- Cutting*
- Brazing*
- Soldering*
- Grinding*
- Using a direct flame in any area*
- Exposure of any energized electrical conductors*

* Permit SHALL be issued prior work beginning if these activities occur in process areas. If work can be moved, it should be relocated to a non-process area, (i.e., welding shop)

- Permits will be downloaded from the Global Risk Consultants (GRC) web sight: www.globalriskconsultants.com
- Click "Client Tools & Impairment/Hot Work Permit"



Download, complete and print prior to posting at the hot work site.

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- Hot work needs to be authorized
 - The GRC Hot Work Permit must be completed, printed and have MANAGEMENT review, approval and be signed PRIOR to hot work beginning.
- Before cutting or welding is permitted, the area shall be inspected by the individual responsible for authorizing hot works operations.
- This individual shall designate precautions to be followed in order to grant authorization to proceed with the hot works.
- Fire watch time durations shall be set and entered on the permit.

• **BEFORE** the permit is issued, the employee or supervisor completing the permit, shall inspect the work area to determine whether fire watchers are necessary.

Examples of when fire watch is not needed:

- Cutting locks off trailers \rightarrow trailers must be moved away from the dock 35 feet prior to cutting
- Hot works are conducted in areas identified as welding areas.

NOTE: If welding/cutting is to occur in the maintenance shop, this activity has to be conducted where there are **NO** flammables or combustibles within 35 feet.

** For further questions about this areas where a fire watch may not be needed, contact the Process Safety Manager or Regional Safety Manager**





OSHA's standard 1910.252(a) requires fire watchers when:

- "Other than a minor fire" might develop
- "Appreciable combustible material, in building construction or contents, closer than 35 feet (10.7 m) to the point of operation"
- "Appreciable combustibles are more than 35 feet (10.7 m) away but are easily ignited by sparks."
- "Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation".







FIRE WATCHERS MUST:

- Have the correct fire extinguishing equipment readily available, (ABC for combustibles, type D for metals)
- Have training for proper use of portable fire **extinguishers in the last 12 months.**
- Have two way radio contact with operations in case evacuation is needed.
- Watch for fires in all exposed areas
- Try to extinguish fires only when obviously within the capacity of the equipment available, ('trash can" or incipient stage fire), or otherwise sound the alarm.

A fire watch shall be maintained for up to one hour after completion of welding or cutting operations to detect and extinguish possible smoldering fires. (timing must be determined ahead of the hot work)

The FSM or designee must return to the area every hour for up to 4 (four) hours after the work is completed to verify no fires exist. (timing must be determined ahead of the hot work)



Hot works will not be permitted in the following areas:

- -In areas not authorized by management,
- -In areas where the permit has not been approved
- -In sprinkled buildings while such protection is impaired.
- -In the presence of explosive atmospheres (mixtures of flammable gases, vapors, liquids, or dusts with air),
- -In the presence of explosive atmospheres that may develop inside un-cleaned tanks or equipment which have previously contained flammable materials.

THINK Safety ALWAYS



Before starting hot work:

-Know where the closest fire alarm pull station is located (if applicable).

-Ensure work area is securely barricaded from unauthorized entrants, (pedestrian & MHE traffic).

-Have and wear **all** the appropriate personal protective equipment. (review pertaining SDS)

-Move combustibles at least 35 feet from hot work operations.

-If combustibles cannot be moved, protect these by using metal guards or flame proof curtains.

-Ensure that fire watch is implemented and adequate portable fire extinguishers are available.



Conducting Hot works:

- Monitor the area for flammable or combustible materials, if there is a chance of flammable gas release. Use portable gas detector for continuous monitoring. (Confined Spaces monitors also measure LEL. Use these if necessary)
- > Maintain adequate ventilation to avoid exposure to toxic fumes.
- > Wear appropriate Personal protective equipment
- torch valves shall be closed and the gas supply to the torch positively shut whenever the torch is not to be used for a substantial period of time, such as during lunch hour or overnight
- When arc welding is to be suspended for any substantial period of time, such as during lunch or overnight, all electrodes shall be removed from the holders and the holders carefully located so that accidental contact cannot occur and the machine disconnected from the power source





Completing hot works operations & securing the permit:

-Fire Watch must remain at the hot work site for **up to one hour** (timing must be determined ahead of the hot work).

-The FSM or designee must return to inspect the area every hour for up to four (4) hours (time designated on Permit) following the hot work to ensure that there are no fires or smoldering fires (timing must be determined ahead of the hot work)

-After the final inspection, the Hot work must be signed and kept until reviewed by Management The permit shall be audited within 24 hours of the completion of the hot work.

-Complete the appropriate information in the Hot work log. (see example on next Slide)

-If deficiencies were observed in the completed permit, or, inconsistencies were observed during the hot work activity, the FSM or management designee will review the deficiencies, *(within 24 hours of the audit),* with the associate who completed the permit & conducted the hot work in order to improve future practices.

-This review will be documented. (The FSM or management designee can use an training sign off sheet or an "OJT" form for this documentation)





Appendix Three

Hot

Work

DATE	Location of Work	Type of Work Performed	Permit Audited Y/N	Name of Fire Watch Monitor	Name and Date of GM/FSM Reviewing Permit
_					
				-	
-					
			-		
			1		

Sprinkler/Alarms System Impairments



The Americold Fire Protections programs are consistent with the OSHA and NFPA requirement for Fire Watch during periods of fire suppression system or alarm system impairment.

GRC-Fire Watch



The assignment of a person or persons to an area for the express purpose of notifying the fire department, the building occupants, or both of an emergency; preventing a fire from occurring; extinguishing small fires; or protecting the public from fire or life safety dangers. NFPA 101-3.3.91

A fire watch should consist of trained personnel who continuously patrol the affected area. Ready access to fire extinguishers and the ability to promptly notify the fire department are important items to consider. During the patrol of the area, the person should not only be looking for fire, but making sure that the other fire protection features of the building such as egress routes and alarm systems are available and functioning properly. [NFPA 25:A.15.5.2(4)(b)] NFPA 1-A-13.3.3.6.5.2(4)(b)

GRC-Fire Watch (cont.)



A fire watch may involve some special action beyond normal staffing, such as assigning an additional security guard(s) to walk the areas affected. These individuals should be specially trained in fire prevention and in occupant and fire department notification techniques, and they should understand the particular fire safety situation for public education purposes. **NFPA 101-A.9.6.1.7**

Where a required fire alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service. **NFPA 101-<u>9.6.1.6*</u>**

Where a required automatic sprinkler system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the sprinkler system has been returned to service. **NFPA 101-9.7.6.1**

GRC-Fire Watch (cont.)



The Fire Watch members shall:

- Patrol the area, structure or facility and document the patrol a minimum of once every hour.
- Be trained in the use of a fire extinguisher and have one accessible at all times.
- Be capable of communicating with building occupants and the fire department to notify them about fires or other emergencies.
- Maintain a record of the Fire Watch for inspection.

These procedures are to be followed during ALL HOURS OF OCCUPANCY until such time as the systems are back online and certified and approval has been received.

FAILURE TO FOLLOW FIRE WATCH GUIDELINES MAY RESULT IN FINES AND/OR THE AFFECTED AREAS BEING RESTRICTED FROM OCCUPANCY UNTIL SUCH TIME AS REPAIRS ARE COMPLETED, BY ENFORCEMENT OF LOCAL CODE.



Hot Work Permit

Permit No.:

Hot Work equipment in good repair

Required Precautions Checklist

(must be retained as record of hot work activity) Available Sprinklers, hose streams, and extinguishers are in service/

There are no safer ways of effectively/efficiently doing this job.

operable

Other

Instructions

1. Person doing hot work: Indicate time started and post permit at hot work location. After hot work, indicate time completed and leave permit posted for Fire Watch. 2. Fire Watch: Prior to leaving area, do final inspection, sign, leave permit posted and notify Permit-Authorizing Individual.

3. Monitor: Do final inspection at end of monitoring period. Sign and return to Permit-Authorizing individual.

Who, When, and Where?

Hot Work Being Done By					Combustible/fla deposits (from
	Employee	Contractor			flammable/com
	Name of Person Doing Hot Work				Explosive atmo
	Date	Job/Work Order Number			Floor swept cle
					Combustible flo
	Location/Building and			sheets	
				Remove other	
	Description of Job				
					All wall and floo
				Fire-resistant ta	
	I verify the above loc			Work on	
	checked on the Requito prevent fire, and p			Construction is insulation	
	Signatu			Combustibles of	
					Enclosed equip
	Time Started:	Time Finished:			Containers pur
					Fire watch/
	Expiration Date	Expiration Time			Minute breaks.
					Fire watch is su
					small hose
	Work area and all ad have spread were ins			Fire watch is tra alarm	
	were no signs of fire			Include addition	
	Time	Signature of Fire Watch			Hours
					periodi

Hours following hot work that work area was nonitored with no signs of fire or smoldering

naterials

Signature of Fire Monitor

Time

Rev. 10/18/19

Requirements within a 11 m (35 ft.) "sphere" of work: Combustible dust or lint-producing equipment shut down Conveyors, ducts, blowers, and other equipment capable of ammable materials removed, including; dust, lint, oil all surfaces), packaging or stored materials, and nbustible liquids. osphere in area eliminated ean oor wet down, covered with damp sand or fire-resistan combustibles where possible. Otherwise protect with arpaulins or metal shields or openings covered arpaulins suspended beneath work walls/ceilings or enclosed equipment: non-combustible. No combustible covering or on other site of walls moved away oment cleaned of all combustibles rged of flammable liquids/ vapors hot work area monitoring requirements: es after work is completed, including all coffee or lunch that Fire Watch will be provided. upplied with suitable extinguishers and/or charged ained in the use of this equipment and in sounding nal watch for adjoining areas, above, or below after job is completed that hot work area will be lically inspected/monitored

WARNING!

HOT WORK IN PROGRESS WATCH FOR FIRE!

IN CASE OF AN EMERGENCY CALL: AT: **WARNING!** Other precautions taken: Confined Space or Lockout/ Tagout permit completed if needed Area smoke or heat detection has been disabled if present Fold Her Global Risk Co Global Risk Consultants

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