

## **Asbestos Abatement Closeout Report**

Concord Elementary School 3811 SE Concord Road Milwaukie, Oregon 97267

Prepared for:

Toward A New
Excellence

North Clackumas Schools

North Clackamas School District 12451 SE Fuller Road Milwaukie, Oregon 97222

September, 2010 PBS Project No. 21078.021

#### PROJECT CLOSEOUT REPORT

For

North Clackamas School District

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Prepared by

PBS Engineering + Environmental 4412 SW Corbett Avenue Portland, Oregon 97239

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TAB 1: SUMMARY

#### **PROJECT SUMMARY**

#### INTRODUCTION

Between June 21, 2010 and July 12, 2010, PBS Engineering + Environmental (PBS) conducted air monitoring and project oversight during asbestos abatement at Concord Elementary School in Milwaukie, Oregon. Abatement work was conducted to facilitate planned renovation work at this school. Abatement was performed by Performance Abatement Services (PAS) of Vancouver, Washington. Reference Tabs 4 and 5 for contractor licensing, qualifications, and logs of supervisors and workers used on this project.

The following approximate quantities of asbestos-containing materials were removed from the building (in both base bid, alternates and change orders) as part of this project:

- Approximately 2,300 square feet of non-asbestos floor tile with asbestos-containing mastic in the cafeteria on the lower level.
- Approximately 2,850 square feet of gypsum wall and ceiling systems with asbestos containing joint compound in the office area.
- Approximately 250 linear feet of pipe insulation in the lower level classrooms.
- Approximately 590 horizontal feet of complete window assemblies of varying heights and sizes with asbestos containing caulking, glazing compound and CAB panels. (see drawings for specific locations)
- Approximately 40 square feet of mastic removal behind wainscot panels in the office area.
- Approximately 50 square feet of debris in classrooms 11 and 13 as a result of unit ventilator removal.

Reference abatement plans and specifications in Tab 6 for additional abatement project information.

Listed below are descriptions of the engineering controls, work practices and air monitoring sampling methodologies utilized during this project.

#### **ENGINEERING CONTROLS AND WORK PRACTICES**

Abatement was performed in containment with critical barriers, decontamination chambers and negative-air pressure. The work area was regulated by placement of appropriate signage at the entrance to the abatement area. Glove bag removal was performed on pipe insulation in remote areas outside containment.

Throughout the duration of the project, workers utilized half-face negative pressure air purifying respirators, Tyvek coveralls, gloves, boots and other personal protection equipment, as appropriate.

All regulated asbestos-containing materials were double-bagged or drummed prior to removal from the work area. Labels were applied to the bags in accordance with standards developed by the Oregon Department of Environmental Quality (DEQ). The asbestos-containing materials and contaminated building components were disposed of at the Waste Management Landfill located in Hillsboro, Oregon.

All asbestos abatement was performed in compliance with applicable federal, state, and local regulations, project specifications, and contractual obligations.

#### VISUAL INSPECTIONS AND AIR SAMPLING

A PBS AHERA-certified inspector and/or a NIOSH certified 582 air technician were on-site during critical points of abatement on the project. PBS performed visual inspections of the work area for any residual asbestos-containing materials. The inspections are conducted to verify completion of the work and ensure proper removal of asbestos-containing materials in the removal area. Visual inspections were also performed in adjacent spaces to monitor the integrity of the containment, to identify potential problems outside the immediate work area and mitigate them, if necessary.

PBS performed ambient air monitoring in adjacent areas during the abatement. Air sample analysis revealed that the containment was successful at containing dust during abatement. The abatement contractor was responsible for Occupational Safety and Health Administration (OSHA) compliance for personal exposure monitoring.

In addition to the visual inspection, PBS collected clearance air samples for analysis via transmission electron microscopy (TEM). Analysis of all samples resulted in airborne fiber levels below the Environmental Protection Agency clearance standard of 70 structures per square millimeter (struc./mm²) of air. Clearance results were communicated to all appropriate parties.

Air monitoring inventory and analytical reports are included in Tab 3.

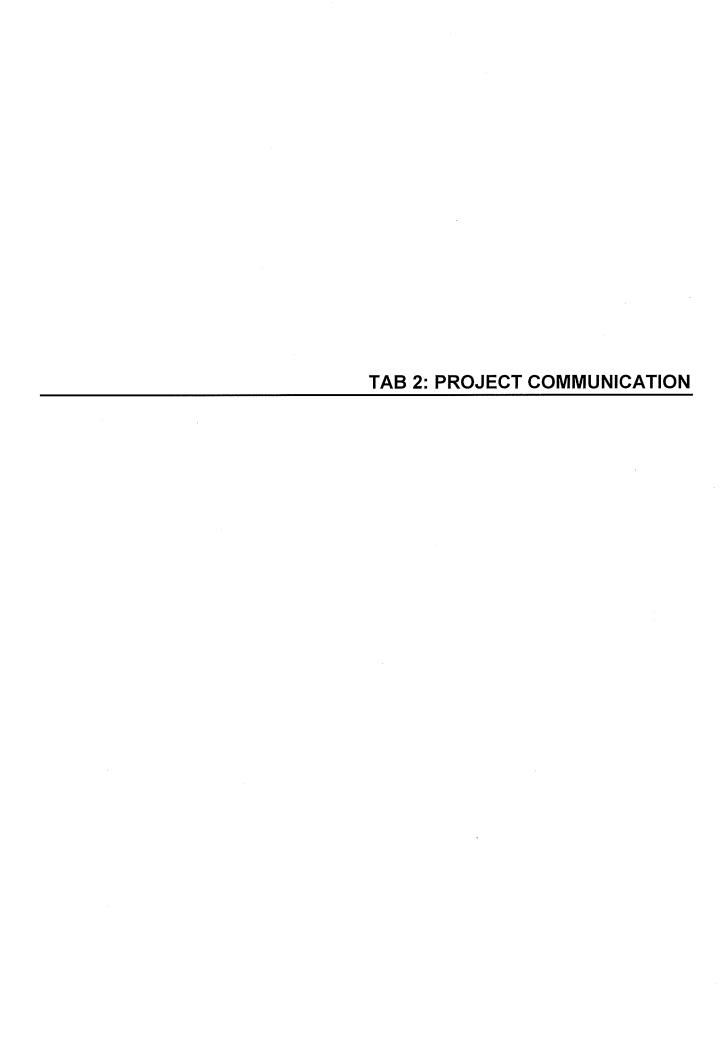
#### CERTIFICATION

PBS has compiled this report consistent with the project scope and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

Signature

Date

Steve Dilling Project Manager

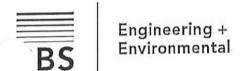




## FIELD OBSERVATION REPORT Project Name: NCSD COLCORA Contractor: PAS Project No.: 21078,021 PBS Site Observer(s): A Y DOALE Phase No. 603 Task: Date: 07.07, 10 Contractor On-site Personnel: Report No: Time: Page 1 of 1 Project Manager: STRV6 Foreman: CLADY Temp.: Weather: Summary Project Status: WILLOW How Many? Workers? Other Personnel On-site: Air Monitoring Personnel On-site: Items Observed (Work Practices & Procedures): CREW CONTINUES TO GLOVE BAG TO IN MORTHWARE LOWER Print or Type Name and Title The individual signing certifies that the above Ital Defrek 144 fact information is correct and accurate. 67.07.10

Authorized Signature

Date

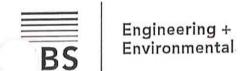


### FIELD OBSERVATION REPORT Project Name: NCSD CONCORD Contractor: Project No.: 21078.021 Phase No. 603 PBS Site Observer(s): Task: Date: 07.06.10 Contractor On-site Personnel: DA-Page 1 of 1 Project Manager: STEVE Report No: Time: Temp.: Foreman: CLARIC Weather: GLOVEBAG/WILLOW PEM Summary Project Status: How Many? Workers? Other Personnel On-site: Air Monitoring Personnel On-site: Items Observed (Work Practices & Procedures): CRED IS WORKING @ OTHER SCHOOL SITE ASSISTING STALL CAENS WORK WILL CONTINUE GLOVE-BAGGING IN BYSOMENT CHASSLOCOMS IN MORET WING AND WINDOW REMOVAL The individual signing certifies that the above Print or Type Name and Title SAL J BOBILE information is correct and accurate.

07.06.10

Date

Authorized Signature



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Contractor.	Project No.: 21078.621			
PBS Site Observer(s):	Phase No. 203	Task:		
Contractor On-site Personnel:	Date: 07.02-	10		
Project Manager: 57EVE	Report No:	A A 1	Page 1 of 1	
Foreman: CAALK	Weather:		Temp.: °F	
Workers? How Many?	Summary Project S	Status: GLOUBAG/	wallow PG	
Air Monitoring Personnel On-site:	Other Personnel O			
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## FIELD OBSERVATION REPORT Project Name: NESD concord PAS Contractor: Project No.: 21078.021 PBS Site Observer(s): JAY DOTALE Phase No.: 003 Task No.: Date: 7. 01.10 Contractor On-site Personnel: Project Manager: STRUE D Time: 04/ Report No: Page 1 of 1 Foreman: CARK Weather: Temp.: Summary Project Status: WWW DOWS ISUL OFFICE MASTIC Workers? How Many? Air Monitoring Personnel On-site: Other Personnel On-site: Items Observed (Work Practices & Procedures): CAEN WORKING ON GLOUR BAGGING TSI IN KOLTH WING, MASTIC NEMENAL IN OFFICE BEHOLD WALL PANEL & WINDOW REMOVAL OF NORTH WILL The individual signing certifies that the above Print or Type Name and Title information is correct and accurate. SAY J BOAME 1 H JECK

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Date

07.07.10



# FIELD OBSERVATION REPORT Project Name: NCSD COMODO

DAS Contractor: Project No.: 21078 -021 PBS Site Observer(s): Phase No.: 653 BLAGA Task No.: Date: 6 30.10 Contractor On-site Personnel: Project Manager: 576 JG ) Time: Page 1 of 1 Report No: Foreman: CARL Temp.: Weather:

Workers? How Many?	Summary Project Status: WINDOWS GLOVE BAGTS
Air Monitoring Personnel On-site:	Other Personnel On-site: SC/CONTACTORS
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Print or Type Name and Title

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## FIELD OBSERVATION REPORT DAS Project Name: NCSD CONCORD Contractor: Project No.: 21077. 621 PBS Site Observer(s): 17 DOANE Phase No.: 003 Task No.: Date: 06. 29.10 Contractor On-site Personnel: Project Manager: STEVE Time: DA+ Report No: Page 1 of 1 Foreman: CLARICS Weather: Temp.: Workers? Summary Project Status: WILLOW PEMOJAL How Many? Air Monitoring Personnel On-site: Other Personnel On-site: SC/DOSTAICT Items Observed (Work Practices & Procedures): CREW WORK, IG ON REMOVAL OF WINDOWS ON KIGHTH SITE OF BUILDING BADRIBETARE DEMADRATES WHILL AREA, CREW IN PRE OF DEPOSABLE COVER ALLS + 1/2 FOR DESPONDED UNGE TA FITELS The individual signing certifies that the above Print or Type Name and Title

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information is correct and accurate.

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Authorized Signature

06.29.10 Date



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Contractor: PAS	Project Name: NCSD CONCORD
Contractor.	Project No.: 21078-021
PBS Site Observer(s):	Phase No. Task:
Contractor On-site Personnel:	Date: 06.28.10
Project Manager: STENE D	Report No: Time: DAY Page 1 of 1
Foreman: CAR	Weather: Temp.: °F
Workers? \(\frac{1}{2}\) How Many? \(\frac{5}{2}\)	Summary Project Status: OFFICE CLAPANA ( WILDOW)
Air Monitoring Personnel On-site:	Other Personnel On-site:
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PBS Site Observer(s): LAT DOALE	Phase No. 005	Task:	
Contractor On-site Personnel:	Date: 6.25.10		
Project Manager: STEVE D	Report No:	Time: DAY	Page 1 of 1
Foreman: CLARK	Weather:		Temp.: °F
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Workers? How Many? 9  Air Monitoring Personnel On-site:	Other Personnel On-s		
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Contractor: PAS	Project Name: MCSB CO-JCORD
	Project No.: 21078 .021
PBS Site Observer(s): 1A-1 NOALL	Phase No. OS Task:
Contractor On-site Personnel:	Date: 6 . 24,10
Project Manager: STEVE D	Report No: Time: DA - Page 1 of 1
Foreman: CLARIL, R.	Weather: Temp.: °F
Workers? Y How Many? 5	Summary Project Status: OFFICE DEMO
Air Monitoring Personnel On-site:	Other Personnel On-site:
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Authorized Signature

Date



### FIELD OBSERVATION REPORT Project Name: NCSA CONCORD PAS Contractor: Project No.: 21078.021 Phase No. 003 PBS Site Observer(s): JAY Task: Date: ( . 23.10 Contractor On-site Personnel: Time: D4. Page 1 of 1 Project Manager: STEVE D Report No: Temp.: Weather: CLARIC Foreman: Summary Project Status: CLEADING OFFICE DEMO How Many? Workers? Other Personnel On-site: Air Monitoring Personnel On-site: Items Observed (Work Practices & Procedures): 1000 UISUAL INSPECTION OF LOWER LEVEL CAFFETERIA. NO of ACM OBSELVED SLIGHT STANDALG OF SCAB FILLER LOCK DON'T ARTHED 1/80 AGGRESSIVE TEM GAMPUNG 1330 SAMPLING COMPLETE. OFFICE CONTACTION OF GYA CEILING BEGINS he individual signing certifies that the above or Type Name and Title LAND DOANS IHIER information is correct and accurate.

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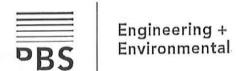
Authorized Signature

3.10 Date



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Contractor:  Project No.: 21078.621					
	Phase No. Task:				
PBS Site Observer(s):	Date: 6 22 10				
Contractor On-site Personnel:	Report No: Time: Page 1 c	of 1			
Project Manager:	Weather: Temp.:	۰F			
Foreman:	Summary Project Status: VAT Dany CAFET				
Workers? How Many?					
Air Monitoring Personnel On-site:	Other Personnel On-site:				
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## FIELD OBSERVATION REPORT Project Name: NCSD CONCOLD PA Contractor: Project No.: 21078.021 Phase No. 003 PBS Site Observer(s): 4A-DOANT Task: Date: 06.21.10 Contractor On-site Personnel: Project Manager: STEVE Page 1 of 1 Time: Report No: Temp.: Foreman: CVADIL Weather: Summary Project Status: PDE P How Many? Workers? Other Personnel On-site: CONTAC Air Monitoring Personnel On-site: Items Observed (Work Practices & Procedures): DTO PBS ON SITE - MEET WISTERE The individual signing certifies that the above Print or Type Name and Title HOST HI BROOK LYAC information is correct and accurate.

Authorized Signature

Date



## Engineering + Environmental

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VISUAL INSPECTION CHECKLIST
(USE FOR VISUAL INSPECTION, PRE-ENCAPSULATION & FINAL INSPECTION)
Contractor: PAS  PBS Site Observer: JAY WAVE  Project Manager: 57 60 6 9  Project Name: NCSB COUCOAD ES  Project Number: 21078.021 P#00  Abatement Area: CAFE, CRIA  Attached Report No.:  Date: 6 7 9 10 Time: 1000
Contractor On-Site Personnel Foreman: CLARK R Other Personnel On Site:
Type of Inspection: □Visual Inspection, □ Pre-Encapsulation, □ Final Inspection, □ Other
Number of Workers:
removed
Condition of Regulated Work Area appears: ☐ Satisfactory ☐ Unsatisfactory
FIELD OBSERVATION NOTES: Include: 1) Work Practices, 2) Delays, 3) Items Discussed W/ Contractor, 4)  Scope Changes, 5) Project Concerns  NO EVIDER AREAD. VATAN DESCRIPTION OF SUB-  PRE AREAD. VATAN DEMOND VIA WETMANUAL METHADS  PRE AREAD. VATAN DEMOND VIA WETMANUAL METHADS  PRE AREAD. VATAN DEMOND VIA WETMANUAL METHADS  WASHING FOR COVERALS & 1/2 FAIL RESPINATION  MAGELLA FILTER
The individual signing has visually inspected this area and found that the above information is complete and accurate.
ANY DEFICIENCIES MUST BE CORRECTED BEFORE CLEARANCE MAN BE STARTED  Authorized Signature:  Title: ITTCH



### ASBESTOS WORKSITE CHECKLIST

(USE DURING WORKSITE PREPARATION AND AS A DAILY WORKSITE CHECKLIST)

Contractor: PAS	Project Name: NCSD
PBS Site Observer: JAY DOAJE	Project Number: 21078.021 #203
Project Manager: STEWED	Abatement Area: CAFETCL(A
Owner Contact:	Attached Report No.:
Air Monit. Personnel On-Site:	Date: 6.21.0 Time: AM/PM
Contractor On-Site Personnel	
Foreman: CLARK Other Personnel	on Site:
Number of Workers: S	In REMOUAL Page of
Type of Inspection: Worksite Preparation,	☐ Daily Worksite Checklist, ☐ Other
Pre-Abatement Air Samples:	
CLEAN ROOM:  Warning Signs Posted  Worksite Entry Logbook  Decontamination, Respirator & Work Procedures Posted  First Aid Kit  Street Clothes Storage  Sufficient Airlocks  Hot & Cold Water with Controllable Taps  Soap & Towels  Drain with Filters or Wastewater Storage  Decontamination Set-up and Construction Appearance:  Work Area Set-up and Construction Appearance:  Other (describe)	WORK AREA:  ☐ Critical Barriers Established ☐ Negative Pressure System Operational Number of Negative Air Units ☐ CFM of Negative Air Units ☐ Manometer Operational & Measuring Press. Diff. ☐ Ground Fault Interrupter on Electrical Items ☐ HVAC Isolated ☐ Emergency/Fire Exits Established ☐ Adequate Number of Fire Extinguishers  Satisfactory ☐ Unsatisfactory Satisfactory ☐ Unsatisfactory ☐ Other (describe) ☐ Other (describe)
FIELD OBSERVATION NOTES: Include: 1) Work practices; 2) Delays; 3  PPR OF DISPOSABLE HEAD TO TOC CON  LEST MAGENTA FINTERS	3) Items Discussed w/Contractor; 4) Scope Changes; 5) Project Concerns
The individual signing has visually inspected this area and for	und that the above information is complete and accurate.
me:	Authorized Signature:
ce: Contractor	Title: 1HTQ-U

TAB 3: ASBESTOS/LEAD AIR AND BULK SAMPLE INVENTORIES/LABORATORY REPORTS



#### **AIR SAMPLING PROCESS**

Air samples are taken to determine representative fiber levels in the air, as an index to the potential asbestos content of the air. This is done to ensure the safety of the abatement workers and other personnel in the building, and to assist in determining if the building is safe for public occupancy after asbestos removal. The sampler is a pump and filter cassette arrangement through which the air is drawn. The fibers in the air are then deposited on the filter where they can be subsequently analyzed under a microscope.

#### **EQUIPMENT**

High volume air sampling pumps are a.c. - powered and used when large volumes of relatively clean air need to be sampled. These pumps typically operate at flow rates of about 10 liters of air per minute. Low volume pumps are battery operated and are primarily used for personal monitoring. They operate at 1.0 to 2.5 liters per minute flow rates.

#### PERSONAL EXPOSURE MONITORING

According to the OSHA code, an employer must perform monitoring to determine the exposure level for each employee, or at least the exposure for each type of task on the abatement project. Breathing zone air samples are collected to represent full shift exposure. This could be one sample or a series of samples representing a period of 6 to 7 hours or more.

#### **AREA MONITORING**

Ambient air samples are collected outside of abatement work areas to detect possible elevated fiber levels as a result of abatement. "Clearance" samples are a type of ambient air sample, and are taken prior to removing plastic isolation barriers to confirm that the space is safe to reoccupy without respiratory protection. The EPA recommended clearance level is 0.01 fiber per cubic centimeter (f/cc) of air for sample cassettes analyzed using phase contrast microscopy. In school buildings, if materials abated exceeds 160 square feet of asbestos-containing material (ACM) or 200 linear feet of ACM in a single containment, a total of five air samples are collected. The EPA clearance level is less than 70 structures per millimeter squared (<70 Struct./mm²) cumulative average of the set of five samples using transmission electron microscopy.

#### QUALITY CONTROL PROCEDURES

Air sampling pumps are calibrated before and after use to determine accurate flow rates. Microscopes are also frequently adjusted for proper operation. All equipment undergoes routine maintenance to ensure optimal functioning.

PBS analysts have completed air sampling/analysis training courses and participate in an internal quality control program, a national sample exchange program, and the American Industrial Hygiene Association's Proficiency Analytical Testing Program (PAT). This variety of quality control practices ensures the highest possible proficiency.

"Blanks" are unused filter cassettes that are periodically analyzed to determine the level of background fibers on the filters. All samples undergo chain-of-custody documentation. Records are kept of equipment calibration and maintenance.

### AIR SAMPLE ASBESTOS ANALYSIS

North Clackamas School District Client:

c/o JJ Henri Co.

Milwaukie, OR 97222

Project: Construction Period Services

Concord Elementary Hazmat Svcs

Report Date:

09/09/2010

Date Received: 06/29/2010

Client Project ID: N/A

PBS Project No.:21078.021 0003

Page No.:

1 of 3

				-		
PBS LAB ID/ CLIENT ID	DATE, LOCATION WORKER NAME, ACTIVITY, PPE, ETC.	MINUTES SAMPLED	AVE. FLOW RATE (LPM)	AIR VOLUME (L)	FIBERS/ FIELDS	FIBERS PER cc (f/cc)
A21078.021-0001	6/21/2010 - Blank				0/100	0 fiber(s)
A21078.021-0002	6/21/2010 - Blank				0/100	0 fiber(s)
A21078.021-0003	6/21/2010 - Pre-abatement Basement; cafeteria	107	14.4 LPM	1541 L	62.5/100	0.02 f/cc
	A: 0.063 B: 0.035 C: 0.002					
A21078.021-0004	6/21/2010 - Pre-abatement Main office	109	14.4 LPM	1570 L	34.5/100	0.011 f/cc
	A: 0.034 B: 0.019 C: 0.002					
A21078.021-0005	6/22/2010 - Outside work area Decon entrance; cafeteria	279	9.8 LPM	2734 L	30.5/100	0.005 f/cc
	A: 0.016 B: 0.009 C: 0.001					
A21078.021-0006	6/23/2010 - Clearance-TEM Lower level cafeteria vinyl floor tile/mastic	130	9.8 LPM	1274 L	See Attached TEM An	alysis Report
A21078.021-0007	6/23/2010 - Clearance-TEM Lower level cafeteria vinyl floor tile/mastic	130	9.8 LPM	1274 L	See Attached TEM An	alysis Report
A21078.021-0008	6/23/2010 - Clearance-TEM Lower level cafeteria vinyl floor tile/mastic	130	9.8 LPM	1274 L	See Attached TEM An	alysis Report
A21078.021-0009	6/23/2010 - Clearance-TEM  Lower level cafeteria vinyl floor tile/mastic	130	9.8 LPM	1274 L	See Attached TEM An	alysis Report
A21078.021-0010	6/23/2010 - Clearance-TEM  Lower level cafeteria vinyl floor tile/mastic	130	9.8 LPM	1274 L	See Attached TEM An	alysis Report
A21078.021-0011	6/24/2010 - Outside work area Office hall; gypsum/joint compound remova	226 I	6.9 LPM	1559 L	17/100	0.005 f/cc
	A: 0.016 B: 0.009 C: 0.002					

Engineering + Environmental

#### AIR SAMPLE ASBESTOS ANALYSIS

North Clackamas School District Client:

c/o JJ Henri Co.

Milwaukie, OR 97222

Project: Construction Period Services

Concord Elementary Hazmat Svcs

Report Date:

09/09/2010

Date Received: 07/30/2010

Client Project ID: N/A

PBS Project No.:21078.021 0003

Page No.:

2 of 3

Room 1 A: 0.013 A21078.021-0013 6/24/202 Office h: A: 0.009 A21078.021-0014 6/28/202 Office; g A21078.021-0015 6/28/202 Office; g A21078.021-0017 6/28/202 Office; g A21078.021-0018 6/28/202 Office; g A21078.021-0019 6/28/202 Room 1 A: 0.019 A21078.021-0020 6/28/203 North w A: 0.009 A21078.021-0021 6/28/203	DATE, LOCATION WORKER NAME, ACTIVITY, PPE, ETC.	MINUTES SAMPLED	AVE. FLOW RATE (LPM)	AIR VOLUME (L)	FIBERS/ FIELDS	FIBERS PER cc (f/cc)
A21078.021-0013  6/24/202 Office h:  A: 0.009  A21078.021-0014  6/28/202 Office; g  A21078.021-0015  6/28/203 Office; g  A21078.021-0017  6/28/203 Office; g  A21078.021-0018  6/28/203 Office; g  A21078.021-0019  A21078.021-0019  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0020  A21078.021-0021  A21078.021-0021	0012 6/24/2010 - Clearance Room 13; hard fitting impact	106	14.4 LPM	1526 L	11.5/100	0.004 f/cc
Office has A: 0.009 A21078.021-0014 6/28/2020 Office; g  A21078.021-0015 6/28/2020 Office; g  A21078.021-0016 6/28/2020 Office; g  A21078.021-0017 6/28/2020 Office; g  A21078.021-0018 6/28/2020 Office; g  A21078.021-0019 6/28/2020 Room 1 A: 0.019 A21078.021-0020 6/28/2020 North w A: 0.009 A21078.021-0021 6/28/2020	A: 0.013 B: 0.007 C: 0.002					
A21078.021-0014 6/28/2020 Office; g  A21078.021-0015 6/28/2020 Office; g  A21078.021-0016 6/28/2020 Office; g  A21078.021-0017 6/28/2020 Office; g  A21078.021-0018 6/28/2020 Office; g  A21078.021-0019 6/28/2020 Room 1  A21078.021-0020 6/28/2020 North w  A21078.021-0021 6/28/2020 A21078.021-0021 6/28/2020 North w  A21078.021-0021 6/28/2020 A21078 A	0013 6/24/2010 - Outside work area Office hall; gypsum/joint compound removal	84 I	14.4 LPM	1210 L	8/100	0.003 f/cc
Office; g  A21078.021-0015 6/28/202 Office; g  A21078.021-0016 6/28/202 Office; g  A21078.021-0017 6/28/202 Office; g  A21078.021-0018 6/28/202 Office; g  A21078.021-0019 6/28/202 Room 1  A: 0.018  A21078.021-0020 6/28/202 North w  A: 0.008	A: 0.009 B: 0.005 C: 0.002					
Office; g  A21078.021-0016 6/28/20 Office; g  A21078.021-0017 6/28/20 Office; g  A21078.021-0018 6/28/20 Office; g  A21078.021-0019 6/28/20 Room 1  A: 0.019  A21078.021-0020 6/28/20 North w  A: 0.008	0014 6/28/2010 - Clearance-TEM Office; gypsum and joint compound removal	128	9.8 LPM	1254 L	See Attached TEM Ar	nalysis Report
Office; g  A21078.021-0017 6/28/20 Office; g  A21078.021-0018 6/28/20 Office; g  A21078.021-0019 6/28/20 Room 1  A: 0.019  A21078.021-0020 6/28/20 North w  A: 0.008  A21078.021-0021 6/28/20	0015 6/28/2010 - Clearance-TEM Office; gypsum and joint compound removal	128	9.8 LPM	1254 L	See Attached TEM Ar	nalysis Report
Office; g  A21078.021-0018 6/28/20 Office; g  A21078.021-0019 6/28/20 Room 1  A: 0.019  A21078.021-0020 6/28/20 North w  A: 0.009  A21078.021-0021 6/28/20	0016 6/28/2010 - Clearance-TEM Office; gypsum and joint compound removal	128	9.8 LPM	1254 L	See Attached TEM Ar	nalysis Report
Office; g A21078.021-0019 6/28/20 Room 1 A: 0.019 A21078.021-0020 6/28/20 North w A: 0.009 A21078.021-0021 6/28/20	0017 6/28/2010 - Clearance-TEM Office; gypsum and joint compound removal	128	9.8 LPM	1254 L	See Attached TEM Ar	nalysis Report
Room 1 A: 0.019 A21078.021-0020 6/28/20 North w A: 0.009 A21078.021-0021 6/28/20	0018 6/28/2010 - Clearance-TEM Office; gypsum and joint compound removal	128	9.8 LPM	1254 L	See Attached TEM Ar	nalysis Report
A21078.021-0020 6/28/20 North w A: 0.009 A21078.021-0021 6/28/20	0019 6/28/2010 - Outside work area Room 12; glove bag	138	9.8 LPM	1352 L	16.5/100	0.006 f/cc
North w A: 0.009 A21078.021-0021 6/28/20	A: 0.019 B: 0.01 C: 0.002					
A21078.021-0021 6/28/20	0020 6/28/2010 - Outside work area North wing hall; window removal	129	9.8 LPM	1264 L	8/100	0.003 f/cc
	A: 0.009 B: 0.005 C: 0.002					
North w	0021 6/28/2010 - Outside work area North wing hall; upstairs, window removal	148	9.8 LPM	1450 L	13/100	0.004 f/cc
A: 0.013	A: 0.013 B: 0.007 C: 0.002					

AIR SAMPLE ASBESTOS ANALYSIS

Client: North Clackamas School District

c/o JJ Henri Co.

Milwaukie, OR 97222

Project: Construction Period Services

Concord Elementary Hazmat Svcs

Report Date:

09/09/2010

Date Received: 07/30/2010

Client Project ID: N/A

PBS Project No.: 21078.021 0003

Page No.:

3 of 3

PBS LAB ID/ CLIENT ID

DATE, LOCATION WORKER NAME, ACTIVITY, PPE, ETC.

**MINUTES** SAMPLED AVE. FLOW RATE (LPM)

AIR VOLUME (L) FIBERS/ **FIELDS** 

**FIBERS** PER cc (f/cc)

REVIEWED BY

Approved Signatory

Steve Dilling

Name

L: Liters of air

LPM: Liters per minute

A: Interlaboratory 95% Upper Confidence Limit

B: Intralaboratory 95% Upper Confidence Limit

C: Limit of detection (LOD)

<LOD: Below the limit of detection

FILTER AREA (Square millimeters): 385 FIELD AREA (Square millimeters): 0.00785

### Portland Inc.

#### Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Analysis Report Cover Final Report**

Asbestos and Environmental Analysis

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 101182R01

Report Date: 6/24/2010

Job Number: 101182

PDX

Client: PBS Engineering + Environmental Address: 4412 SW Corbett Ave

Portland, OR 97239

Project Name: Concord E.S.

Project Num: 21078.021 Phase 0003

PO Number: Sub Project:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

THE CUMULATIVE	AVERAGE FOR THIS SET OF	SAMPLES IS: 8.7	S/MM2 (PASSES AHERA CLEARA	NCE CRITERIA)
Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received
101182 - S1	21078.021-0006 - TEM-Clearance	AHERA		6/23/2010
101182 - S2	21078.021-0007 - TEM-Clearance	AHERA		6/23/2010
101182 - S3	21078,021-0008 - TEM-Clearance	AHERA		6/23/2010
101182 - S4	21078,021-0009 - TEM-Clearance	AHERA		6/23/2010
101182 - S5	21078.021-0010 - TEM-Clearance	AHERA		6/23/2010

40-CFR Part 763

AHERA - Method Preparation and analysis of the above samples was conducted in accordance with the AHERA method for the identification of asbestos. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low App. A, Subpart E temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

> Analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The samples were analyzed at approximate screen magnification of between 15,000x-20,000x, with an accelerating voltage of 100 KV. Grid opening measurements were performed at a magnification of approximately 550X. Grid preparations are evaluated by the analyst before commencing analysis. Proper preparations have >75% replicate coverage, have a 10% etch rate, have acceptable particulate loading and show no evidence of preparation remnants (chemical or material).

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Reviewed by:

**Analyst** 

#### Lab/Cor Portland, Inc. LabCor Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

AHERA Summary Data

Job Number: 101182

PDX

Report Number: 101182R01

Volume (L): 1274

Client: PBS Engineering + Environmental

Date Received: 6/23/2010

Project Name: Concord E.S.

Lab/Cor Sample No.: S1

Client Sample No.: 21078.021-0006

**Description:** TEM-Clearance

Analyst(s) JS

**Analysis Date** 6/24/2010

Microscope H-7000

Magnification 20000

Average Grid Opening Area: 0.01385 Area Analyzed (mm2): 0.06925

Grid Openings Analyzed: 5

Lab Filter Area (mm2): 385

Analytical Sens. (struc/cc): 0.00436 Dectection Limit. (struc/cc): 0.01305

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count <sup>1</sup> Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA >=5.0µm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.004	0 - 0.016 - Poisson	0

Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S2

Client Sample No.: 21078.021-0007

Description: TEM-Clearance

Analyst(s) JS

**Analysis Date** 6/24/2010

Magnification Microscope 20000 H-7000

Lab Filter Area (mm2): 385 Grid Openings Analyzed: 5

Average Grid Opening Area: 0.01385

Area Analyzed (mm2): 0.06925 Analytical Sens. (struc/cc): 0.00436

Volume (L): 1274

Dectection Limit. (struc/cc): 0.01305

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count <sup>1</sup> Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA >=5.0μm, 5:1	14.4	0.004	0 - 0.024 - Poisson	1
AHERA TOTAL >=0.5, 5:1	14.4	0.004	0 - 0.024 - Poisson	1

<sup>&</sup>lt;sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

#### Lab/Cor Portland, Inc. LabCor Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

AHERA Summary Data

Job Number: 101182

PDX

Client: PBS Engineering + Environmental

Report Number: 101182R01

Volume (L): 1274

Date Received: 6/23/2010

Project Name: Concord E.S.

Lab/Cor Sample No.: S3

Client Sample No.: 21078.021-0008

**Description:** TEM-Clearance

Analyst(s)

JS

**Analysis Date** 6/24/2010

Microscope H-7000

Magnification 20000

Average Grid Opening Area: 0.01385

Grid Openings Analyzed: 5

Lab Filter Area (mm2): 385

Area Analyzed (mm2): 0.06925 Analytical Sens. (struc/cc): 0.00436 Dectection Limit. (struc/cc): 0.01305

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence înterval (struc/cc)	Structure Count¹ Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	14.4	0.004	0 - 0.024 - Poisson	1
AHERA >=5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA TOTAL >=0.5, 5:1	14.4	0.004	0 - 0.024 - Poisson	1

<sup>&</sup>lt;sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S4

Client Sample No.: 21078.021-0009

Description: TEM-Clearance

**Analysis Date** Analyst(s) JS 6/24/2010

Microscope H-7000

Magnification 20000

Volume (L): 1274 Lab Filter Area (mm2): 385

Grid Openings Analyzed: 5

Average Grid Opening Area: 0.01385 Area Analyzed (mm2): 0.06925

Analytical Sens. (struc/cc): 0.00436 Dectection Limit. (struc/cc): 0.01305

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	14.4	0.004	0 - 0.024 - Poisson	1
AHERA >=5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA TOTAL >=0.5, 5:1	14.4	0.004	0 - 0.024 - Poisson	1

<sup>&</sup>lt;sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

## LabCor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Summary Data** 

Job Number: 101182

PDX

Client: PBS Engineering + Environmental

Report Number: 101182R01

Date Received: 6/23/2010

Project Name: Concord E.S.

Lab/Cor Sample No.: S5

Client Sample No.: 21078.021-0010

Description: TEM-Clearance

Analyst(s)

JS

Analysis Date 6/24/2010

Microscope H-7000 Magnification 20000

Volume (L): 1274 Lab Filter Area (mm2): 385

Grid Openings Analyzed: 5

Average Grid Opening Area: 0.01385

Area Analyzed (mm2): 0.06925 Analytical Sens. (struc/cc): 0.00436

Dectection Limit. (struc/cc): 0.01305

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count <sup>1</sup> Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA >=5.0μm, 5:1	0	< 0.004	0 - 0.016 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.004	0 - 0.016 - Poisson	0

<sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Reviewed by:

**Analyst** 

One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] \* analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

Gr G1 G1

G1

G2

G2

3

4

5

## LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

**Final Report** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101182

PDX

NSD

NSD

NSD

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101182R01

Client: PBS Engineering + Environmental

Date Received: 6/23/2010

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

Lab/Cor Sample No: S1 Client Sample No: 21078.021-0006

Analyst(s)

**Analysis Date** 6/24/2010

Microscope

Magnification

F8

Н8

H4

Description: TEM-Clearance

Description: TEM-Clearance								JS	6/24/2010		H-7000	20000
No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Com	ment	Count Categories
1	G3			NSD								
2	H6			NSD								

LabCor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

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Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101182

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101182R01

Client: PBS Engineering + Environmental

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

Date Received: 6/23/2010

Lab/Cor Sample No: S2

Client Sample No: 21078.021-0007

Analyst(s) **Analysis Date** 

JS 6/24/2010

Microscope

Magnification

	CHEIL	Sample	140. 210	70.021-0007					Allarystics	Allulyolo L		or coccp	
	ľ	Descript	ion: TEI	M-Clearance					JS	6/24/20	10	H-7000	20000
Gr	No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Comm	ent	Count Categories
G1	1	G2			NSD								
G1	2	H5			NSD								
G1	3	F7			NSD								
G2	4	H7	ADQ	1	Matrix 2-0	5	4.5	1.1	Tremolite	Mg, Si, Ca, Fe			AHERA, AHERA_5.0
				ltemType		Туре	e ItemNum			Confirme	ed	Comment	
					Brigl	htfield	H1622	1BF		38400			
					Diffra	action	H1622	1DF		JS 6/24	/2010	0.53 nm row	spacing

H16221SP

G2 5 D6 NSD

Spectra

## 7C///

## LabCor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

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Asbestos and Environmental Analysis

AHERA Raw Data

Job Number: 101182

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101182R01 Date Received: 6/23/2010

Client: PBS Engineering + Environmental

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

Lab/Cor Sample No: S3

Client Sample No: 21078.021-0008

**Analysis Date** Magnification Analyst(s) Microscope

	[	Descript	ion: TEI	on: TEM-Clearance					JS	6/24/2010		H-7000	20000
Gr	No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Element	s Comi	ment	Count Categories
G1	1	D9			NSD								
G1	2	H9			NSD								
G1	3	H6	CDQ	1	Fiber	0.6	0.05	12	Chrysotile	Mg, S	3i		AHERA, AHERA_0.5-5.0
					lter	ItemType		ItemNum		Confirmed		Comment	
					Brig	ghtfield	H1622	2BF				.,	
					Diff	raction	H1622	2DF		JS	6/24/2010	0.53 row s	spacing
					Spe	ectra	H1622	2SP		JS	6/24/2010		
G2	4	H5			NSD								
G2	5	D3			NSD								

## LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101182

PDX

Report Number: 101182R01

Client: PBS Engineering + Environmental

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

Method 40-CFR Part 763 App. A, Subpart E

Date Received: 6/23/2010

Lab/Cor Sample No: S4

	Client	Sample	No: 210	78.021	-0009					Analyst(s)	Analy	sis Date	Microsco	pe Magnification
		Descript								JS	6/2	4/2010	H-7000	20000
Gı	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Element	s Com	ment	Count Categories
G1	1	СЗ			Aville	NSD								
G1	2	F3	CDQ	1		Fiber	1.7	0.05	34	Chrysotile	Mg,	Si		AHERA, AHERA_0.5-5.0
		10.00				Iten	nType	ItemNu	ım		Co	nfirmed	Comment	
			Brightfield		H16223BF									
						Diff	raction	H1622	3DF		JS	6/24/2010	0.53 nm ro	w spacing
						Spe	ectra	H1622	3SP		JS	6/24/2010		
G1	3	H6				NSD								
G2	4	H7				NSD								
G2		F4				NSD								

## LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

**Final Report** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101182

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101182R01

Client: PBS Engineering + Environmental

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

Date Received: 6/23/2010

Lab/Cor Sample No: S5

Client Sample No: 21078.021-0010

**Analysis Date** Microscope Magnification Analyst(s) 0/04/00/0 20000

	Description: TEM-Clearance								JS	6/24/2010 F		H-7000	20000
Gr	No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Comm	nent	Count Categories
G1	1	H3			NSD								
G1	2	H7			NSD								
G1	3	D5			NSD								
G2	4	D3			NSD								
G2	5	G3			NSD								

## LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101182

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101182R01 Date Received: 6/23/2010

Client: PBS Engineering + Environmental

Project Name: Concord E.S.

Project No.: 21078.021 Phase 0003

**Count Categories** 

AHERA

AHERA TOTAL >=0.5, 5:1

AHERA\_0.5-5.0 AHERA >=0.5 to 5.0μm, 5:1

AHERA\_5.0

AHERA >=5.0μm, 5:1

Reviewed by:

Jordan Shibley

**Analyst** 



Engineering + Environmental

# TRANSMITTAL AND CHAIN OF CUSTODY FOR TEM SAMPLES

Project No.: 21076.	D21 Phase No.: C		Ta	isk No	). <b>:</b>		
Project Site/Location: Individuals signing this form we send the original. The Received damage of package immediatel	arrant that the information prov. r should complete the form, kee	•	:	ete. The riginal t	e Sender should to the Sender. R	i keep a co Receiver si	opy and hall report
SENDER			EIVER		, 1		
Date Sent: 6/23/10		Date	Receive	d: <u>((</u>	2310	7.8	>>pm
PBS Engineering + Envir 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939 Fax: 503.24	•	Addr	P (5 Step	321 SV ortland 503) 22	V Corbett Ave , OR 97239 .4-5055	Date	6/23/10
Authorized Signature	Date				Receiver'	e ID Ma	<b>.</b> .
Sender's ID No.	Brief Description		ir Volu	Τ.	Receiver	S ID IN	· · · · · · · · · · · · · · · · · · ·
21078.021 - 0006	TEM Cleanance	<u>e 15</u>	<del>274</del>	<del>                                     </del>			
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Please analyze the attached air A.H.E.R.A., CFR 40, Part 763, a components for a minimum of the TURNAROUND DES		, for asbestos u pl, or the most re	sing Trans ecent versio	mission on therec	Electron Microsc of. Please archiv	copy, in ac ve any rem	cordance with aining sample
SPECIAL INSTRUCTIONS:							5010
			!				

#### Lab/Cor Portland, Inc. ortland

4321 SW Corbett Ave., Ste A Portland, OR 97239

## **Analysis Report Cover**

**Final Report** 

Asbestos and Environmental Analysis

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Job Number: 101252

PDX Client: PBS Engineering + Environmental

Address: 4412 SW Corbett Ave Portland, OR 97239

Project Name: Construction Period Services Project Num: 21078.021 Phase 0003

PO Number: Sub Project:

Report Number: 101252R01

Report Date: 6/29/2010

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

THE CUMULATIVE	AVERAGE FOR THIS SET OF S	AMPLES IS: 3.4	S/MM2 (PASSES AHERA CLEARANCE	CRITERIA)
Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
101252 - S1	A21078.021-0014 - Clearance -TEM	AHERA		6/28/2010
101252 - S2	A21078.021-0015 - Clearance -TEM	AHERA		6/28/2010
101252 - S3	A21078.021-0016 - Clearance -TEM	AHERA		6/28/2010
101252 - S4	A21078.021-0017 - Clearance -TEM	AHERA		6/28/2010
101252 - S5	A21078.021-0018 - Clearance -TEM	AHERA		6/28/2010

40-CFR Part 763 App. A, Subpart E

AHERA - Method Preparation and analysis of the above samples was conducted in accordance with the AHERA method for the identification of asbestos. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

> Analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The samples were analyzed at approximate screen magnification of between 15,000x-20,000x, with an accelerating voltage of 100 KV. Grid opening measurements were performed at a magnification of approximately 550X. Grid preparations are evaluated by the analyst before commencing analysis. Proper preparations have >75% replicate coverage, have a 10% etch rate, have acceptable particulate loading and show no evidence of preparation remnants (chemical or material).

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Reviewed by:

Analyst

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

### **AHERA Summary Data**

Job Number: 101252

PDX

Client: PBS Engineering + Environmental

Report Number: 101252R01

Date Received: 6/28/2010

Project Name: Construction Period Services

Volume (L): 1254

Lab/Cor Sample No.: S1 Client Sample No.: A21078.021-0014

Lab Filter Area (mm2): 385

Grid Openings Analyzed: 7

Description: Clearance -TEM

Average Grid Opening Area: 0.008505

Analyst(s) JS

**Analysis Date** 6/29/2010

Magnification

Area Analyzed (mm2): 0.059535

Microscope 20000 H-7000

Analytical Sens. (struc/cc): 0.00516 Dectection Limit. (struc/cc): 0.01542

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Cour	Structure Count <sup>1</sup> Prim/Total		
AHERA >=0.5 to 5.0μm, 5:1	16.8	0.005	0 - 0.029 - Poisson	1			
AHERA >=5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0			
AHERA TOTAL >=0.5, 5:1	16.8	0.005	0 - 0.029 - Poisson	1			

<sup>&</sup>lt;sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S2

JS

Client Sample No.: A21078.021-0015

Description: Clearance -TEM

Analyst(s)

**Analysis Date** 6/29/2010

Microscope H-7000

Magnification 20000

Volume (L): 1254

Lab Filter Area (mm2): 385 Grid Openings Analyzed: 7

Average Grid Opening Area: 0.008505

Area Analyzed (mm2): 0.059535 Analytical Sens. (struc/cc): 0.00516

Dectection Limit. (struc/cc): 0.01542

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA >=5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.005	0 - 0.019 - Poisson	0

<sup>&</sup>lt;sup>1</sup> Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

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#### **Final Report**

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Asbestos and Environmental Analysis

### **AHERA Summary Data**

Job Number: 101252

PDX

Report Number: 101252R01

Client: PBS Engineering + Environmental

Date Received: 6/28/2010

Project Name: Construction Period Services

Volume (L): 1254

Lab/Cor Sample No.: S3

Client Sample No.: A21078.021-0016

Lab Filter Area (mm2): 385

Description: Clearance -TEM

Grid Openings Analyzed: 7

Analyst(s)

JS

**Analysis Date** 6/29/2010

Microscope H-7000

Magnification 20000

Average Grid Opening Area: 0.008505

Area Analyzed (mm2): 0.059535 Analytical Sens. (struc/cc): 0.00516

Dectection Limit. (struc/cc): 0.01542

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA >=5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.005	0 - 0.019 - Poisson	0

Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S4

JS

Client Sample No.: A21078.021-0017

Description: Clearance -TEM

**Analysis Date** Analyst(s)

6/29/2010

H-7000

Microscope 20000

Magnification

Volume (L): 1254

Lab Filter Area (mm2): 385 Grid Openings Analyzed: 7

Average Grid Opening Area: 0.008505

Area Analyzed (mm2): 0.059535

Analytical Sens. (struc/cc): 0.00516 Dectection Limit. (struc/cc): 0.01542

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structi Coun Prim/Te
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA >=5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.005	0 - 0.019 - Poisson	0

Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

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#### **Final Report**

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Asbestos and Environmental Analysis

**AHERA Summary Data** 

Job Number: 101252

PDX

Client: PBS Engineering + Environmental

Report Number: 101252R01

Volume (L): 1254

Date Received: 6/28/2010

Project Name: Construction Period Services

Lab/Cor Sample No.: S5

Analyst(s)

JS

Client Sample No.: A21078.021-0018

Description: Clearance -TEM

**Analysis Date** 

6/29/2010

Microscope

H-7000

Magnification 20000

Lab Filter Area (mm2): 385 Grid Openings Analyzed: 7

Average Grid Opening Area: 0.008505

Area Analyzed (mm2): 0.059535 Analytical Sens. (struc/cc): 0.00516

Dectection Limit. (struc/cc): 0.01542

Structure Type	Filter Density (s/mm2)	Concen- tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim/Total
AHERA >=0.5 to 5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA >=5.0μm, 5:1	0	< 0.005	0 - 0.019 - Poisson	0
AHERA TOTAL >=0.5, 5:1	0	< 0.005	0 - 0.019 - Poisson	0

Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Reviewed by:

Analyst

One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] \* Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

#### Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A LabCor **Portland** 'nc

Portland, OR 97239

#### **Final Report**

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Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01

Client: PBS Engineering + Environmental

Project Name: Construction Period Services

Date Received: 6/28/2010

Project No.: 21078.021 Phase 0003

Lab/Cor Sample No: S1

Client Sample No: A21078.021-0014

	Client	Sample	No: A2	1078.021-0014					Analyst(s)	Analysis	Date	Microsco	pe Magnification
	j	Descript	t <mark>ion:</mark> Cle	arance -TEM					JS	6/29/2	2010	H-7000	20000
Gr	No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Com	ment	Count Categories
G1	1	B20			NSD								
G1	2	B24			NSD								
G1	3	E2			NSD								
G1	4	E9			NSD								
G2	5	B21	CDQ	1	Fiber	2	0.05	40	Chrysotile	Mg, Si			AHERA, AHERA_0.5-5.0
					lten	пТуре	ItemNu	ım		Confir	ned	Comment	
					Brig	ghtfield	H1643	2BF					
					Diff	raction	H1643	2DF		JS 6/2	29/2010	0.53 nm ro	w spacing
					Spe	ectra	H1643	2SP		JS 6/	29/2010		

LabCor Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A

MC

G2

G2

6

7

H4

E12

**Final Report** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

NSD

NSD

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01 Date Received: 6/28/2010

Client: PBS Engineering + Environmental

Project Name: Construction Period Services Project No.: 21078.021 Phase 0003

Portland, OR 97239

Lab/Cor Sample No: S2

Client Sample No: A21078.021-0015

Analyst(s) **Analysis Date**  Microscope

Magnification

	E	Descriptio	on: Cle	arance -TEM					JS	6/29/2	010	H-7000	20000
Gr	No.	Loc.	D	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Com	ment	Count Categories
G1	1	B22			NSD								
G1	2	E4			NSD								
G1	3	F10			NSD								
G1	4	F20			NSD								
G2	5	F15			NSD								

LabCor Portland

Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **Final Report**

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Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01 Date Received: 6/28/2010

Client: PBS Engineering + Environmental

Project Name: Construction Period Services

Project No.: 21078.021 Phase 0003

Lab/Cor Sample No: S3

Client Sample No: A21078.021-0016

Magnification Analyst(s) **Analysis Date** Microscope 20000

6/29/2010 H-7000 Description: Clearance -TEM JS Comment **Count Categories** Class Length Width Aspect Analyte Elements Loc. Prim Tot Gr No. NSD G1 1 A24 NSD G1 2 D8 NSD 3 G1 D24 NSD G1 4 E17 5 NSD G2 E12 NSD 6 G2 E14 NSD G2 7 F20

## LabCor Portland, Inc. Portland 4321 SW Corbett Ave., Ste A 7G///

Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01 Date Received: 6/28/2010

Client: PBS Engineering + Environmental Project Name: Construction Period Services

Project No.: 21078.021 Phase 0003

Lab/Cor Sample No: S4

Client Sample No: A21078.021-0017

**Analysis Date** Magnification Analyst(s) Microscope วกกกก 010010010 LL 7000

		Descripti	on: Cle	arance -TEM					JS	6/29/2	010 H-70	30 20000
Gr	No.	Loc.	lD	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	F5			NSD							
G1	2	E3			NSD							
G1	3	E6			NSD							
G1	4	E16			NSD							
G2	5	B20			NSD							
G2	6	E3			NSD							
G2	7	F11			NSD							

# LabCor Portland, Inc. Portland, Ste A 4321 SW Corbett Ave., Ste A

Portland, OR 97239

#### **Final Report**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01 Date Received: 6/28/2010

Client: PBS Engineering + Environmental

Project No.: 21078.021 Phase 0003

Project Name: Construction Period Services

Lab/Cor Sample No: S5

Client Sample No: A21078.021-0018 **Analysis Date** Magnification Analyst(s) Microscope

	I	Descripti	on: Cle	arance -TEM					JS	6/29/2	010	H-7000	20000
Gr	No.	Loc.	ID	Prim Tot	Class	Length	Width	Aspect	Analyte	Elements	Comn	nent	Count Categories
G1	1	B20			NSD								
G1	2	E4			NSD								
G1	3	F10			NSD								
G1	4	E24			NSD								
G2	5	15			NSD								
G2	6	E22			NSD								
G2	7	E8			NSD								

nc.

LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

**Final Report** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**AHERA Raw Data** 

Job Number: 101252

PDX

Method 40-CFR Part 763 App. A, Subpart E

Report Number: 101252R01

Client: PBS Engineering + Environmental

Project Name: Construction Period Services

Date Received: 6/28/2010

Project No.: 21078.021 Phase 0003

Count Categories

AHERA

AHERA TOTAL >=0.5, 5:1

AHERA >=0.5 to 5.0 $\mu$ m, 5:1 AHERA\_0.5-5.0

AHERA\_5.0

AHERA >=5.0µm, 5:1

Reviewed by:

Analyst

# TRANSMITTAL AND CHAIN OF CUSTODY FOR AIR TEM SAMPLES

Project No.:	21078.021	Phase 0003			
Project Site: Individuals signing original. The Receiv package immediatel	Construction Pethis form warrant that yer should complete to y to Sender.	t the information provi	ided is correct and complete. The and return the original to the Send	Sender should kee ler. Receiver shall	p a copy and send the report damage of
SENDER			RECEIVER		
Date Sent: J	une 28, 2010		Date Received:	10/28/10	3:25pm
PBS Engineerin 4412 SW Corbe Portland, OR 97 503.248.1939, F	tt Avenue 7239		Company: Lab Address:	cor Portl	and.
Name Authorized Sign	Killoy C	o/28/10 3:15 Date	Name  Authorized Signat	and.	CN Date
Sender's ID No.	Brief De	scription	Receiver's ID No.		Air Volume
.121078.021-001	4 Clearand	e-TEM			1254 L
A21078.021-001	5 Clearand	e-TEM			1254 L
A21078.021-0016	3 Clearanc	e-TEM			1254 L
A21078.021-0017	7 Clearanc	e-TEM			1254 L
A21078.021-0018	3 Clearanc	e-TEM			1254 L
Electron Microsco	ppy, in accordance t version thereof	ce with A.H.E.R.A	ed on this form, for asbest ., CFR 40, Part 763, Appe any remaining sample con	ndiy A to Subna	mission
TURNAROUND D	ESIRED: 24	מנות			

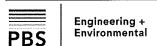
**SPECIAL INSTRUCTIONS:** 

Code	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
21078.021-0001	Wall and Ceiling	Plaster <b>Layer:</b>	Main floor; south custodial close <b>Description:</b>	t, plaster and skim Analysis:	Lab Cor
		Layer 1	fine compact powder, white	No Asbestos Detected	
		Layer 2	loose cementitious powder, light gray	No Asbestos Detected	
21078.021-0002	Wall and Ceiling	Plaster <b>Layer</b> :	Main floor; main office, west wall <b>Description:</b>	l, plaster and skim <b>Analysis:</b>	Lab Cor
		Layer 1	light gray coarse cementitious material	No Asbestos Detected	
21078.021-0003	Wall and Ceiling	Plaster	Main floor; room 25, plaster and	skim	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coarse cementitous material, white	No Asbestos Detected	
		Layer 2	loose cementitious powder, white	No Asbestos Detected	
21078.021-0004	Glued-on Ceiling	Tiles (1)	Main floor; south hall, 12"x12" fis yellow mastic	ssured ceiling tiles with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact fibrous material, white	No Asbestos Detected	
		Layer 2	mastic, yellow	No Asbestos Detected	
21078.021-0005	Glued-on Ceiling	Tiles (1)	Main floor; north hall, 12"x12" fis yellow mastic	sured ceiling tiles with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact fibrous material, white	No Asbestos Detected	
		Layer 2	mastic, yellow	No Asbestos Detected	
21078.021-0006	Glued-on Ceiling	Tiles (1)	Main floor; office, 12"x12" fissure mastic	ed ceiling tiles with yellow	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact fibrous material, white	No Asbestos Detected	
		Layer 2	mastic, yellow	No Asbestos Detected	
21078.021-0007	Nailed-on Ceiling	Tiles	Main floor; room 25, 2'x4' nailed	on ceiling tiles	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	brown compressed fibers	No Asbestos Detected	
21078.021-0008	Vinyl Floor Tile (1	)	Main floor; room 25, under heate black mastic	er, green floor tile with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	dark gray compressed fibers	No Asbestos Detected	

<u>Code</u>	<u>Material</u>		Location	<u>Results</u>	Lab
21078.021-0009	Felt Wrap Pipe	Insulation Layer:	Main floor; room 25, under heate <b>Description</b> :	er, grey felt Analysis:	Lab Cor
		Layer 1	vinyl, green	7% Chrysotile	
		Layer 2	fibrous tarry backing, black	No Asbestos Detected	
21078.021-0010	Caulk		Main floor; room 25, window bet and brick, grey caulk	ween aluminum frame	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray soft rubbery material	No Asbestos Detected	
21078.021-0011	Caulk		Main floor; window between tran	site panel and aluminum	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray/brown soft rubbery material w/ coating	5% Chrysotile	
21078.021-0012	Gypsum Wallbo	oard/Joint	Main floor; north boys restroom, compound	gypsum and joint	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder w/ paint, offwhite	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
21078.021-0013	Gypsum Wallbo	oard/Joint	Main floor; health room, gypsum	and joint compound	Lab Cor
	•	Layer:	Description:	Analysis:	
		Layer 1	fine compact powder w/ paint, offwhite	<1% Chrysotile	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
	Comments:	Point Count Asbestos: 0.	Total % Asbestos (Layer 1): 1.25% 1%	%; GRR Composite Total %	
21078.021-0014	Gypsum Wallbo	oard/Joint	Main floor; room 28, gypsum and	d joint compound	Lab Cor
	•	Layer:	Description:	Analysis:	
		Layer 1	fine compact powder, offwhite	No Asbestos Detected	
		Layer 2	comact chalky material with paper, white	No Asbestos Detected	
21078.021-0015	Wall Tile		North staircase wall; wall tile		Lab Cor
	· · ·	Layer:	Description:	Analysis:	
		Layer 1	tan vinyl	No Asbestos Detected	

0-4-	B. d. a.		Location	Populto	Lah
<u>Code</u>	Material NA III		Location	Results	Lab Cor
21078.021-0016	Gypsum Wallboar Compd.	rd/Joint	Lower level; room 15, behind ce compound	lling tile, gypsum and joint	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder, white	No Asbestos Detected	
		Layer 2	compact chalky material, white	No Asbestos Detected	
21078.021-0017	Glued-on Ceiling	Tiles (1)	Lower level; room 15, 12"x12" fis yellow mastic	ssured ceiling tile with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact fibrous material, white	No Asbestos Detected	
		Layer 2	mastic, yellow	No Asbestos Detected	
21078.021-0018	Wall and Ceiling I	⊃laster <b>Layer</b> :	Lower level; room 15, plaster an <b>Description</b> :	d skim <b>Analysis:</b>	Lab Cor
		Layer 1	coarse cementiitous material, white	No Asbestos Detected	
		Layer 2	loose cementitious powder, white	No Asbestos Detected	
21078.021-0019	Wood Panel Mast	iic Layer:	Main floor; main office behind wo Description:	ood paneling, gold mastic Analysis:	Lab Cor
		Layer 1	yellow mastic	No Asbestos Detected	
21078.021-0020	Covebase/Mastic		Main floor; health room, 4" tan co	ovebase with white mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rubbery material, tan	No Asbestos Detected	
		Layer 2	mastic w/ paint, offwhite/black	No Asbestos Detected	
21078.021-0021	Tackboard Mastic		Main floor; hall outside health roo gold mastic	om behind tackboard,	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	orange mastic	No Asbestos Detected	
21078.021-0022	Vinyl Floor Tile/Ma	astic	Main floor; main office under OS tile with black mastic	B underlayment, green	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, green	6% Chrysotile	
		Layer 2	fibrous tarry backing, black	No Asbestos Detected	
21078.021-0023	Sink Undercoating	9	Main floor; health room, black sir	<del>-</del>	Lab Cor
		Layer:	Description:	Analysis:	
	a.	Layer 1	black brittle mastic	2% Chrysotile	

Code	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
21078.021-0024	Sink Undercoating	9	Main floor; room 21, black sink u	ındercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	black brittle mastic	No Asbestos Detected	
21078.021-0025	Transite Panel		Main floor; room 21, above wind	ows, transite panel	Lab Cor
21010.021 0020	Transito Fairo	Layer:	Description:	Analysis:	
		Layer 1	light gray loose powder	5% Chrysotile	
21078.021-0026	Gypsum Wallboar Compd.	d/Joint	Main floor; room 20, gypsum and	d joint compound	Lab Cor
	Compa.	Layer:	Description:	Analysis:	
		Layer 1	fine compact powder, white	No Asbestos Detected	
		Layer 2	loose chalky powder	No Asbestos Detected	
21078.021-0027	Corkboard Mastic		Main floor; room 25, corkboard r		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	interwoven fibers w/ paint, white	No Asbestos Detected	
		Layer 2	mastic, dark gray	No Asbestos Detected	
		Layer 3	cork material, light brown	No Asbestos Detected	
		Layer 4	mastic, w/ powder, dark gray	No Asbestos Detected	
21078.021-0028	Sink Undercoating	)	Main floor; room 25, grey sink ur	ndercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray loose shavings	6% Chrysotile	
21078.021-0029	Sheet Floor Cover	ing (1)	Main floor; north custodial closed aggregate pattern	t, sheet vinyl with small	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl, gray	No Asbestos Detected	
		Layer 2	mastic w/ wood fibers, yellow	No Asbestos Detected	
21078.021-0030	Vinyl Floor Tile/Ma	astic (1)	Main floor; computer lab, 9"x9" g	rey floor tile with black	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, gray	4% Chrysotile	
		Layer 2	mastic, black	No Asbestos Detected	
		Layer 3	fibrous tarry backing, black	No Asbestos Detected	
21078.021-0031	Vinyl Floor Tile/Ma	astic (2)	Main floor; computer lab, 9"x9" c black mastic	lark grey floor tile with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, gray	4% Chrysotile	
		Layer 2	fibrous tarry backing, black	No Asbestos Detected	
		=	-		



<u>Code</u>	<u>Material</u>		Location	<u>Results</u>	<u>Lab</u>
21078.021-0032	Ceiling Tile		Main floor; library office, ceiling	tile	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	light tan compact fibrous material	No Asbestos Detected	
21078.021-0033	Sink Undercoatin	g	Lower level; room 19,grey sink u	undercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray loose shavings	6% Chrysotile	
21078.021-0034	Sink Undercoatin	g	Lower level; room 15, coat area	, white sink undercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	offwhite fibrous mastic	No Asbestos Detected	
21078.021-0035	Sheet Floor Cove	ering (1)	Lower level; room 15, coat area aggregate pattern	, sheet vinyl with small	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl, gray	No Asbestos Detected	
		Layer 2	fibrous backing, gray	No Asbestos Detected	
		Layer 3	mastic, yellow	No Asbestos Detected	
21078.021-0036	Covebase/Mastic	:	Lower level; room 15, coat area		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	mastic, yellow	No Asbestos Detected	
		Layer 2	mastic, black	3% Chrysotile	
21078.021-0037	Tackboard Mastic		Lower level; hall outside room 1	6, behind tackboard, gold	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, light brown	No Asbestos Detected	
		Layer 2	mastic, light brown	No Asbestos Detected	
21078.021-0038	Gypsum Wallboa Compd.	rd/Joint	Lower level; room 16, gypsum a	nd joint compound	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder w/ paint, white	No Asbestos Detected	
		Layer 2	compact chalky material, offwhite	No Asbestos Detected	
21078.021-0039	Sheet Floor Cove	ring (2)	Lower level; room 17, grey shee aggregate pattern	t vinyl with large	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl, gray	No Asbestos Detected	
		Layer 2	fibrous backing, gray	No Asbestos Detected	

<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
21078.021-0040	Gypsum Wallbo Compd.	ard/Joint	Lower level; room 19, gypsum	and joint compound	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder, white	<1% Chrysotile	
	•	Layer 2	compact chalky, offwhite	No Asbestos Detected	
		XRD Asbesto Asbestos: 0.	os Weight Percent (Layer 1): 2.20 12%	0%; GRR Composite Total %	6
21078.021-0041	Nailed-on Ceilin	g Tile	Lower level; cafeteria, nailed-or	n ceiling tile	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	golden brown compressed fibers	No Asbestos Detected	
21078.021-0042	Counter Underc	oating	Lower level; kitchen, under dishundercoating	washer counter, black	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	black mastic	2% Chrysotile	
21078.021-0043	Vinyl Floor Tile/f	Mastic (3)	Lower level; 12"x12" floor tile w black mastic	ith brown streaks and	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, white	No Asbestos Detected	
		Layer 2	mastic, black	No Asbestos Detected	
21078.021-0044	Vinyl Floor Tile/N	Mastic (4)	Lower level; 12"x12" floor tile w mastic	ith brown specks and black	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, white	No Asbestos Detected	
		Layer 2	mastic, black	No Asbestos Detected	
21078.021-0045	Sealant		Room 16; exterior window, at al grey sealant	luminum window seam,	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray sticky mastic	6% Chrysotile	
21078.021-0046	Sealant		Room 17; exterior window, betw brick, top layer, grey sealant	veen aluminum frame and	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	soft rubbery material, gray	No Asbestos Detected	
		Layer 2	mastic, black	2% Chrysotile	

Code	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
21078.021-0047	Sealant		Room 17; exterior window, betw brick, bottom layer, black sealar		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	dark brown sticky mastic	2% Chrysotile	
21078.021-0048	Sealant		Room 14; exterior window, at ve sealant	entilator exhaust, grey	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray sticky mastic	6% Chrysotile	
21078.021-0049	Sealant		Room 14; exterior window, betw brick, grey sealant	een aluminum frame and	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	soft rubbery material, gray	No Asbestos Detected	
		Layer 2	sticky mastic, gray	6% Chrysotile	
21078.021-0050	Sealant		Room 14; exterior window, at all grey sealant	uminum window seam,	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray sticky mastic	6% Chrysotile	
21078.021-0051	Sealant		Room 15; exterior window, at ve sealant	ntilator exhaust, grey	Lab Cor
		Layer:	Description:	Analysis:	
	,	Layer 1	gray sticky mastic	6% Chrysotile	
21078.021-0052	Sealant		Room 15; exterior window, betw brick, grey sealant	een aluminum frame and	Lab Cor
	,	Layer:	Description:	Analysis:	
		Layer 1	soft rubbery material, gray	No Asbestos Detected	
		Layer 2	soft rubbery material, light gray	5% Chrysotile	
21078.021-0053	Sealant		Room 15; exterior window, betw seam, grey sealant	een aluminum window	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	light gray soft rubbery material	5% Chrysotile	
21078.021-0054	Sealant		Ground floor near east access rebetween aluminum frame and be		PBS ARCHIVE
		Layer:	Description:	Analysis:	

Comments:

Sample archived; not analyzed per request.



<u>Code</u>	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
21078.021-0055	Window Glazing	Compound	Upper level; gym window, east, window glazing	exterior window, grey	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	gray soft caulking material w/ paint	2% Chrysotile	
21078.021-0056	Window Glazing	Compound	Upper level; gym window, east, window glazing	exterior window, grey	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	white soft caulking material w/ paint	1% Chrysotile	
21078.021-0057	Window Glazing	Compound	Upper level; gym window, east, window glazing	exterior window, grey	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	white soft caulking material w/ paint	1% Chrysotile	
	Comments: F	oint Count	Total % Asbestos: 1%		
21078.021-0058	Sealant		Upper level; gym window, east, frame and brick, grey sealant	exterior window, between	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	dark brown soft rubbery material w/ paint	No Asbestos Detected	
21078.021-0059	Boiler Insulation		Boiler room; jacket and insulation	ən	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose fibrous material, yellow	No Asbestos Detected	
		Layer 2	fibrous backing w/ paint, white	No Asbestos Detected	
		Layer 3	interwoven fibers w/ foil, white.silver	No Asbestos Detected	
21078.021-0060	Vinyl Floor Tile/M	astic Layer:	Cafeteria; 12" cream tile with ma	astic Analysis:	Lab Cor
		Layer 1	vinyl tile, white	No Asbestos Detected	
		Layer 2	mastic, black	4% Chrysotile	
21078.021-0061	Covebase/Mastic		Cafeteria; 5" black covebase		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rubbery material, black	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	

Code <u>Mater</u>	<u>rial</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21078.021-0062 3-Tab	Roofing	Roof edges; composition 3-tab		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	rocky fibrous tar, black	No Asbestos Detected	
	Layer 2	rocky fibrous tar, black/gray	3% Chrysotile	
21078.021-0063 Built-u	up Roofing	Roof top; silver paint and tar		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	paint, silver	No Asbestos Detected	
	La <u>y</u> er 2	tar, black	No Asbestos Detected	
21078.021-0064 Vinyl	Floor Tile/Mastic	Cafeteria; 12" cream with black	mastic	Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl tile, tan	No Asbestos Detected	
	Layer 2	mastic, black	4% Chrysotile	

Project No.: 21078.021 Phase No.: 0002

# LabCor Portland, Inc. Portland, Inc. 4321 SW Corbett Ave., Ste A

Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

PBS Engineering + Environmental Client:

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100191R02

P.O. No: n/a

Report Date: 02/04/2010

Job Number: 100191

**Project Name:** 

Inc //

powder, white Other Fibers

Layer 01

Layer 02

Fibrous

Trace

Glass Cellulose

2%

3 %

Mineral

Wool

Synthetic Other

Project Number: 21078.021 Project Notes:	Phase 000	2				
Client Sample ID: 21078.02* Client Sample Description: Asbestos Mineral Fibers	I-0001 Percent of	•	Sample ID: S1		Date Analyzed: 02/04/2010  Analyst: Stephanie Golden	Percent
	Sample:	Chrysotile	e Amosite	Crocidolite	A	sbestos:
Layer 01						
fine compact powder, white	10%	-	-			NAD
Layer 02						
loose cementitious powder, light gray	90%	-	-	-		NAD
Other Fibers Fibrous Glass	s Cellulose	Mineral Wool	Synthetic Other		Matrix	
Layer 01 -	-		-	,	- 100 %	•
Layer 02 -	2 %	-	-		98 %	
Client Sample ID: 21078.021	-0002		Sample ID: S2		Date Analyzed: 02/04/2010	
Client Sample Description:					Analyst: Stephanie Golden	)_u
Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	e Amosite	Crocidolite		Percent sbestos:
Homogeneous						,
coarse cementitious material, light gray	100%	-	-	-		NAD
Other Fibers Fibrous		Mineral	,			
Glass	Cellulose	Wool	Synthetic Other		Matrix	
_	2 %		-		98 %	
Client Sample ID: 21078.021 Client Sample Description:	-0003		Sample ID: S3		Date Analyzed: 02/04/2010  Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	e Amosite	Crocidolite	•	Percent sbestos:
Layer 01						
coarse cementitous material, white	40 %	-	•	<b>-</b>		NAD
Layer 02						
loose cementitious	60 %	-	-	-		NAD

98 %

97 %

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Matrix

# LabCor Portland, Inc. Portland 4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number:	100191	Report Number: 100191R02
		Report Date: 02/04/2010

100								Report Date: 02/	04/2010
Client Sample ID: Client Sample Desc	21078.021 ription:	1-0004		Sample ID: S4			Date Analyzed: Analyst:	02/04/2010 Stephanie Golde	en
Asbestos Mineral F	-	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percen Asbesto
Layer 01									
compact fibrous material, white		95 %	-	-	-				N/
Layer 02 mastic, yellow		5%	-	-	-				NA
Other Fibers	Fibrous Glass		Mineral Wool	Synthetic Other	•		1	Matrix	
Layer 01	60 %	5 %	8 %	-		-	-	. 2	7 %
Layer 02	-	1 %	-	-		-	-	9	9 %
Client Sample ID: Client Sample Desci	21078.021	-0005		Sample ID: S5			Date Analyzed: Analyst:	02/04/2010 Stephanie Golde	n
Asbestos Mineral Fi	-	Percent of Sample:	Chrysotile	e Amosite	Crocidolite		,	·	Percent Asbestos
Layer 01									
compact fibrous material, white		95 %	-	-	-				N.A
Layer 02									h. r. d
mastic, yellow		5%		-	-				N.A
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other			Ņ	//atrix	
Layer 01	60 %	5 %	10 %	-		-	-		5 %
Layer 02	-	1 %		-		-	-	9	9 %
<u>Client Sample ID:</u> Client Sample Descr	21078.021 iption:	-0006		Sample ID: S6			Date Analyzed: Analyst:	02/04/2010 Stephanie Golde	n
Asbestos Mineral Fi	<u>bers</u>	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percent Asbestos
Layer 01								•	
compact fibrous material, white		95 %	-	-	-				NA
Layer 02		5%			_				NА
mastic, yellow Other Fibers	Fibrous		- Mineral Wool	Country of the Other	_		٨	<i>N</i> atrix	
Laver Od	Glass	Cellulose		Synthetic Other		_			6 %
Layer 01 Layer 02	60 % -	5 % 1 %	9 %	-		_	- -		9 %
				0 1. 10. 07			Data Analyzadi	02/04/2010	
Client Sample Descr	-			Sample ID: S7			Date Analyzed: Analyst:	Stephanie Golde	
Asbestos Mineral Fi	<u>bers</u>	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percent Asbestos
Homogeneous compressed fibers brown	3,	100%	-	-	-				NA
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other			N	/latrix	
	<del>-</del>	100 %	-	-		-	-	С	1%

NVLAP

Page 2 of 6 Page No.:

#### LabCor **Portland**

Inc.//

### Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 100191R02

Report Date: 02/04/2010

Asbestos and Environmental Analysis

Job Number:

Client Sample ID:

100191

Portland, OR 97239

Sample ID: S8

Date Analyzed:

02/04/2010

**Client Sample Description: Asbestos Mineral Fibers** 

Percent of

21078.021-0008

Analyst:

Stephanie Golden Percent

0 %

Homogeneous

compressed fibers, dark

Sample: Chrysotile

Crocidolite Amosite

Asbestos:

NAD

gray

100%

Other Fibers

**Fibrous** Glass

Mineral Cellulose Wool

Synthetic Other

Matrix

Client Sample ID: 21078.021-0009

Client Sample Description:

Percent of

Sample ID: S9

Date Analyzed:

02/04/2010 Stephanie Golden

**Asbestos Mineral Fibers** 

Sample: Chrysotile Amosite

100 %

Crocidolite

Analyst:

Percent Asbestos:

7%

NAD

Layer 01

vinyl, green

**Fibrous** 

Glass

21078.021-0010

20%

80%

7 %

Layer 02

Other Fibers

fibrous tarry backing, black

Mineral Wool Synthetic Other

Matrix

93 % 30 %

Layer 01 Layer 02

70 %

Sample ID: S10

Date Analyzed:

02/04/2010

Client Sample Description:

**Asbestos Mineral Fibers** 

Percent of

Cellulose

Sample: Chrysotile

Crocidolite Amosite

Analyst:

Stephanie Golden Percent

Asbestos:

NAD

5 %

Homogeneous

Client Sample ID:

soft rubbery material, gray

100%

**Other Fibers** 

**Fibrous** Glass

Cellulose

Mineral Wool

Synthetic Other

Matrix

Matrix

100 %

Client Sample ID: 21078.021-0011 Sample ID: S11

Date Analyzed:

02/04/2010

**Client Sample Description:** 

**Asbestos Mineral Fibers** 

Percent of Sample:

Chrysotile

Crocidolite Amosite

Analyst:

Stephanie Golden Percent

Homogeneous

Other Fibers

100%

5 %

Asbestos:

soft rubbery material w/ coating, gray/brown

**Fibrous** Glass

Cellulose

Mineral Wool

Synthetic Other

95 %

Page No.:

Page 3 of 6

# LabCor Portland Inc. | | Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239 Inc.//

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

## Asbestos and Environmental Analysis

Job Number: 1001	91						Re	eport Number: 10 Report Date: 02	
Client Sample ID:	21078.021	-0012	····	Sample ID: S1	2	Da	ate Analyzed:	02/04/2010	
<b>Client Sample Desc</b>	ription:						Analyst:	Stephanie Gold	den
Asbestos Mineral F	-	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percent Asbestos:
Layer 01 fine compact pow	/der w/	15%	-	-	-				NAD
paint, offwhite Layer 02									
compact chalky n with paper, white	naterial	85 %	-	-	-				NAD
Other Fibers	Fibrous Glass	: Cellulose	Mineral Wool	Synthetic Othe	er			Matrix	
Layer 01	1 %	2 %	_	_		-	-		97 %
Layer 02	2 %	5%	-	<u>-</u>		-	•	LA COLOR DE LA CASA DE	93 %
	21078.021	-0013		Sample ID: S1:	3	Da	ate Analyzed: Analyst:	02/04/2010 Stephanie Gold	len
Client Sample Desci	-	Doroont of					Anaryon	otopiiaino eiet	Percent
Asbestos Mineral F	<u>ibers</u>	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Asbestos:
Layer 01 fine compact pow paint, offwhite	der w/	30%	Trace	-	-				< 1 %
Layer 02 compact chalky m with paper, white	naterial	70%	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	Wool	Synthetic Othe	r			Matrix	
Layer 01 Layer 02	-	- 6 %	-	-		-	-		100 % 94 %
	21078.021	-0014		Sample ID: S14	1	Da	ate Analyzed:	02/04/2010	
Client Sample Descr	iption:		٠				Analyst:	Stephanie Gold	len
Asbestos Mineral Fi	-	Percent of Sample:	Chrysotile	e Amosite	Crocidolite		-		Percent Asbestos:
Layer 01									
fine compact power offwhite	der,	5%	-	-	-				NAD
Layer 02 compact chalky m	ıaterial	95%	-	-	-				NAD
with paper, white Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	Wool	Synthetic Othe	r			Matrix	
Layer 01	-	3 %	-	-		-	-		97 %
Layer 02	2 %	6 %	-	-		-	-		92 %
Client Sample ID: Client Sample Descr	21078.021 iption:	-0015	;	Sample ID: S15	5	Da	ite Analyzed: Analyst:	02/04/2010 Stephanie Gold	len
Asbestos Mineral Fi	-	Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percent Asbestos:
Homogeneous vinyl, tan		100%	_	-	· <u>-</u>				NAD
Other Fibers	Fibrous Glass		Mineral Wool	Synthetic Othe	r			Matrix	
	-	-	-	-	ı	-	-		100 %

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Page 4 of 6 Page No.:

# LabCor Portland Inc. /// 4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number:	100191	Report Number:	100191R02
		Papart Date: (	02/04/2010

								Report Date: 02/	04/2010
Client Sample ID:	21078.021	-0016		Sample ID: S	S16		Date Analyzed:	02/04/2010	
Client Sample Desc	cription:						Analyst:	Stephanie Gold	en
Asbestos Mineral I		Percent of Sample:	Chrysotil	le Amosite	Crocidolite				Percent Asbestos:
Layer 01									
fine compact pov white	wder,	20 %	-	-	-				NAD
Layer 02									
compact chalky white	material,	80 %	-	-	-	4			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Ot	her		ſ	Matrix	
Layer 01	_	1 %		-		-	-	ę	99 %
Layer 02	1 %	6 %	-	-		-	-	9	93 %
	21078.021	0017		Sample ID: S	217		Date Analyzed:	02/04/2010	
Client Sample ID: Client Sample Desc		-0017		Sample ID.	)		Analyst:	Stephanie Golde	en
Asbestos Mineral F	•	Percent of					rularyou		Percent
Aspestos Iviliterai r	IDEIS	Sample:		e Amosite	Crocidolite				Asbestos:
Layer 01		•	,			*			
compact fibrous		90 %	_	-	-				NAD
material, white									
Layer 02									
mastic, yellow		10%	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	Wool	Synthetic Oth	her		b	Matrix	
Layer 01	60 %	5 %	12 %	-		-	-	_	23 %
Layer 02	2 %	-	-	-		-	-	(	98 %
Client Sample ID:	21078.021	-0018		Sample ID: S	18		Date Analyzed:	02/04/2010	
Client Sample Desc				·			Analyst:	Stephanie Golde	en
Asbestos Mineral F	•	Percent of							Percent
		Sample:	Chrysotile	e Amosite	Crocidolite				Asbestos:
Layer 01									
coarse cementiite	ous	35 %	-	-	-				NAD
material, white									
Layer 02									NAD
loose cementitiou powder, white	JS	65 %	•	•	-				NAU
Other Fibers	Fibrous		Mineral				_		
	Glass	Cellulose	Wool	Synthetic Oth	ner		N	/latrix	
Layer 01	-	2 %	-	-		-	-	_	98 %
Layer 02	-	3 %	-	• *		-	-	ę	97 %

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## LabCor Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A

Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 100191

Report Number: 100191R02 Report Date: 02/04/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous." Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden Analyst

Page No.: Page 6 of 6



Phase 0002

## Engineering + Environmental

100191

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

Date Sent: February 02, 2010  PBS Engineering + Environmental  4412 SW Corbett Avenue  Portland, OR 97239  503.248.1939, Fax: 503.248.0223  Name  Name  Date Received: 2/2/10 10:50A  Company: Lab Cor Address: 4321 SW Corbett Ave Ste A Portland, OR 97239  503-224-5055	•
4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.0223 Name Name Name  Address: 4321 SW Corbett Ave Ste A Portland, OR 97239 503-224-5055  Name Name	<u>ra</u>
Authorized Signature  Date  Authorized Signature  2/2	./≀o Date
Sender's ID No. Brief Description Receiver's ID No.	
21078.021-0001	
21078.021-0002	
21078.021-0003	
21078.021-0004	
21078.021-0005	
21078.021-0006	
21078.021-0007	
21078.021-0008	
21078.021-0009	
21078.021-0010	
21078.021-0011	
21078.021-0012	
21078.021-0013	
21078.021-0014	<del></del>
21078.021-0015	

**Project No.:** 

SENDER

21078.021



## Engineering + Environmental

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

21078.021-0016	
21078.021-0017	-
21078.021-0018	
Please analyze the enclosed 18 sample(s) for asbestos content using PLM with dispersion staining requests prior notification if samples will be disposed.  Request verbal results by: AM/PM Date.  Please fax and mail the results to the above address.  TURNAROUND DESIRED: 48 Hour	g. PBS
SPECIAL INSTRUCTIONS:	and the state of t
	CN

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

Inc.//

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100227R01

P.O. No: n/a

Report Date: 02/10/2010

Job Number: 100227

Project Name:

Project Number: 21078.021 Phase 0002

**Project Notes:** 

Client Sample ID: 21078.021-0013

Sample ID: S1

Date Analyzed:

02/10/2010

Client Sample Description:

Percent of

Analyst:

Stephanie Golden

Asbestos Mineral Fibers

Cellulose

Crocidolite

Percent Asbestos:

Homogeneous

Sample: Chrysotile

Amosite **Point Count:** 

400

fine compact powder,

1.25 %

5 Point Count Fields:

1.25 %

offwhite Other Fibers

Fibrous Glass

Mineral

Wool

Synthetic Other

Matrix

98.75 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Analyst

Page 1 of 1

Page No.:

### **Harmony Kilby**

From:

Harmony Kilby

Sent:

Friday, February 05, 2010 4:07 PM

To:

'Staff

Subject:

Attachments:

Additional Analysis: 21078.021 Phase 0002; LC# 100191 100191R02\_20100204\_Final-PLMVis.pdf; 100191\_coc.pdf

Please do a **point count analysis** on <u>Layer 1 (joint compound only)</u> of sample **-0013** for Project 21078.021 Phase 0002 (LCP#100191).

We would like results on a 3 Day TA.

Please let me know if there are any questions about this request.

Thank you!

Harmony Kilby Administrative Assistant harmony kilby@pbsenv.com 503.417.7592

PBS Engineering + Environmental Engineering | Natural Resources | Environmental | Health and Safety www.pbsenv.com 4412 SW Corbett Ave Portland OR, 97239 ph: 503.248.1939 : fax: 503.248.0223

**From:** Staff [mailto:Staff@labcorpdx.net] **Sent:** Thursday, February 04, 2010 10:58 AM

**To:** Harmony Kilby **Cc:** Matt Jones

**Subject:** 21078.021 Phase 0002; LC# 100191

Attached are the invoice and final report for the sample(s) submitted on 02/02/2010.

Please contact us at the number below if you should have any further questions, concerns or complaints regarding the results or the service provided to you.

Sincerely,

Stephanie Golden Analyst 4321 SW Corbett Ave., Ste A Portland, OR 97239 Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Note: This email and the attached document contain privileged and confidential information, and are intended solely for the use of the individual referenced above. If you are not the intended recipient, you are hereby advised that any distribution or copying of this communication is prohibited. If you have received this message in error, immediately notify the sender by telephone or email and delete this message from your mail server.

LabCor Portland, Inc. Portland, Inc.

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 100349R01

P.O. No: n/a

Report Date: 02/22/2010

Asbestos and Environmental Analysis

Client:

Inc

PBS Engineering + Environmental

4321 SW Corbett Ave., Ste A

4412 SW Corbett Ave Portland, OR 97239

Portland, OR 97239

Job Number: 100349

**Project Name:** 

Project Number: 21078.021 Phase 0002

**Project Notes:** 

Client Sample ID: 21078.021-0013

Sample ID: S1

Date Analyzed:

02/22/2010

Analyst:

Stephanie Golden

Percent

Asbestos Mineral Fibers

**Client Sample Description:** 

Layer Percent: Chrysotile

Amosite

Crocidolite

Asbestos:

Homogeneous

fine powder, gray

0.5 %

Mineral

Synthetic

Other

0.1 %

Other Fibers

Fibrous Glass

Cellulose Wool

Matrix

99.5 %

Comments: Gravimetric Reduction. GRR value is 0.204993478.

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page No.: Page 1 of 1

## LabCor Portland, Inc.

100349

## PBS Request for Extended/ Additional Analyses

Please use this form for samples that require additional analysis. This should only be used for samples LabCor already has received and reported.

	Contact:	Harmony Kilby	Project Manager:	Clark Nels	eon .	1
person	equesting additional ana	alysis)	Contact Project Manager		TNO)	<b>j</b> .
.abCor i	Report No.:	100191	Dec notice to	· · · · · · · · · · · · · · · · · · ·		1
		100/9/	PBS Project No.:	21078.021 Pha	se 000 <b>2</b>	
Cli	ent Sample Numbers to		Layer			
	Analyze	~0013	(if applicable)			
					•	
`	<u>.</u>				•	
Select				· .	Select O	20.
One:	<del>                                     </del>	10		·	Turn Around	Pric
	Composite	liayer percent, and percent	culated with regards to the entire sa t asbestos present in the total samp	do example and the area to the	Same Day	NA
	Analysis	Totalige for this, as we hist	select a certain option when running analysis, so the report automati	or or compact. This area of and a		
		results for the reduested s	amples.			
	Composite/	"Composite by weight". The dissolution and a 400-field	e entire sample gravimetrically redu point count is performed on what is	iced by ashing and acid	24 hours	\$95.00
X	Gravimetric 400	ashestos present le calcula ratio applied.	ated based on points counted with t	he gravimetric reduction	2 days	\$80.00
•	Point Count	nado appaed.			3 days	\$75.00
71		A 400-field point count is p	erformed on a single layer within a	sample with no graylmetric	5 days	\$55.00
	4-4-	reduction,			4 hours	\$75.00 \$65.00
- 1	400 Point Count		•		24 hours	\$50.00
				1	2 days	
		1			3 days	\$35.00

Portland, OR 97239

4321 SW Corbett Ave., Ste A

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**BULK SAMPLE ASBESTOS ANALYSIS** 

Client:

Inc.

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100296R01

Report Date: 02/15/2010

Job Number:

100296

P.O. No: n/a

**Project Name:** 

**Project Number:** 

21078.021 Phase 0002

**Project Notes:** 

21078.021-0019 Client Sample ID:

Sample ID: S1

Date Analyzed:

02/15/2010

**Client Sample Description:** 

Percent of

Analyst:

Stephanie Golden

**Asbestos Mineral Fibers** 

Sample: Chrysotile

Crocidolite Amosite

Percent Asbestos:

Homogeneous

mastic, yellow

100%

NAD

Other Fibers

**Fibrous** Glass

Mineral Wool Cellulose

Synthetic Other

Matrix

98 %

Client Sample ID: 21078.021-0020 Sample ID: S2

Date Analyzed: Analyst: 02/15/2010

Client Sample Description: **Asbestos Mineral Fibers** 

Percent of

2 %

Stephanie Golden

Sample: Chrysotile Amosite Crocidolite

Percent Asbestos:

Laver 01

rubbery material, tan

40%

NAD

NAD

Layer 02

Other Fibers

mastic w/ paint, offwhite/black

60%

Mineral

Matrix

Layer 01

Glass Cellulose Wool Synthetic Other

Analyst:

100 % 100 %

Layer 02

Client Sample ID: 21078.021-0021

Sample ID: S3

Date Analyzed:

02/15/2010

Fibrous

Client Sample Description: **Asbestos Mineral Fibers** 

Percent of Sample:

Amosite

Stephanie Golden

Percent Asbestos:

6 %

NAD

Homogeneous

100%

Crocidolite

NAD

mastic, orange Other Fibers

Sample:

40%

1%

**Fibrous** Glass Cellulose

Mineral Wool

Chrysotile

Synthetic Other

Matrix

Client Sample ID:

21078.021-0022

Sample ID: S4

Amosite

Date Analyzed:

02/15/2010

**Client Sample Description:** 

**Asbestos Mineral Fibers** Percent of

Analyst:

Stephanie Golden

Chrysotile

Crocidolite

Percent Asbestos:

99%

Layer 01

vinyl tile, green

60% 6 %

Layer 02 fibrous tarry backing, black

Other Fibers

Fibrous Glass

Mineral

Layer 01

Cellulose

Wool Synthetic Other

Matrix

94%

Layer 02

70 %

30 %

Page 1 of 8

# LabCor Portland, Inc. Portland Inc. / | 4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 100296					Rep	port Number: 1002 Report Date: 02/15	
Client Sample ID: 21078.02 Client Sample Description: Asbestos Mineral Fibers	1-0023 Percent of		Sample ID: S5		Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	Percent
		Chrysotile	e Amosite	Crocidolite			Asbestos
Homogeneous brittle mastic, black	100%	2 %	-				2 %
Other Fibers Fibrous Glass		Mineral Wool	Synthetic Other	·	-	Matrix 98	%
Client Sample ID: 21078.02	1-0024		Sample ID: S6		Date Analyzed:	02/15/2010	
Client Sample Description: Asbestos Mineral Fibers	Percent of	Chrysotile	e Amosite	Crocidolite	Analyst:	Stephanie Golden	Percent Asbestos
Homogeneous	Campio	Onlysonic	, , , minosito	o.co.aomo			
brittle mastic, black	100%	-	-	-			NAI
Other Fibers Fibrous Glass		Mineral Wool	Synthetic Other		ı	Matrix	
<u>.</u>	•	•	-	-	-	100	·
Client Sample ID: 21078.021 Client Sample Description:	-0025	:	Sample ID: S7		Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	
<u>Asbestos Mineral Fibers</u>	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos
Homogeneous loose powder, light gray	100%	5 %	-	-			5 %
Other Fibers Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other		1	Matrix	0/
<b>-</b>	2 %	-	-	_	-	93	%
<u>Client Sample ID:</u> 21078.021 Client Sample Description:	-0026	:	Sample ID: S8		Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	
Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos
Layer 01 fine compact powder, white	20%	-	-	-			NAI
Layer 02							A1 A 7
loose chalky powder	80%	-	-	-			NAI
Other Fibers Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other		1	Matrix	
Layer 01 -	1 %	-	- "	-	-	99	
Layer 02 -	5 %	-	-	-	-	95	%

Page No.:

# LabCor Portland, Inc. Portland day Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 10029	6						Re	eport Number: 1 Report Date: 0	
Client Sample ID: 2	1078.021	-0027	- In the Control of t	Sample ID: S9			Date Analyzed:	02/15/2010	
Client Sample Descrip				•			Analyst:	Stephanie Go	lden
Asbestos Mineral Fib		Percent of Sample:	Chrysotile	e Amosite	Crocidolite				Percent Asbestos:
Layer 01									
interwoven fibers was	1/	10%	-	-	-				NAD
Layer 02									
mastic, dark gray		5%	-	-	-				NAD
Layer 03									
cork material, light I	brown	80%	-	-	-				NAD
Layer 04							•		
mastic, w/ powder, gray	dark	5%		-	-	•			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other				Matrix	
Layer 01	-	20 %	-	-		-	-		80 %
Layer 02	-	=	-	-		-	-		100 %
•	_	-	-	<b>-</b> _		•	-		100 %
Layer 03									
Layer 03 Layer 04	_	1 %	-	•		-	-		99 %
Layer 04	- 1078.021- otion:			Sample ID: S10	- 111		Date Analyzed: Analyst:	02/15/2010 Stephanie Go	
Layer 04 <u>Client Sample ID:</u> 21	otion:			·	Crocidolite		-		
Layer 04 <u>Client Sample ID:</u> 21  Client Sample Descrip	otion:	0028 Percent of		·	Crocidolite		-		den Percent Asbestos:
Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe	otion: <u>ers</u>	0028 Percent of		·	Crocidolite -		-		den Percent
Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe	otion: <u>ers</u>	O028  Percent of Sample:	Chrysotile	·	Crocidolite -		Analyst:		den Percent Asbestos:
Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Homogeneous loose shavings, gray	otion: ers y Fibrous	Percent of Sample:	Chrysotile 6 % Mineral	e Amosite	Crocidolite -	_	Analyst:	Stephanie Go	den Percent Asbestos:
Layer 04  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Homogeneous loose shavings, gray  Other Fibers  Client Sample ID: 21	y Fibrous Glass	Percent of Sample: 100% Cellulose	Chrysotile 6 % Mineral Wool	e Amosite	Crocidolite -	_	Analyst:	Stephanie Go  Matrix  02/15/2010	den Percent Asbestos: 6 %
Layer 04  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Homogeneous loose shavings, gray  Other Fibers  Client Sample ID: 21  Client Sample Descrip	y Fibrous Glass - 1078.021- otion:	Percent of Sample: 100% Cellulose -	Chrysotile 6 % Mineral Wool	Amosite  - Synthetic Other	Crocidolite -		Analyst:	Stephanie Go Matrix	den Percent Asbestos: 6 %
Layer 04  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Homogeneous loose shavings, gray  Other Fibers  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe	y Fibrous Glass - 1078.021- otion:	Percent of Sample: 100% Cellulose	Chrysotile 6 % Mineral Wool -	Amosite  - Synthetic Other - Sample ID: S11	Crocidolite - Crocidolite		Analyst:	Stephanie Go  Matrix  02/15/2010	den Percent Asbestos: 6 %
Layer 04  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Homogeneous loose shavings, gray  Other Fibers  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Layer 01	y Fibrous Glass - 1078.021- otion:	Percent of Sample:  100 %  Cellulose  0029  Percent of Sample:	Chrysotile 6 % Mineral Wool -	Amosite  - Synthetic Other - Sample ID: S11	-		Analyst:	Stephanie Go  Matrix  02/15/2010	Percent Asbestos: 6 % 94 %  den Percent Asbestos:
Layer 04  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe  Homogeneous loose shavings, gray  Other Fibers  Client Sample ID: 21  Client Sample Descrip Asbestos Mineral Fibe	y Fibrous Glass - 1078.021- otion:	Percent of Sample:  100%  Cellulose -  0029  Percent of	Chrysotile 6 % Mineral Wool -	Amosite  - Synthetic Other - Sample ID: S11	-		Analyst:	Stephanie Go  Matrix  02/15/2010	Percent Asbestos: 6 % 94 % den Percent
Layer 04  Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Homogeneous loose shavings, gray Other Fibers  Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Layer 01	y Fibrous Glass - 1078.021- otion:	Percent of Sample: 100 % Cellulose - 0029 Percent of Sample: 95 %	Chrysotile 6 % Mineral Wool -	Amosite  - Synthetic Other - Sample ID: S11	-	-	Analyst:	Stephanie Go  Matrix  02/15/2010	den Percent Asbestos: 6 %  94 %  den Percent Asbestos: NAD
Client Sample ID: 21 Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Homogeneous loose shavings, gray Other Fibers  Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Layer 01 vinyl, gray Layer 02 mastic w/ wood fiber yellow	y Fibrous Glass - 1078.021- otion:	Percent of Sample:  100 %  Cellulose  0029  Percent of Sample:	Chrysotile 6 % Mineral Wool - Chrysotile -	Amosite  - Synthetic Other - Sample ID: S11	-		Analyst:	Stephanie Go  Matrix  02/15/2010	Percent Asbestos: 6 % 94 %  den Percent Asbestos:
Client Sample ID: 21 Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Homogeneous loose shavings, gray Other Fibers  Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Layer 01 vinyl, gray Layer 02 mastic w/ wood fiber	y Fibrous Glass - 1078.021- otion:	Percent of Sample: 100 % Cellulose - 0029 Percent of Sample: 95 %	Chrysotile  6 % Mineral Wool - Chrysotile	Amosite  - Synthetic Other - Sample ID: S11	-		Analyst:  - Date Analyzed: Analyst:	Stephanie Go  Matrix  02/15/2010	Percent Asbestos: 6 % 94 % den Percent Asbestos: NAD
Client Sample ID: 21 Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Homogeneous loose shavings, gray Other Fibers  Client Sample ID: 21 Client Sample Descrip Asbestos Mineral Fibe Layer 01 vinyl, gray Layer 02 mastic w/ wood fiber yellow	y Fibrous Glass - 1078.021- otion: ers  rs, Fibrous	Percent of Sample: 100 % Cellulose - 0029 Percent of Sample: 95 % 5 %	Chrysotile 6 % Mineral Wool - Chrysotile - Mineral	Synthetic Other - Sample ID: S11 - Amosite -	-		Analyst:  - Date Analyzed: Analyst:	Stephanie Go Matrix 02/15/2010 Stephanie Gol	den Percent Asbestos: 6 %  94 %  den Percent Asbestos: NAD



Page 3 of 8 Page No.:

# Inc.

# 

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 100	296					Re	eport Number: 10 Report Date: 02	
<u>Client Sample ID:</u> Client Sample Desc	21078.021 cription:	1-0030		Sample ID: S1	2	Date Analyzed: Analyst:	02/15/2010 Stephanie Gold	len
Asbestos Mineral I	•	Percent of Sample:	Chrysotile	e Amosite	Crocidolite			Percent Asbestos
Layer 01								
vinyl tile, gray		50 %	4 %	-	-			4
Layer 02								
mastic, black		5%	-	-	-			NΑ
Layer 03								
fibrous tarry back black	king,	45 %	-	-	-			NA
Other Fibers	Fibrous		Mineral					
	Glass	Cellulose	Wool	Synthetic Othe	r		Matrix	
Layer 01	-	-	-	-	-	-		96 %
Layer 02	-	2 %	-	-	-	-		98 %
Layer 03	-	70 %	-	-	•	-		30 %
Client Sample ID:	21078.021	-0031	;	Sample ID: S13	3	Date Analyzed:	02/15/2010	
Client Sample Desc	ription:					Analyst:	Stephanie Gold	en
Asbestos Mineral F	<u>ibers</u>	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos
ayer 01								
vinyl tile, gray		60 %	4 %	-	=			4 9
Layer 02								
fibrous tarry back black	ing,	30 %	-	-	<b>.</b>			NA
Other Fibers	Fibrous		Mineral					
	Glass	Cellulose	Wool	Synthetic Other	r		Matrix	
Layer 01	-	- ,	-	-	-	٦		96 %
Layer 02	-	70 %		-	-	-	3	30 %
•	21078.021	-0032		Sample ID: S14		Date Analyzed:	02/15/2010	
lient Sample Desc						Analyst:	Stephanie Golde	
<u> Asbestos Mineral F</u>	<u>ibers</u>	Percent of	Chrusatila	Amosite	Crocidolite			Percent Asbestos
l		Sample.	Chrysotile	Amosite	Grocidonte			Aspesios
domogeneous compact fibrous		100%	-	-	-			NA
material, light tan Other Fibers	Fibrous		Mineral					
Julei Fibers	Glass	Cellulose	Wool	Synthetic Other		ı	Matrix	
	5 %	60 %	_	-	-	-		35 %
				2I- ID- C4E		Data Analyzadı	02/15/2010	
Wared Oans de ID.		.0033	•	Sample ID: S15		Date Analyzed: Analyst:	Stephanie Golde	⊃n
	21078.021-					Anaiyot.	Stophanic Golde	
lient Sample Desc	ription:	Parcent of						Percent
lient Sample Desc	ription:	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos
lient Sample Desc Asbestos Mineral F	ription:		Chrysotile	Amosite	Crocidolite			
lient Sample Desc Asbestos Mineral F Homogeneous	ription: <u>ibers</u>	Sample:	-	Amosite	Crocidolite			
Client Sample Desci Asbestos Mineral F Homogeneous Ioose shavings, g	ription: ibers ray		6 %	Amosite -	Crocidolite			Asbestos
Client Sample Desci Asbestos Mineral F Homogeneous	ription: <u>ibers</u>	Sample:	-	Amosite - Synthetic Other	-		Matrix	Asbestos

Page 4 of 8 Page No.:

# Inc

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Job Number: 1002	296						Re	port Number: 1	
				. 0	0		Data Analyzadi	02/15/2010	2/10/2010
Client Sample ID:	21078.021	-0034		Sample ID: S1	<b>b</b>		Date Analyzed: Analyst:	Stephanie Gol	den
Client Sample Desc Asbestos Mineral F	-	Percent of					Analysti	Otophanio doi	Percent
Aspestos Milieral I	ibers		Chrysotil	e Amosite	Crocidolite				Asbestos:
Homogeneous									
fibrous mastic, of	fwhite	100%		-	-				NAD
Other Fibers	Fibrous		Mineral	0 11 11 011				N. A Audio	
	Glass	Cellulose 35 %	Wool	Synthetic Othe	er		_	Matrix	65 %
Client Sample ID:	21078.021			Sample ID: S1	7		Date Analyzed:	02/15/2010	
Client Sample Desc							Analyst:	Stephanie Gol	den
Asbestos Mineral F	-	Percent of							Percent
,		Sample:	Chrysotil	e Amosite	Crocidolite				Asbestos:
Layer 01									
vinyl, gray		50 %	-	-	-				NAD
Layer 02									MAD
fibrous backing, g	ıray	45 %		-	•				NAD
Layer 03									NAD
mastic, yellow		5%	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Othe	ır		1	Matrix	
Lover 01	Giado	Cellulose	_	-	i .				100 %
Layer 01 Layer 02	2 %	75 %	_	_		_	-		23 %
Layer 03	-	3 %	-	-		-	-	•	97 %
			··········		_			00/45/0040	
Client Sample ID:	21078.021-	.0036		Sample ID: S18	3		Date Analyzed:	02/15/2010	
	21078.021- ription:	0036		Sample ID: S18	3		Date Analyzed: Analyst:	Stephanie Gol	den
Client Sample ID: Client Sample Descr Asbestos Mineral Fi	ription:	·0036 Percent of		Sample ID: S18			-		Percent
Client Sample Descr	ription:			·	3 Crocidolite		-		
Client Sample Desci Asbestos Mineral Fi Layer 01	ription:	Percent of Sample:		·			-		Percent Asbestos:
Client Sample Desci Asbestos Mineral Fi Layer 01 mastic, yellow	ription:	Percent of		·			-		Percent
Client Sample Descr Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02	ription:	Percent of Sample: 70 %	Chrysotile	·			-		Percent Asbestos: NAD
Client Sample Desci Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black	ription: i <u>bers</u>	Percent of Sample:	Chrysotile - 3 %	·			-		Percent Asbestos:
Client Sample Descr Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02	ription: ibers Fibrous	Percent of Sample:	Chrysotile - 3 % Mineral	e Amosite	Crocidolite		Analyst:	Stephanie Gol	Percent Asbestos: NAD
Client Sample Desci Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers	ription: i <u>bers</u>	Percent of Sample: 70 %	Chrysotile - 3 %	·	Crocidolite		Analyst:	Stephanie Gol	Percent Asbestos: NAD 3 %
Client Sample Descriance Asbestos Mineral Fi  Layer 01  mastic, yellow  Layer 02  mastic, black  Other Fibers  Layer 01	ription: ibers Fibrous	Percent of Sample:	Chrysotile - 3 % Mineral	e Amosite	Crocidolite	- -	Analyst:	Stephanie Gol	Percent Asbestos: NAD
Client Sample Desci Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02	ription: ibers Fibrous Glass	Percent of Sample: 70 % 30 % Cellulose 1 %	Chrysotile  - 3 % Mineral Wool	e Amosite  -  -  Synthetic Othe	Crocidolite ·	-	Analyst:	Stephanie Gol	Percent Asbestos: NAD 3 %
Client Sample Descriance Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID:	ription: ibers Fibrous Glass - - 21078.021-	Percent of Sample: 70 % 30 % Cellulose 1 %	Chrysotile  - 3 % Mineral Wool	e Amosite	Crocidolite ·	- -	Analyst:	Stephanie Gol	Percent Asbestos: NAD 3 %
Client Sample Descriance Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID:	Fibrous Glass - - - 21078.021-	Percent of Sample:  70 % 30 %  Cellulose 1 %  0037	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Descriance Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descriance Asbestos Mineral Fi	Fibrous Glass - - - 21078.021-	Percent of Sample: 70 % 30 % Cellulose 1 %	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite ·	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Descriance Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descriance Asbestos Mineral Fi Layer 01	Fibrous Glass - - 21078.021- ription: bers	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Descriance Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descriance Asbestos Mineral Fi Layer 01 compressed fibers	Fibrous Glass - - 21078.021- ription: bers	Percent of Sample:  70 % 30 %  Cellulose 1 %  0037	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Descri Asbestos Mineral File Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID: Client Sample Descri Asbestos Mineral File Layer 01 compressed fibers brown	Fibrous Glass - - 21078.021- ription: bers	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Description Asbestos Mineral Filiption Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID: Client Sample Description Asbestos Mineral Filiption Layer 01 compressed fibers brown Layer 02	Fibrous Glass - 21078.021- iption: bers s, light	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 %
Client Sample Descria Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID: Client Sample Descria Asbestos Mineral Fi Layer 01 compressed fibers brown Layer 02 mastic, light brown	Fibrous Glass - 21078.021- iption: bers s, light	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:  40 %	Chrysotile  - 3 % Mineral Wool	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  -  r	-	Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 % den Percent Asbestos:
Client Sample Descrium Asbestos Mineral Filipare 11  mastic, yellow Layer 02  mastic, black Other Fibers  Layer 01  Layer 02  Client Sample ID: Client Sample Descrium Asbestos Mineral Filipare 11  compressed fibers brown Layer 02	Fibrous Glass 21078.021- ription: bers s, light	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:  40 %	Chrysotile  3 % Mineral Wool  Chrysotile	e Amosite  Synthetic Othe Sample ID: S19	Crocidolite  Crocidolite	-	Analyst:  Date Analyzed: Analyst:	Stephanie Gold Matrix 02/15/2010	Percent Asbestos: NAD 3 % 100 % 96 % den Percent Asbestos: NAD
Client Sample Descria Asbestos Mineral Fi Layer 01 mastic, yellow Layer 02 mastic, black Other Fibers Layer 01 Layer 02 Client Sample ID: Client Sample Descria Asbestos Mineral Fi Layer 01 compressed fibers brown Layer 02 mastic, light brown	Fibrous Glass Glass - 21078.021- ription: bers s, light	Percent of Sample:  70 %  30 %  Cellulose  1 %  0037  Percent of Sample:  40 %  60 %	Chrysotile  3 % Mineral Wool  Chrysotile - Mineral	e Amosite  - Synthetic Othe Sample ID: S19	Crocidolite  Crocidolite	-	Analyst:  Date Analyzed: Analyst:	Stephanie Gold  Matrix  02/15/2010  Stephanie Gold	Percent Asbestos: NAD 3 % 100 % 96 % den Percent Asbestos:

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# LabCor Portland, Inc. Portland Inc. /// 4321 SW Corbett Ave., Ste A Portland, OR 97239 Inc

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Job Number: 100	296						Re	oort Number: 1002 Report Date: 02/15	
Client Sample ID: Client Sample Des	21078.021	-0038		Sample ID: S20	)		Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	
Asbestos Mineral	-	Percent of Sample:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
fine compact por paint, white	wder w/	15%	-	-	<u>.</u>	•			NAD
compact chalky offwhite	material,	85%	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other	r		.1	Matrix	
Layer 01 Layer 02	3 %	1 % 5 %	-	-		-	-	99 92	
Client Sample ID:	21078.021	-0039	Ş	Sample ID: S21			Date Analyzed:	02/15/2010	
Client Sample Desc Asbestos Mineral I	-	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Analyst:	Stephanie Golden	Percent Asbestos:
Layer 01 vinyl, gray Layer 02		50%	-	-	-				NAD
fibrous backing,	gray	50 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other			1	<i>M</i> atrix	
Layer 01 Layer 02	- 3%	- 80 %	-	- Wo	ollastonite	- 5 %	<u>.</u> 2	100 12	
Client Sample ID:	21078.021	-0040	S	Sample ID: S22			Date Analyzed:	02/15/2010	
Client Sample Desc Asbestos Mineral F		Percent of Sample:	Chrysotile	Amosite	Crocidolite		Analyst:	Stephanie Golden	Percent Asbestos:
Layer 01 fine compact pow white	vder,	10%	Trace	-	-				< 1 %
Layer 02 compact chalky,	offwhite	90 %	-	-	-	•			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other			1	Matrix	
Layer 01 Layer 02	-	3 % 6 %	-	-		-	-	97 94	
Client Sample ID:	21078.021	-0041	S	Sample ID: S23			Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	
Client Sample Desc Asbestos Mineral F	•	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Analysia		Percent Asbestos:
Homogeneous compressed fiber golden brown	rs,	100%	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose 100 %	Mineral Wool -	Synthetic Other		-	-	Matrix 0 9	<b>%</b>

NVLAP

Page 6 of 8 Page No.:

# Inc.//

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Job Number: 100	296					-	oort Number: 1002 Report Date: 02/15	
Client Sample ID: Client Sample Desc Asbestos Mineral F	-	-0042 Percent of Sample:		Sample ID:	24 Crocidolite	Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	Percent Asbestos:
Homogeneous mastic, black		100%	2 %	-	-			2 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool -	Synthetic Oth	er -	-	Matrix 98	%
Client Sample ID: Client Sample Desc Asbestos Mineral F	•	-0043 Percent of		Sample ID: S2	25	Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	Percent
	<u>ibers</u>	Sample:		e Amosite	Crocidolite			Asbestos:
Layer 01 vinyl tile, white		95 %	-	-	-			NAD
Layer 02 mastic, black		5%	-	-	-			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Oth	er	N	Matrix (	
Layer 01 Layer 02	-	- 1 %	-	-	-	-	100 99	
Client Sample ID: Client Sample Desc Asbestos Mineral F	-	0044  Percent of Sample:	Chrvsotile	Sample ID: S2	Crocidolite	Date Analyzed: Analyst:	02/15/2010 Stephanie Golden	Percent Asbestos:
Layer 01 vinyl tile, white		95 %	-	-	-			NAD
Layer 02 mastic, black		5%	-	-	•			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Othe	er	N	1atrix	
Layer 01 Layer 02	-	- 5 %	 -	-	-	-	100 95 °	

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#### LabCor Lab/Cor Portland, Inc. **Portland** 4321 SW Corbett Ave., Ste A

Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 100296

Report Number: 100296R01

Report Date: 02/15/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

**Analyst** 

NVLAP

Page 8 of 8 Page No.:



Phase 0002

**Project No.:** 

21078.021

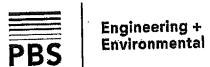
#### Engineering + Environmental

100296

# TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the original. The Receiver should complete the for package immediately to Sender.	Information provided is con orm, keep a copy and return	rect and complete. The S the original to the Sende	ender snould keep r.  Receiver shall re	port damage of
SENDER		RECEIVER		1C 10
Date Sent: February 12, 2010		Date Received:	2/12/10	4:02 pm
PBS Engineering + Environmenta 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.0223  Name Authorized Signature	2/17/10 <sup>3:50</sup> Date	Portla	SW Corbett Av. nd, OR 97239 24-5055 - G.OLOG	e Ste A  2/12/10  Date
Sender's ID No.	Brief Description	Receive	er's ID No.	
21078.021-0019				
21078.021-0020				
21078.021-0021				
21078.021-0022				
21078.021-0023				
21078.021-0024				
21078.021-0025				
21078.021-0026				
21078.021-0027				
21078.021-0028				
21078.021-0029				
21078.021-0030				
21078.021-0031				
21078.021-0032				

21078.021-0033



TRANSMITTAL AND CHAIN OF CUSTODY FO	R ASBESTOS BULK SAMPLES
21078.021-0034	
21078.021-0035	
21078.021-0036	
21078.021-0037	
21078.021-0038	
21078.021-0039	
21078.021-0040	
21078.021-0041	
21078.021-0042	
21078.021-0043	
21078.021-0044	DD0
Please analyze the enclosed 26 sample(s) for asbestos conterrequests prior notification if samples will be disposed.  Request verbal results by: AM/PM  Please fax and mail the results to the above address.  TURNAROUND DESIRED: 24 Hour	_Date.
SPECIAL INSTRUCTIONS:	(%)
	<u> </u>

LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

### **Analysis Report Cover**

Final Report

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 100346R01

Report Date: 2/22/2010

Asbestos and Environmental Analysis

Job Number: 100346

**PDX** 

Client: PBS Engineering + Environmental

Address: 4412 SW Corbett Ave

Portland, OR 97239

**Project Name:** 

Project No.: 21078.021 Phase 0002

PO Number: Sub Project: Reference No.:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample # Client Sample # and Description

Analysis

Analysis Notes

Date Received:

100346 - S1

21078.021-0040 - Layer 1

NIOSH 9000 - XRD -Quantitative Bulk

2/18/2010

NIOSH 9000 - Preparation and analysis of the above samples were conducted in accordance with the NIOSH method 9000 for the XRD - Quantitative identification and quantification of asbestos by X-ray diffraction. Sample fibrosity was confirmed by either optical or electron Bulk microscopy before consideration of XRD quantitative analysis determine a more accurate percentage by weight. Approximately 500 mg of mortared fines were dried in an oven at 110°C for at least one hour. Approximately 5 mg of dried sample was diluted with isopropanol to 10ml. Aliquots were filtered onto 0.45µm silver membrane filters. The filters were mounted on sample holders for XRD analysis. XRD analysis was performed using an X-ray Diffractometer using a Copper x-ray source at 40 kW 35 mA emission. The XRD is equipped with a computer-controlled goniometer stage with selectable scan step sizes and rates. Scanning was done using step size of 0.03º 2 theta, at a rate of 1 sec per step. Quantitative data were obtained using NISTcertified or other calibration standards of regulated asbestiform minerals.

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Sincerely,

Analyst

LabCor Lab/Cor Portland, Inc. Portland 4321 SW Corbett Ave., Ste A

**Final Report** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

NIOSH 9000 - XRD - Quantitative Bulk Summary

Job Number: 100346

Client: PBS Engineering + Environmental

Report Number: 100346R01

Date Received: 2/18/2010

Project Name:

Lab/Cor Sample No.: S1

Client Sample No.: 21078.021-0040

Portland, OR 97239

Description: Layer 1

Analyst(s)

**Analysis Date** 

JS

2/22/2010

Analyte Description	Abs/Pres	Weight %	Gravimetric Reduction	Weight Percent
Chrysotile	Presence	2.20%	Acid Solubles	
Asbestos	Presence	2.20%	Organics	
	•		Residue	

Reviewed by:

Analyst

#### Lab/Cor Portland, Inc. LabCor Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100377R01

P.O. No: n/a

Report Date: 02/24/2010

Job Number: 100377

Project Name:

21078.021 Phase 0002

**Project Number: Project Notes:** 

Client Sample ID: 21078.021-0040

Sample ID: S1

Date Analyzed:

02/24/2010

Analyst:

Stephanie Golden

Client Sample Description: **Asbestos Mineral Fibers** 

fine powder, gray

Laver Percent: Chrysotile

%

Cellulose

**Amosite** 

Crocidolite

Percent Asbestos:

Homogeneous

0.75 %

Point Count: 3

Point Count Fields: 400

0.12 %

Other Fibers

Fibrous

Glass

Mineral Wool

Synthetic

Other

Matrix

99.25 %

Comments: Gravimetric Reduction. GRR value is 0.159139084.

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden Analyst

Page 1 of 1

Page No.:

## LabCor Portland, Inc.

## PBS Request for Extended/ Additional Analyses

Please use this form for samples that require additional analysis. This should only be used for samples LabCor already has received and reported.

and report	ed.			٠		_			
Primary C	ontact:	Harmi	my	Killon	Project Manager:	Clar	k Nelso	n	
(person re	questing addit	lonal analy	sis)(	,	Contact Project Mana	ager?:	Yes (	No )	
LabCor R	eport No.:	100	29(	6	PBS Project No.:	21078	5.021 Ph	.000Z	
Clie	nt Sample Nur	nbers to be Analyzed	: 3	mple Number	Layer (If applicable)	St (consessor)			·
Select			L			_1		Select O	ne:
One:								Turn Around	Price
	Compo Analy		layer po charge request	ercent, and percer for this, as we lus	Iculated with regards to the er at asbestos present in the tota it select a certain option when inal enalysis, so the report au samples.	i sample recelu running a repo	/ed. There is no ort. This can elso be	Same Day	NA
X	Gravim Composi Point C	ite 400	dissolul	tion and a 400-field as present is calcu	he enlire sample gravimetrica d point count is performed on lated based on points counte	what is left. Th	e percent of	24 hours 2 days 3 days 5 days	\$95.00 \$80.00 \$75.00 \$55.00
	400 Pòint	Count	A 400-fi reduction		performed on a single layer w	rithin a sampla	with no gravimetric	4 hours 8 hours 24 hours 2 days 3 days	\$75.00 \$65.00 \$50.00 \$35.00
of custody analyses w	contact. By in Ithin the stated uthorized by	itialling and	dating	g below Lab/C	yst approves this reques or accepts the analysis	st by Initialing request and Date Request Date Appro	ested: 2/23	e client with the a	the chain approved

#### Lab/Cor Portland, Inc. LabCor **Portland**

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Client:

Inc

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100312R01

Report Date: 02/17/2010

P.O. No: n/a

02/17/2010

Stephanie Golden

Date Analyzed:

Analyst:

Percent

Asbestos:

Percent

Asbestos:

Percent

Percent

2 %

NAD

2 %

Job Number: 100312

**Project Name:** 

**Project Number:** 21078.021 Phase 0002

**Project Notes:** 

21078.021-0045 Sample ID: S1 Date Analyzed: 02/17/2010 Client Sample ID:

Analyst: Stephanie Golden **Client Sample Description:** 

Percent of **Asbestos Mineral Fibers** 

Sample: Chrysotile Amosite Crocidolite

Homogeneous 6% sticky mastic, gray 100% 6 %

Mineral Other Fibers **Fibrous** Glass Wool

Matrix Synthetic Other Cellulose 94 %

Sample ID: S2

Client Sample ID: 21078.021-0046 Client Sample Description:

**Asbestos Mineral Fibers** 

Sample: Chrysotile Crocidolite Amosite

Layer 01 soft rubbery material, 98%

gray Layer 02 2% 2 %

mastic, black Mineral Other Fibers **Fibrous** 

Glass Wool Synthetic Other Matrix Cellulose

100 % Layer 01 98 %

02/17/2010 Sample ID: S3 Date Analyzed: Client Sample ID: 21078.021-0047

Layer 02

Analyst: Stephanie Golden Client Sample Description:

Percent of **Asbestos Mineral Fibers** 

Asbestos: Sample: Chrysotile Crocidolite Amosite Homogeneous

sticky mastic, dark brown 100% 2 % Mineral Other Fibers **Fibrous** 

Glass Wool Matrix Synthetic Other Cellulose

98 %

02/17/2010 Sample ID: S4 Date Analyzed: Client Sample ID: 21078.021-0048 Stephanie Golden

Analyst: Client Sample Description: **Asbestos Mineral Fibers** Percent of

Asbestos: Chrysotile Crocidolite Sample: Amosite

Homogeneous 6 % sticky mastic, gray 100% 6 %

Other Fibers **Fibrous** Mineral Glass Wool Matrix Synthetic Other Cellulose

94%

Page No.:

# LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239 Inc

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Job Number: 10031	12					Ro	eport Number: 1003 Report Date: 02/17	
Client Sample ID: 2 Client Sample Descri	21078.021 ption:	-0049		Sample ID: S5		Date Analyzed: Analyst:	02/17/2010 Stephanie Golder	
Asbestos Mineral Fil	-	Percent of Sample:	f Chrysotil	le Amosite	Crocidolite			Percent Asbestos:
Layer 01 soft rubbery materi gray Layer 02	ial,	70%	-	-				NAD
sticky mastic, gray		30 %	6 %	-	-			6 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Othe	er		Matrix	
Layer 01	-	-	-	-		-	100	
Layer 02	-	-	-	-		-	94	%
Client Sample ID: 2 Client Sample Descri	1078.021 ption:	-0050		Sample ID: S6		Date Analyzed: Analyst:	02/17/2010 Stephanie Golden	
Asbestos Mineral Fib	•	Percent of Sample:	Chrysotile	e Amosite	Crocidolite			Percent Asbestos:
Homogeneous sticky mastic, gray		100%	6 %	-	-			6 %
Other Fibers	Fibrous Glass		Mineral Wool	Synthetic Othe		•	Matrix	
	-	-	-	-			94	%
Client Sample ID: 2	1078.021	-0051		Sample ID: S7		Date Analyzed:	02/17/2010	
Client Sample Descrip	otion:					Analyst:	Stephanie Golden	
Asbestos Mineral Fib	<u>ers</u>	Percent of Sample:	Chrysotile	e Amosite	Crocidolite			Percent Asbestos:
Homogeneous sticky mastic, gray		100%	6 %	-	-			6 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Othe	r		Matrix	
	-	-	-	-		<u>-</u>	94	%
Client Sample ID: 27 Client Sample Descrip	1078.021- otion:	0052		Sample ID: S8		Date Analyzed: Analyst:	02/17/2010 Stephanie Golden	
Asbestos Mineral Fib		Percent of Sample:	Chrysotile	e Amosite	Crocidolite			Percent Asbestos:
Layer 01								
soft rubbery materia gray Layer 02	ıl,	90 %	-	-	-			NAD
soft rubbery materia light gray	ıl,	10%	5 %	-	-			5 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic Other	,		Matrix	
Layer 01	-	<del>-</del>	-	-		-	100	
Layer 02	-	•	-	-		-	95 '	%



Page 2 of 4 Page No.:

# Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239 Inc

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Job Number: 100312		Report Number: 100312R01 Report Date: 02/17/2010
Client Sample ID: 21078.021-0053 Client Sample Description:	Sample ID: S9	Date Analyzed: 02/17/2010 Analyst: Stephanie Golden
Asbestos Mineral Fibers Percent Sample	of :: Chrysotile Amosite Crocidolite	Percent Asbestos:
Homogeneous soft rubbery material, 100 light gray	% 5%	5 %
Other Fibers Fibrous Glass Cellulos	Mineral Se Wool Synthetic Other	Matrix - 95 %
Client Sample ID: 21078.021-0055	Sample ID: S10	Date Analyzed: 02/17/2010
Client Sample Description: <u>Asbestos Mineral Fibers</u> Sample	of : Chrysotile Amosite Crocidolite	Analyst: Stephanie Golden Percent Asbestos:
Homogeneous soft caulking material w/ 100° paint, gray	% 2 %	2 %
Other Fibers Fibrous Glass Cellulos	Mineral Wool Synthetic Other	Matrix - 98 %
Client Sample ID: 21078.021-0056	Sample ID: S11	Date Analyzed: 02/17/2010
Client Sample Description:  Asbestos Mineral Fibers Percent	of : Chrysotile Amosite Crocidolite	Analyst: Stephanie Golden Percent Asbestos:
Homogeneous  soft caulking material w/ 100 9 paint, white	% 1 %	1 %
Other Fibers Fibrous Glass Cellulos	Mineral e Wool Synthetic Other	Matrix - 99 %
Client Sample ID: 21078.021-0057	Sample ID: S12	Date Analyzed: 02/17/2010
Client Sample Description:  Asbestos Mineral Fibers  Sample:	of Chrysotile Amosite Crocidolite	Analyst: Stephanie Golden Percent Asbestos:
Homogeneous soft caulking material w/ 100% paint, white	6 1%	1 %
Other Fibers Fibrous Glass Cellulos	Mineral Wool Synthetic Other	Matrix - 99 %
	Sample ID: S13	Date Analyzed: 02/17/2010
Client Sample Description: Asbestos Mineral Fibers Percent of	· f	Analyst: Stephanie Golden Percent
	Chrysotile Amosite Crocidolite	Asbestos:
soft rubbery material w/ 100 % paint, dark brown		NAD
Other Fibers Fibrous Glass Cellulose	Mineral Wool Synthetic Other	Matrix - 100 %



Page 3 of 4 Page No.:

## LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 100312

Report Number: 100312R01

Report Date: 02/17/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden Analyst

NVLAP

Page No.: Page 4 of 4



# Engineering + Environmental

100312

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 21078.021 Phase 0002

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER		RECEIVER	
Date Sent: February 16, 20	10	Date Received: 2 10 10 10:15 mg	_
PBS Engineering + Environm 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.02 Name Authorized Signature		Company: Lab Cor Address: 4321 SW Corbett Ave Ste A Portland, OR 97239 503-224-5055  Name Name Authorized Signature  Date	- [10
Sender's ID No.	<b>Brief Description</b>	Receiver's ID No.	
21078,021-0045	<u> </u>	/	
21078.021-0046			
21078.021-0047			
21078.021-0048			_
21078.021-0049			_
21078.021-0050			_
21078.021-0051			_
21078.021-0052			_
21078,021-0053			_
21078.021-0055			_
21078.021-0056			
21078.021-0057	· · · · · · · · · · · · · · · · · · ·		
21078.021-0058			_
	•		



#### Engineering + Environmental

# TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Please analyze the enclosed 13 sample(s) for asbestos or requests prior notification if samples will be disposed.	ontent using PLM with dispersion staining. PBS
Request verbal results by: AM/PM	Date.
Please fax and mail the results to the above address.  TURNAROUND DESIRED: 24 Hour	
SPECIAL INSTRUCTIONS:	
#0054 has been archived.	

LabCor Lab/Cor Portland, Inc.

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 100350R01

P.O. No: n/a

Report Date: 02/22/2010

4321 SW Corbett Ave., Ste A Portland, OR 97239

Asbestos and Environmental Analysis

Client:

Inc

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Job Number: 100350

**Project Name:** 

Project Number: 21078.021 Phase 0002

**Project Notes:** 

Client Sample ID: 21078.021-0057

Sample ID: S1

Date Analyzed:

02/22/2010

Analyst:

Stephanie Golden

Client Sample Description: **Asbestos Mineral Fibers** 

Layer Percent: Chrysotile

Cellulose

Amosite

Crocidolite

Percent Asbestos:

Homogeneous

soft caulking material,

% 1 % Point Count: 4

Point Count Fields: 400

1 %

white/gray Other Fibers

**Fibrous** Glass Mineral

Wool Synthetic Other

Matrix

99 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.

The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page No.: Page 1 of 1

## LabCor Portland, Inc.

100350

#### PBS Request for Extended/ Additional Analyses

Please use this form for samples that require additional analysis. This should only be used for samples LabCor already has received and reported.

Primary C	ontact:	H	armony Kilby	Project Manager:	Clark Nels	on	
(person re	questing addition	al analy	sis)	Contact Project Manag	ger?: Yes	N₀)	•
LabCor R	eport No.:		100312	PBS Project No.:	21078.021 Pha	se 000 <b>2</b>	
Clie	nt Sample Numbe Ai	ers to be nalyzed		Layer (if applicable)			
Dalast	1			<u> </u>		Select O	ne:
Select One:				·		Turn Around	Price
	Composi Analysis		layer percent, and percent charge for this, as we just t	al analysis, so the report auto		Same Day	NA
·	Composit Gravimetric Point Cou	400	dissolution and a 400-field	e enlire sample gravimetrically point count is performed on w ited based on points counted		24 hours 2 days 3 days 5 days	\$95.00 \$80.00 \$75.00 \$55.00
X	400 Point Co		A 400-field point count is pa reduction.	erformed on a single layer will	nin a sample with no gravimetric		\$75.00 \$65.00 \$50.00 \$35.00 \$36.00
of custody analyses w	contact. By initial ithin the stated turn the stated turn thorized by:	ling and	dating below Lab/Cor	raccepts the analysis re	by Initialing below and refequest and will provide the Date Requested: 2/18	turns the form to e client with the a	the chain pproved

# LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Job Number: 100361

Project Name:

Project Number: 21078.021 Phase 0002 Report Number: 100361R01 Report Date: 02/19/2010

P.O. No: n/a

Project Notes:								
Client Sample ID: 21	078.021	1-0059		Sample ID:	: S1		Date Analyzed:	02/19/2010
Client Sample Descript	tion:						Analyst:	Stephanie Golden
<u>Asbestos Mineral Fibe</u>		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
loose fibrous materia yellow	al,	40 %	-	-	-			NAD
Layer 02								
fibrous backing w/ pa white	aint,	30 %	-	-	-			NAD
Layer 03								
interwoven fibers w/ white.silver	foil,	30 %	-	•	-			NAD
Other Fibers	Fibrous Glass	Cellulos	Mineral e Wool	Synthetic		Other		Matrix
Layer 01	100 %	-	-	-		-	-	0 %
Layer 02	-	90 %	-	-		-	-	10 %
Layer 03	80 %	-	-			-	-	20 %
Client Sample ID: 210	078.021	-0060		Sample ID:	S2		Date Analyzed:	02/19/2010
Client Sample Descript	ion:						Analyst:	Stephanie Golden
Asbestos Mineral Fiber		Layer						Percent
	F	Percent:	Chrysotile	Amosite	Crocidolite			Asbestos:
Layer 01								
vinyl tile, white		99 %	-	-	-			NAD
Layer 02								
mastic, black		1 %	4 %	-	-			4 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other		Matrix
Layer 01	_		,	- Cyntholic		_	-	100 %
Layer 02	_	2%		-		_	-	94 %
	70.00/			o 1 15	00		Data Analysis	02/19/2010
Client Sample ID: 210 Client Sample Descripti	78.021	-0067		Sample ID:	53		Date Analyzed: Analyst:	Stephanie Golden
Asbestos Mineral Fiber		Layer					Analyst.	Percent
Aspestos Milleral I Ibei			Chrysotile	Amosite	Crocidolite			Asbestos:
Layer 01								
rubbery material, blac	ck	98%	-	-	-			NAD
Layer 02								
mastic, brown		2%	-	-	-			NAD
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other		Matrix
Layer 01	-	-	-	-		-	-	100 %
Layer 02	-	-	-	_	Wollastonite	2 %	-	98 %
•								

Page 1 of 2 Page No.:

## LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 1003	61						•	oort Number: 100361R01 Report Date: 02/19/2010
Client Sample ID:	21078.02	1-0062		Sample ID:	S4		Date Analyzed:	02/19/2010
Client Sample Descr	iption:						Analyst:	Stephanie Golden
Asbestos Mineral Fi	<u>bers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
rocky fibrous tar, b	olack	50 %	-	~	-			NAD
Layer 02								
rocky fibrous tar, black/gray		50 %	3 %	-	-			3 %
Other Fibers	Fibrou Glass		Mineral se Wool	Synthetic		Other		Matrix
Layer 01	15 %	_	-	•		-	-	85 %
Layer 02	-	-	-	-		-	-	97 %
	21078.02	1-0063		Sample ID:	S5		Date Analyzed:	02/19/2010
Client Sample Descr	•						Analyst:	Stephanie Golden
Asbestos Mineral Fi		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
paint, silver		8%	-	-	-			NAD
Layer 02								
tar, black		92%	-	-	-			NAD
Other Fibers	Fibrous Glass		Mineral e Wool	Synthetic		Other		Matrix
Layer 01	-	2 %	-	-		-		98 %
Layer 02	-	7 %	-	-		_	-	93 %
,								

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page 2 of 2 Page No.:



Phase 0002

Engineering + Environmental

100361

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information provided is co- original. The Receiver should complete the form, keep a copy and return package immediately to Sender.	rrect and complete. The Sender should keep a copy and send the or the original to the Sender. Receiver shall report damage of
SENDER	RECEIVER
Date Sent: February 19, 2010	Date Received: 21910 1.00pm
PBS Engineering + Environmental 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.0223  Romon Name  2/19/10 Authorized Signature Date	Company: Lab Cor  Address: 4321 SW Corbett Ave Ste A  Portland, OR 97239  503-224-5055  Name  Name  Authorized Signature  Date
Sender's ID No. Brief Description	Receiver's ID No.
21078.021-0059	<u>:</u>
21078.021-0060	:
21078.021-0060 21078.021-0061	
-	
21078.021-0061	
21078.021-0061 21078.021-0062	1
21078.021-0061 21078.021-0062 21078.021-0063  Please analyze the enclosed 5 sample(s) for asbestos corequests prior notification if samples will be disposed. Request verbal results by: AM/PM Please fax and mail the results to the above address.	1

Project No.:

21078.021

#### LabCor Lab/Cor Portland, Inc. Portland Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 100385R01

Report Date: 02/25/2010

P.O. No: n/a

Job Number: 100385

Project Name: Project Number:

21078.021 Phase 0002

**Project Notes:** 

,								
Client Sample ID:	21078.021	-0064		Sample ID:	S1		Date Analyzed:	02/25/2010
Client Sample Desc	ription:						Analyst:	Stephanie Golden
Asbestos Mineral F		Layer						Percent
	I	Percent:	Chrysotile	Amosite	Crocidolite			Asbestos:
Layer 01								
vinyl tile, tan		95%	-	-	-			NAD
Layer 02								
mastic, black		5%	4 %	-	-			4 %
Other Fibers	Fibrous		Mineral				•	
	Glass	Cellulos	e Wool	Synthetic		Other		Matrix
Layer 01	_	-	-	-		-	-	100 %
Layer 02	-	1 %	-	-		-	-	95 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

NVLAP

Page 1 of 1 Page No.:



Phase 0002

21078.021

Project No.:

# Engineering + Environmental

100385

# TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

1 Toject Non 2.0.	The Conder should keep a copy and send the
Individuals signing this form warrant that the information provided is cororiginal. The Receiver should complete the form, keep a copy and return package immediately to Sender.	rrect and complete. The Sender Should keep a copy and come to the original to the Sender. Receiver shall report damage of
SENDER	RECEIVER
Date Sent: February 25, 2010	Date Received: 2/25/10 11:15Am
PBS Engineering + Environmental 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.0223 Harmony Killy Name 2/25/10 amm=	Company: Lab Cor Address: 4321 SW Corbett Ave Ste A Portland, OR 97239 503-224-5055  Name  Authorized Signature Date
Authorized Signature Date	Authorized Signature Date
Authorized Signature Date  Sender's ID No. Brief Description	Authorized Signature  Receiver's ID No.
Sender's ID No.  Brief Description 21078.021-0064	Receiver's ID No.
Sender's ID No.  Brief Description	Receiver's ID No.
Sender's ID No.  Brief Description  21078.021-0064  Please analyze the enclosed 1 sample(s) for asbestos or requests prior notification if samples will be disposed. Request verbal results by:AM/PM	Receiver's ID No.  Ontent using PLM with dispersion staining. PBS Date.
Sender's ID No.  21078.021-0064  Please analyze the enclosed 1 sample(s) for asbestos or requests prior notification if samples will be disposed. Request verbal results by: AM/PM  Please fax and mail the results to the above address.  TURNAROUND DESIRED:  4 Hour	Receiver's ID No.  Ontent using PLM with dispersion staining. PBS Date.

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB21078.021-1001	Paint	6,920 ppm	Room 29; at window, brown, metal, heater, good condition	R.J. Lee Group
LB21078.021-1002	Paint	630 ppm	Room 29; east wall, white, plaster, good condition	R.J. Lee Group
LB21078.021-1003	Paint	<483 ppm	Room 29; cabinet, brown, plaster, good condition	R.J. Lee Group
LB21078.021-1004	Paint	1,760 ppm	Eastside gymnasium; interior, clear, wood, window, good condition	R.J. Lee Group
LB21078.021-1005	Paint	184,000 ppm	Eastside gymnasium; exterior, brown, wood, window, fair condition	R.J. Lee Group
LB21078.021-1006	Paint	299 ppm	Boiler #1; door, metal substrate, silver, poor condition	R.J. Lee Group
LB21078.021-1007	Paint	251 ppm	Gym south wall; wood substrate, white, good condition	R.J. Lee Group
LB21078.021-1008	Paint	<211 ppm	East exterior; door, metal, blue, good condition	R.J. Lee Group
LB21078.021-1009	Paint	<77.2 ppm	Covered play structure; siding, wood, grey, good condition	R.J. Lee Group
LB21078.021-1010	Paint	<463 ppm	Covered play structure; pole, metal, red, good condition	R.J. Lee Group
LB21078.021-1011	Paint	358 ppm	Covered play structure; pole, metal, blue, good condition	R.J. Lee Group
LB21078.021-1012	Paint	None Detected	First floor; west hall, center, white, sheetrock, wall, good condition	Wy'East Environ.
LB21078.021-1013	Paint	672 ppm	First floor; confluence of west and north halls, tan and white, wood, door frame, good condition	Wy'East Environ.
LB21078.021-1014	Paint	3240 ppm	First floor; between rooms 11 and 13, tan and turquoise, wood, wall, good condition	Wy'East Environ.
LB21078.021-1015	Paint	1340 ppm	Ground floor; north wall of health room, tan, sheetrock, wall, good condition	Wy'East Environ.
LB21078.021-1016	Paint	1250 ppm	Ground floor; room 20, tan/white/pink, wood, door frame, good condition	Wy'East Environ.

RJ Lee Group, Inc.

350 Hochberg Road, Monroeville, PA 15146 Tel: (724) 325-1776 | Fax: (724) 733-1799



# LABORATORY REPORT

PBS Environmental - Portland, OR 4412 SW Corbett Avenue Portland, OR 97239

Attn: Harmony Kilby Phone: 503-248-1939 Fax: 503-248-0223

Email: harmony\_kilby@pbsenv.com

Prep/Analysis: EPA 3050B / EPA 7420 (Solids)-PA Client Project: 21078.021 Phase 0001 Report Date: February 19, 2010 Samples Received: February 17, 2010 RJ Lee Group Job No.: CAC1009419-0 Purchase Order No.: N/A Matrix: Solid

				Sample C	·Sample Concentration	Minimum R	Minimum Reporting Limit		
Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	Ø
LB21078.021-1001	CA17022010P031-001	N/A	Lead	0.629	6290	0.00848	84.8	02/19/2010	
LB21078.021-1002	CA17022010P031-002	N/A	Lead	0.0630	930	0.0116	116	02/19/2010	
LB21078.021-1003	CA17022010F031-003	N/A	Lead	< 0.0483	< 483	0.0483	483	02/19/2010	
LB21078.021-1004	CA17022010P031-004	N/A	Lead	0.176	1760	0.0356	356	02/19/2010	
LB21078.021-1005	CA17022010P031-005	N/A	Lead	18.4	184000	0.00988	98.8	02/19/2010	

# Analyst Comments:

Report Qualifiers (Q):

H = Holding times for preparation or analysis exceeded  $P = NELAC^{\circ}$  analyte certification pending

"NELAC-National Environmental Laboratory Accreditation Conference N = Analyte not NELAC" certified

These results are submitted pursuant to RI Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples or a period of liatry (30) days before disconting. A slipping and handling few mill be assessed for the results of the return of any samples.

The Group will store the samples for a period of liatry (30) days before discontings. A slipping and handling few mill be a liatry (30) days before disconting accordant that a look a liatry (30) days before a scentilation under AIHA Lab Code. In 1000-864, NF ELAP Cortificate 1970, PA DED Lab 100 00.2035, and LA DEQ Agency Interest 94775. This report may be in full for the report to be valid.

Quality Control data is available upon request. Results have not been blank corrected unless otherwise noted. Samples were received in good condition unless otherwise noted. D = RL (reporting limit verification) outside accepted limits

outside accepted recovery limits

J = Value below lowest calibration standard but above MDL (Method Detection Limit) L=LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery

E = Value above highest calibration standard

S = Spike Recovery outside accepted limits R = RPD (relative percent difference) outside accepted limits

B = Analyte detected in the associated Method Blank

Philip Brindle

Laboratory Supervisor



21078.021

Project No.:



Phase 0001

# Engineering + Environmental

#### TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Address: 350 Hochberg Road Portland, OR 97239  Monroeville, PA 15146 724-325-1776  Harmon W Low Name Name Name  Sender's ID No. Brief Description  LB21078.021-1002 LB21078.021-1003 LB21078.021-1004 LB21078.021-1005  ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.	PBS Engineering + Environmental  4412 SW Corbett Avenue  Portland, OR 97239  503.248.1939, Fax: 503.248.0223  Harmony J. K.J. Lee Group Monroeville, PA 724-325-1776  Name  Name  Name  Authorized Signature  Date  Brief Description  Receiver's ID No. LB21078.021-1001 LB21078.021-1002 LB21078.021-1003 LB21078.021-1004 LB21078.021-1005  Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD: Paint  Wipe Please fax and mail the results to the above address.  TIRNAROUND DESIRED:	
Address: 350 Hochberg Road Monroeville, PA 15146 724-325-1776  Harmon W Mame Name Name Name Name Name Name Name N	Address: 350 Hochberg Portland, OR 97239  503.248.1939, Fax: 503.248.0223  Harmony If Manne Name Name  Authorized Signature  Sender's ID No. Brief Description  LB21078.021-1001  LB21078.021-1002  LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED: Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  Please fax and mail the results to the above address.  THRNAROLIND DESIRED:	117/200
Name  Authorized Signature  Date  Authorized Signature  Da	Name  Authorized Signature  Date  Authorized Signature  Sender's ID No.  Brief Description  Receiver's ID No.  LB21078.021-1001  LB21078.021-1002  LB21078.021-1003  LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD:  Please fax and mail the results to the above address.  THRNAROLIND DESIRED:	Road
Authorized Signature  Date  Authorized Signature  Belling Signature  Authorized Signature  Belling Signat	Authorized Signature  Date  Authorized Signature  Sender's ID No.  LB21078.021-1001  LB21078.021-1002  LB21078.021-1003  LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD:  Please fax and mail the results to the above address.  THRNAROLIND DESIRED:	
LB21078.021-1002  LB21078.021-1003  LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED: Please analyze the enclosed 5 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.  LEAD: Wipe Please fax and mail the results to the above address.  TURNAROUND DESIRED:  48 Hours	LB21078.021-1002  LB21078.021-1003  LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED: Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD: Wipe Please fax and mail the results to the above address.  THRNAROLIND DESIRED:	/o
LB21078.021-1005  ANALYSIS REQUESTED: Please analyze the enclosed 5 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.  LEAD: Wipe Please fax and mail the results to the above address.  TURNAROUND DESIRED:	LB21078.021-1004  LB21078.021-1005  ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD:  Please fax and mail the results to the above address.  THRNAROUND DESIRED:	),
ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.  LEAD:  Paint  Wipe  Please fax and mail the results to the above address.  TURNAROUND DESIRED:	ANALYSIS REQUESTED:  Please analyze the enclosed 5 sample(s) for LEAD content using Method. PBS requests prior notification if samples will be dispose  LEAD:  Paint  Wipe  Please fax and mail the results to the above address.  THRNAROUND DESIRED:	
Method. PBS requests prior notification if samples will be disposed.  LEAD: Paint  Wipe  Please fax and mail the results to the above address.  TURNAROUND DESIRED:	Method. PBS requests prior notification if samples will be dispose  LEAD: Paint  Wipe  Please fax and mail the results to the above address.  TIRNAROUND DESIRED:	·
Wipe Please fax and mail the results to the above address. □ Soll/Misc. □ Air TURNAROUND DESIRED: 48 Hours	☐ Wipe  Please fax and mail the results to the above address.  ☐ Soll/Misc.  ☐ THRNAROUND DESIRED:	Atomic Absorption ed,
AN House	TURNAROUND DESIRED:	
☐ TCLP 48 Hour	- Air	
	☐ TCLP 48 Hour	

Tel: (724) 325-1776 | Fax: (724) 733-1799



# LABORATORY REPORT

PBS Environmental - Portland, OR 4412 SW Corbett Avenue Portland, OR 97239

Email: harmony\_kilby@pbsenv.com Attn: Harmony Kilby Phone: 503-248-1939 Fax: 503-248-0223

Prep/Analysis: EPA 3050B / EPA 7420 (Solids)-PA Client Project, 21078.021 Phase 0001 Samples Received: February 23, 2010 Report Date: February 23, 2010 RJ Lee Group Job No.: CAC1009524-0 Purchase Order No.: N/A Matrix: Solid

Client Sample ID         RJ Lee Group ID         Sampling Date Date Date         Analyte         Weight Percent (%)         Parts per meight Percent (%)         Parts per meight Percent (%)         Parts per meight Percent (%)         Percent (%)         Million (PPM) - Percent (%)         Percent (%)           1.B21078.021-1007         CA23022010P009-001         N/A         N/A         Lead         0.0251         251         0.00960					D = 1 = = = = = =	to the second function of	, , , , , , , , , , , , , , , , , , ,			
RJ Lee Group ID         Sampling Date Date Date Date Date Date Date Date					) ardinec	oncentration	MINITERITE RE	Minimum Keporung Limit		
CA23022010P009-001 N/A Lead 0.0299 299 (CA23022010P009-002 N/A Lead 0.0251 251 (	Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	Q
	1.B21078.021-1006 LB21078.021-1007	CA23022010P009-001 CA23022010P009-002	N/A N/A	Lead	0.0299	299 251	0.0135	135	02/23/2010 02/23/2010	

# Analyst Comments:

Report Qualifiers (Q): $H = Holding$ times for preparation or analysis exceeded	
P == NELAC" analyte certification pending	
N = Analyte nor NELAC" certified	
"NELAC-National Environmental Laboratory Accreditation Conference	٠

These results are submitted pursuant to RI Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, R Lec Croup will store the samples for a period of thirty (30) days before discording. A stipping and handling fee will be assessed for the return of any samples.

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditation under AltA Lab ID 100364, NY ELAP Lab Code 10884, EPA Lab Code 10884, EPA Lab Code 10884, PA DED Lab Lab Code of this laboratory operates in accord with 100 17025:2005 guidelines, and holds a limited scope of accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Quality Control data is available upon request. Results have not been blank corrected unless otherwise noted. Samples were received it good condition unless otherwise noted.

I = Value below lowest calibration standard but above MDL (Method Detection Limit)L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery

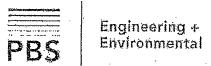
outside accepted recovery limits

E = Value above highest calibration standard

S=Spike Recovery outside accepted limits R=RPD (relative percent difference) outside accepted limits D = RL (reporting limit verification) outside accepted limits

B = Analyte detected in the associated Method Blank

Philip Grindle Laboratory Supervisor Chille Bringle



TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

package immediately to Sender.	f that the information provided is lete the form, keep a copy and re	correct and complete. The Sender should keep a co turn the original to the Sender. Receiver shall report	ppy and send the damage of
SENDER		RECEIVER	
Date Sent: February 22, 2	2010	Date Received:	
PBS Engineering + Environ 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.		Company: R.J. Lee Group Address: 350 Hochberg Road Monroeville, PA 15146 724-325-1776	
Name Name	- 2-122-100	Name	
Authorized Signature	Date	Authorized Signature	Date
<b>Sender's ID No.</b> LB21078.021-1006	Brief Description	Receiver's ID No.	
	Brief Description	Receiver's ID No.	
LB21078.021-1006	Please analyze the end	Receiver's ID No.  Slosed 2 sample(s) for LEAD content using Atomic Absor	ption
LB21078.021-1006	Please analyze the end	closed 2 sample(s) for LEAD content using Atomic Absor	ption
LB21078.021-1006  LB21078.021-1007  ANALYSIS REQUESTED:  LEAD:	Please analyze the end Method. PBS requests	closed 2 sample(s) for LEAD content using Atomic Absor	ption
LB21078.021-1006  LB21078.021-1007  ANALYSIS REQUESTED:  LEAD: ☑ Paint	Please analyze the end Method. PBS requests	closed 2 sample(s) for LEAD content using Atomic Absor prior notification if samples will be disposed. results to the above address.	ption
LB21078.021-1006  LB21078.021-1007	Please analyze the end Method. PBS requests Please fax and mail the	closed 2 sample(s) for LEAD content using Atomic Absor prior notification if samples will be disposed. results to the above address.	ption

05/53/5010 8:300W

Project No.:

21078.021

Phase 0001



# LABORATORY REPORT

PBS Environmental - Portland, OR 4412 SW Corbett Avenue

Portland, OR 97239

Attn: Harmony Kilby Phone: 503-248-1939

Fax: 503-248-0223

Email: harmony\_kilby@pbsenv.com

Prep/Analysis: EPA 3050B / EPA 7420 (Solids)-PA Client Project: 21078.021 Phase 0001 Report Date: February 24, 2010 Samples Received: February 24, 2010 RJ Lee Group Job No.: CAC1009549-0 Purchase Order No.: N/A Matrix: Solid

	α	
	Analysis Date	02/24/2010 02/24/2010 02/24/2010 02/24/2010
Minimum Reporting Limit	Parts per Million (PPM) - mg/kg	211 77.2 463 249
Minimum R	Weight Percent (%)	0.0211 0.00772 0.0463 0.0249
Sample Concentration	Parts per Million (PPM) - mg/kg	< 211 < 77.2 < 463 358
Sample Co	Weight Percent (%)	<ul><li>&lt; 0.0211</li><li>&lt; 0.00772</li><li>&lt; 0.0463</li><li>&lt; 0.0358</li></ul>
	Analyte	Lead Lead Lead Lead
	Sampling Date	N/A N/A N/A N/A
	RJ Lee Group ID	CA24022010P007-001 CA24022010P007-002 CA24022010P007-003 CA24022010P007-004
	Client Sample ID	LB21078.021-1008 LB21078.021-1009 LB21078.021-1010 LB21078.021-1011

# Analyst Comments:

Sanat Oughton (O).		
Jiera I K.		
= Holding times for preparation or analysis exceeded	E = Vatue above highest calibration standard	B = Analute detected in the associated Method Blank
$P = NELAC^*$ analyte certification pending	I = Value belom lanest collivation standard but above MOI (Mestro) Detection I imit	C - Cuite December activity account Therita
	THINK THE PROPERTY OF THE PROP	2 - Spire recovery outside accepted illinis
= Analyte not NELAC" certified	L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery	R = RPD (relative percent difference) outside accepted limits
NELAC-National Environmental Laboratory Accreditation Conference	outside accepted recopera limits	$\Omega = RI$ (renorting limit natification) sufficience accounted limits

Hese results are submitted pirisant to R Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of tidelity provisions. No responsibility or tidelity is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples or a period of thirty (30) days before disconding. A shipping and handling few thin terms of any samples.

To be a considered to a supple of the period of thirty (30) days before disconding. A shipping and handling few thin terms of any samples.

To be a considered to a supple of the period of thirty (30) days before disconding the manualer Alfal Lab DI 300484, NY ELAP Lab Cate Agency Interest 94775. This report may not be used to dain product endorwant by any illoratory accreditation in this report reture only to the tiensus tested or to the sample(s) as received by the abouttory. Any reproduction of this document must be in full for the report to be valid.

Quality Control data is validable upon request. Results have to been blank corrected unless otherwise noted.

Philip Grindle Laboratory Supervisor Philip Brindle



Phase 0001

# Engineering + Environmental

#### TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the

original. The Receiver should complete package immediately to Sender.	e the form, keep a copy and re	eturn the original to the Sender. Receiver shall report damage of	of .
SENDER		RECEIVER	•
Date Sent: February 23, 20	10	Date Received:	
PBS Engineering + Environm 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 503.248.03 Hammy Killy		Company: R.J. Lee Group Address: 350 Hochberg Road Monroeville, PA 15146 724-325-1776	
Authorized Signature	2/28/10 Date	Name  M. Syully 2/24/10 19  Authorized Sighature D	oro Pate
Sender's ID No. LB21078.021-1008 LB21078.021-1009 LB21078.021-1010 LB21078.021-1011	Brief Description	Receiver's ID No.	,
ANALYSIS REQUESTED:  LEAD:  Paint  Wipe  Soil/Misc.  Air  TCLP	Method. PBS requests	<u> </u>	
SPECIAL INSTRUCTIONS:		, cN	

Project No.:

21078.021



## **Laboratory Report**

PBS Environmental 4412 SW Corbett Portland, OR 97201

Report Number: 76903 Report Date: 2/25/10 Project Name:

N. Clackamas School Concord Elementary

Project Location: Project Number:

Date Sampled: Date received: 21078.021

**AOAC 974.02** 

Analyte: Total Lead (Pb) in paint chips quantitation by FLAA

Tillaryto,	Total Lead (LD) III paint onips quanti	lation by I LAA		
Field ID	Lab ID	Quantiation	Detection Limit	
		mg/Kg(ppm)	mg/Kg(ppm)	
1012	B5284	ND	86	
1013	B5285	672	109	
1014	B5286	3240	209	
1015	B5287	1340	334	
1016	B5288	1250	124	•

ND = Not Detected (below reporting limit or detection limit)

Code	<u>Material</u>		Location	Results	<u>Lab</u>
21078.021-0001	Mastic	Layer:	Entry; yellow mastic behind wair <b>Description</b> :	nscot Analysis:	Lab Cor
		Layer 1	mastic, orange-brown	No Asbestos Detected	
		Layer 2	compressed fibers, tan	No Asbestos Detected	
		,			
21078.021-0002	Mastic		Roof; northeast of access hatch	, gray mastic between 3-	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous coating, gray	8% Chrysotile	
		Layer 2	rocky fibrous tar, black	No Asbestos Detected	
		Layer 3	fibrous tar, black	4% Chrysotile	•
21078.021-0003	Built-up Roofing		Roof; near access hatch, at flash and built-up roofing	ning line, between 3-tab	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
		Layer 2	rocky fibrous tar, black	No Asbestos Detected	
		Layer 3	fibrous tar, black	3% Chrysotile	
		Layer 4	tar, black	No Asbestos Detected	
		Layer 5	fibrous tar backing, black	No Asbestos Detected	
21078.021-0004	Mastic		Roof; southeast corner, flashing mastic		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	black tar	No Asbestos Detected	
			D ( 11 1 01 1	16.16	l -b 0
21078.021-0005	Composition Shin	_	Roof; southeast corner, 3-tab an	व teit Analysis:	Lab Cor
		Layer:	Description:	No Asbestos Detected	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
		Layer 2	fibrous tar backing, black	No Asbestos Detected	
		Layer 2	rocky fibrous tar, black	No Aspesios Delected	
21078.021-0006	Composition Shin	gles	Gym roof; east, 3-tab and felt		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
		Layer 2	fibrous tar backing, black	No Asbestos Detected	
21078.021-0007	Built-up Roofing		Gym roof; flashing line		Lab Cor
	-	Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
		Layer 2	fibrous tar, black	3% Chrysotile	
		Layer 3	sticky fibrous tar, black	6% Chrysotile	
				*	



<u>Code</u>	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
21078.021-0008	Mastic		Roof; at flashing line, gray	<b>A</b> 1 •	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous coating, gray	5% Chrysotile	
		Layer 2	fibrous tar, black	4% Chrysotile	
21078.021-0009	Mastic		Roof; at flashing line, black		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	black fibrous tar	2% Chrysotile	
21078.021-0010	Built-up Roofing		Roof; classroom wing, near soul	h edge	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, silver	No Asbestos Detected	
		Layer 2	fibrous tar, black	No Asbestos Detected	
		Layer 3	fibrous tar, black	No Asbestos Detected	
21078.021-0011	Composition Shin	gles	Roof; classroom wing, over sout	h edge	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
		Layer 2	rocky fibrous tar, black	No Asbestos Detected	
		Layer 3	fibrous tar backing, black	No Asbestos Detected	
21078.021-0012	Mastic		Room 12; under counter top		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	black fibrous tar backing	No Asbestos Detected	•
21078.021-0013	Pipe Insulation		Room 10; under pipe stub		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous backing, tan	35% Chrysotile	
		Layer 2	fibrous tar backing, black	No Asbestos Detected	
21078.021-0014	Mastic		Room 13; behind back splash		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous tar backing, black	No Asbestos Detected	
		Layer 2	mastic, tan	No Asbestos Detected	
21078.021-0015	Mastic		Lower level classroom; behind b	ack splash	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	mastic, yellow	No Asbestos Detected	
		Layer 2	fibrous tar backing w/ paint, black	No Asbestos Detected	
21078.021-0016	Caulk		Classroom wing; lower window,		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	offwhite soft caulking material	2% Chrysotile	

<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
21078.021-0017	Caulk		Classroom wing; lower window, old caulk at molding ne to building		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	tan soft caulking material	3% Chrysotile	
21078.021-0018	Caulk		Classroom wing; lower window,		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	tan soft caulking material	3% Chrysotile	
21078.021-0019	Mastic		Office area; north wall, on plaste	er	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	brown mastic w/ paint	4% Chrysotile	
21078.021-0020	Mastic		Office; east wall, brown mastic u	ınder cork board	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coarse cement material, gray	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
21078.021-0021	Joint Compound		Office corridor; behind wainscot		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	white joint compound	No Asbestos Detected	
21078.021-0022	Joint Compound		Office corridor; behind wainscot		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	white joint compound	No Asbestos Detected	
21078.021-0023	Wainscot/Mastic		Office hallway; tan vinyl with dark		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, tan	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
		Layer 3	mastic, yellow	No Asbestos Detected	
	•	Layer 4	fine cement material, white	No Asbestos Detected	
21078.021-0024	Leveling Compou		Basement cafeteria; on concrete floor		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	tan loose powder	No Asbestos Detected	
21078.021-0025	Caulk		Boiler room door; sealant from door frame to wood		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	light gray soft rubbery material	No Asbestos Detected	

<u>Code</u> 21078.021-0026	Material		Location  Boiler room doo; sealant from s	Results	<u>Lab</u> Lab Cor
21070.021-0020	Cauix	Layer:	Description:	Analysis:	Lab Coi
		Layer 1	brown rubbery material	No Asbestos Detected	
21078.021-0027	Gypsum and Plas	ster	Boiler room; ceiling board		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coarse compact powder w/ paint, offwhite	No Asbestos Detected	
		Layer 2	compact fibrous powder w/ paper, offwhite	No Asbestos Detected	
21078.021-0028	Gypsum and Plas	ster	Boiler room; ceiling board		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coarse compact powder w/ paint, offwhite	No Asbestos Detected	
		Layer 2	compact fibrous powder w/ paper, offwhtie	No Asbestos Detected	
21078.021-0029 Joint Compound/Mastic		Basement: nw classroom, old ta	ck board area	Lab Cor	
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder w/ paint, white	No Asbestos Detected	
		Layer 2	mastic, light brown	No Asbestos Detected	

# LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

**BULK SAMPLE ASBESTOS ANALYSIS** 

Client: PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 101151R01 Report Date: 06/22/2010

P.O. No: n/a

Job Number: 101151

Project Name:

21070.021	Phase 000	J .					
21078.021	-0001		Sample ID:	S1		Date Analyzed:	06/22/2010
cription:						Analyst:	Stephanie Golden
	Layer						Percent
	Percent: (	Chrysotile	Amosite	Crocidolite			Asbestos:
							NAD
rown	90%	-	-	-			NAD
							NAD
ers, tan	10%	-	-	-			NAD
Fibrous		Mineral			Other		
Glass	Cellulose	Wool	Synthetic		Other		Matrix 100 %
-	Trace	-	-		-	-	0 %
-	100 %	-			-	•	0 %
21078,021	-0002		Sample ID:	S2		Date Analyzed:	06/22/2010
	-0002		Sample ID:	S2		Date Analyzed: Analyst:	Stephanie Golden
ription:	Layer		·			•	Stephanie Golden Percent
eription: Fibers	Layer	Chrysotile	Sample ID: Amosite	S2 Crocidolite		•	Stephanie Golden
eription: Fibers	Layer	Chrysotile	·			•	Stephanie Golden Percent Asbestos:
eription: Fibers	Layer	Chrysotile 8 %	·			•	Stephanie Golden Percent
eription: Fibers F	Layer Percent: (	•	·			•	Stephanie Golden Percent Asbestos: 8 %
eription: Fibers F	Layer Percent: (	•	·			•	Stephanie Golden Percent Asbestos:
eription: <u>Fibers</u> F gray	Layer Percent: 0	•	·			•	Stephanie Golden Percent Asbestos:  8 %  NAD
eription: <u>Fibers</u> F gray	Layer Percent: 0	•	·			•	Stephanie Golden Percent Asbestos: 8 %
oription: Fibers F gray black	Layer Percent: 0 3% 20%	8 % - 4 % Mineral	Amosite		Other	•	Stephanie Golden Percent Asbestos:  8 %  NAD  4 %
oription: Fibers F gray black	Layer Percent: 0 3% 20%	8 % - 4 % Mineral	·		Other	•	Stephanie Golden Percent Asbestos:  8 %  NAD  4 %  Matrix
ription: Fibers  gray black  Fibrous Glass -	Layer Percent: 0 3% 20% 77%	8 % - 4 % Mineral	Amosite		Other -	•	Stephanie Golden Percent Asbestos:  8 %  NAD  4 %  Matrix 92 %
oription: Fibers Faray black Fibrous	Layer Percent: 0 3% 20% 77%	8 %  4 %  Mineral  Wool	Amosite		Other - -	•	Stephanie Golden Percent Asbestos:  8 %  NAD  4 %  Matrix
,	ription: Fibers Frown ers, tan Fibrous Glass	Fibers Layer Percent: C  rown 90 %  ers, tan 10 % Fibrous Glass Cellulose - Trace	ription: Layer Percent: Chrysotile  rown 90% - ers, tan 10% - Fibrous Mineral Glass Cellulose Wool - Trace -	ription: Layer Percent: Chrysotile Amosite  rown 90% ers, tan 10% Fibrous Mineral Glass Cellulose Wool Synthetic - Trace	eription:  Layer Percent: Chrysotile Amosite Crocidolite  rown 90%  ers, tan 10%  Fibrous Mineral Glass Cellulose Wool Synthetic - Trace	eription:  Tibers Layer Percent: Chrysotile Amosite Crocidolite  Town 90%	Analyst:    Complete   Complete   Complete   Complete   Complete



Page 1 of 5 Page No.:

# LabCor Lab/Cor Portland, Inc.

Inc

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

4321 SW Corbett Ave., Ste A Portland, OR 97239

8%

10%

45 %

Layer 02

Layer 02

Asbestos and Environmental Analysis

Report Number: 101151R01 Job Number: 101151 Report Date: 06/22/2010 06/22/2010 Date Analyzed: Sample ID: S3 Client Sample ID: 21078.021-0003 Stephanie Golden Analyst: Client Sample Description: Percent **Asbestos Mineral Fibers** Layer Asbestos: Chrysotile Amosite Crocidolite Percent: Layer 01 NAD 15% rocky fibrous tar, black Layer 02 NAD rocky fibrous tar, black 15% Layer 03 3 % 3% fibrous tar, black 45% Layer 04 NAD 15% tar, black Layer 05 NAD 10% fibrous tar backing, black Mineral Other Fibers Fibrous Other Matrix Wool Synthetic Glass Cellulose 90 % 10% Layer 01 90 % 10 % Layer 02 94% 3 % Layer 03 98 % Layer 04 2% 80 % 20 % Layer 05 06/22/2010 Date Analyzed: Sample ID: S4 Client Sample ID: 21078.021-0004 Stephanie Golden Analyst: Client Sample Description: Percent Asbestos Mineral Fibers Layer Asbestos: Percent: Chrysotile Crocidolite Amosite Homogeneous NAD 100% tar, black Mineral Fibrous Other Fibers Other Matrix Wool Synthetic Glass Cellulose 100 % 06/22/2010 Date Analyzed: Sample ID: S5 Client Sample ID: 21078.021-0005 Stephanie Golden Analyst: Client Sample Description: Percent Asbestos Mineral Fibers Asbestos: Crocidolite Chrysotile Amosite Percent: Layer 01 NAD 35% rocky fibrous tar, black Layer 02 NAD rocky fibrous tar, black 35% Layer 02 NAD 30% fibrous tar backing, black Mineral Fibrous Other Fibers Other Matrix Wool Synthetic Glass Cellulose 92% 8 % Layer 01 92%

PATAN

45 %

Page No.: Page 2 of 5

# LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239

### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

b Number: 101151							ort Number: 101151R0 Report Date: 06/22/2010	
lient Sample ID: 21078.02	1-0006		Sample ID:	S6		Date Analyzed: Analyst:	06/22/2010 Stephanie Golden	
lient Sample Description: Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Paranysti	Per	cent estos:
ayer 01 rocky fibrous tar, black	60%	-	_	-				NAD
.ayer 02 fibrous tar backing, black	40%	-	_	-				NAD
Other Fibers Fibrou Glass	s	Mineral e Wool	Synthetic		Other		Matrix	
ayer 01 10 %.ayer 02 8 %	- 45 %	-	-		-	-	90 % 47 %	
lient Sample ID: 21078.02			Sample ID:	S7		Date Analyzed: Analyst:	06/22/2010 Stephanie Golden	
lient Sample Description: Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		·		rcent estos:
ayer 01 rocky fibrous tar, black	20%	-	-	-				NAE
ayer 02 fibrous tar, black	60%	3 %	-	-				3 %
ayer 03 sticky fibrous tar, black	20%	6 %	•	-				6 %
<u>Other Fibers</u> Fibrou Glass		Mineral e Wool	Synthetic		Other	_	Matrix 90 %	
_ayer 01 10 % _ayer 02 2 %	-	-	-		-	-	95 %	
ayer 03 3 %	2 %	-	•		-	•	89 %	
Client Sample ID: 21078.02 Client Sample Description:	1-0008		Sample ID:	S8		Date Analyzed: Analyst:	06/22/2010 Stephanie Golden	rcent
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				estos
_ayer 01 fibrous coating, gray	3%	5 %	-	-				5 %
Layer 02 fibrous tar, black	97%	4 %	-	-				4 %
Other Fibers Fibro Glas		Mineral Se Wool	Synthetic		Other	_	Matrix 95 %	
Layer 01 - 2 %	-	-	-		-	-	94 %	
Client Sample ID: 21078.03 Client Sample Description: Asbestos Mineral Fibers	Layer	Charactila	Sample ID:	S9 Crocidolite		Date Analyzed: Analyst:		rcent estos
Homogeneous	Percent:	-	Amosite	Clockoute				2 9
fibrous tar, black <u>Other Fibers</u> Fibro Glas		2 % Mineral se Wool	- Synthetic	*	Other		Matrix	

Page 3 of 5 Page No.:

# LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Portland, OR 97239

#### BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 1011	51							oort Number: 101151R01 Report Date: 06/22/2010
Client Sample ID: 2	21078.021	1-0010		Sample ID:	S10		Date Analyzed: Analyst:	06/22/2010 Stephanie Golden
Asbestos Mineral Fil	bers	Layer Percent: (	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								NAC
paint, silver		2%	-	-	~			,
Layer 02 fibrous tar, black		40%	-	-	-			NAI
Layer 03								NAI
fibrous tar, black		58%	-	-	-			NA
Other Fibers	Fibrous Glass		Mineral Wool	Synthetic		Other		Matrix 99 %
Layer 01	-	1 %	-	-		-		99 % 83 %
Layer 02	2 %	15 %	-	-		-	•	92 %
Layer 03	6 %	2 %	-	-			<del>-</del>	
Client Sample ID:	21078.021	I-0011		Sample ID:	S11		Date Analyzed:	06/22/2010
Client Sample Descr	iption:						Analyst:	Stephanie Golden Percent
Asbestos Mineral Fi	<u>bers</u>	Layer Percent: (	Chrysotile	Amosite	Crocidolite			Asbestos
Layer 01								NA
rocky fibrous tar, b	olack	45%	-	-	-			1471
Layer 02								NA)
rocky fibrous tar, b	olack	35 %	-	-	-			
Layer 03		0001						NA
fibrous tar backing		20%	-	-	-			
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other		Matrix 90 %
Layer 01	10 %	-	-	-		-	-	90 %
Layer 02	10 %	-	-	-		-	-	35 %
Layer 03	-	65 %	-	-		-	-	55 75



Page 4 of 5 Page No.:

# LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 101151

Report Number: 101151R01 Report Date: 06/22/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page 5 of 5 Page No.:



# Engineering + Environmental

101151

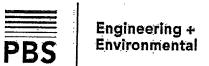
### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 21078.021 Phase 0003

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER		RECEIVER	. \	
Date Sent: June 21, 2010		Date Received:	10/21/10	315pm
PBS Engineering + Environmed 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 866.727.01 Harmony Villay Name Authorized Signature		Portla	SW Corbett Avnd, OR 97239 24-5055 VE GOUS	
Sender's ID No.	Brief Description	Receive	er's ID No.	
'078.021-0001				
21078.021-0002				
21078.021-0003				
21078.021-0004		The state of the s		
21078.021-0005			A	
21078.021-0006		ep accidence among output a final		
21078.021-0007				
21078.021-0008	San			
21078.021-0009	·	MARCON		- Oly ice
21078.021-0010				
21078.021-0011				



### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Please analyze the enclosed 1 requests prior notification if sar	1 sample(s) for asbestos ເ nples will be disposed.	content using PLM with disp	ersion staining. PBS
Request verbal results by:	AM/PM	Date.	
Please fax and mail the results	to the above address.		
<b>TURNAROUND DESIRED:</b>	24 Hour		
SPECIAL INSTRUCTIONS:		•	
		•	
			(A)
			(SD)

#### LabCor **Portland** Inc.

### Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 101205R01 Report Date: 06/24/2010

P.O. No: n/a

Job Number: 101205 Project Name: Concord E.S.

Project Number:

21078.021 Phase 0003

**Project Notes:** 

06/24/2010 Date Analyzed: Client Sample ID: 21078.021-0012 Sample ID: S1 Stephanie Golden Analyst: Client Sample Description: **Asbestos Mineral Fibers** Percent: Chrysotile Crocidolite Amosite Homogeneous

Percent Asbestos:

NAD

NAD

Other Fibers

Layer 02

Layer 01

Laver 02

mastic, tan

fibrous tar backing, black 100%

Mineral **Fibrous** Glass Wool Cellulose

60 %

3%

1%

60 %

Mineral

**Fibrous** 

Synthetic

Other

Matrix 40 %

06/24/2010 Sample ID: S2 Date Analyzed: Client Sample ID: 21078.021-0013 Analyst: Stephanie Golden Client Sample Description: Percent **Asbestos Mineral Fibers** Laver Asbestos: Percent: Chrysotile Crocidolite Amosite Laver 01 35 % 65% 35 % fibrous backing, tan Layer 02 NAD fibrous tar backing, black 35% Other Fibers **Fibrous** Mineral Other Matrix Wool Glass Cellulose Synthetic 35 % 30 % Layer 01 40 % 60 % Layer 02 06/24/2010 Date Analyzed: Sample ID: S3 Client Sample ID: 21078.021-0014 Analyst: Stephanie Golden Client Sample Description: Percent Asbestos Mineral Fibers Asbestos: Percent: Chrysotile Crocidolite Amosite Layer 01 NAD fibrous tar backing, black 97%

Other Fibers Other Wool Matrix Glass Synthetic Cellulose 40 % 60 % Layer 01 99% Laver 02 Trace 06/24/2010 Date Analyzed: Sample ID: S4 Client Sample ID: 21078.021-0015 Stephanie Golden Analyst: **Client Sample Description:** Percent Layer **Asbestos Mineral Fibers** Asbestos: Crocidolite Percent: Chrysotile Amosite Layer 01 NAD 50% mastic, yellow Layer 02 NAD 50% fibrous tar backing w/ paint, black Mineral **Fibrous** Other Fibers Other Wool Matrix Glass Synthetic Cellulose

99%

40 %

Page 1 of 2 Page No.:

#### LabCor Portland

### Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 101205

Report Number: 101205R01 Report Date: 06/24/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden Analyst

Ννίαρ

Page No.: Page 2 of 2

**Project No.:** 

21078.021

101205

#### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the

original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender. **SENDER** RECEIVER 11:10 Am Date Received: June 24, 2010 **Date Sent:** Company: Lab Cor PBS Engineering + Environmental Address: 4321 SW Corbett Ave Ste A **4412 SW Corbett Avenue** Portland, OR 97239 Portland, OR 97239 503-224-5055 503.248.1939, Fax; 866.727.0140 Name N:ID am Date **Authorized Signature** Receiver's ID No. **Brief Description** Sender's ID No. 21078.021-0012 21078.021-0013 21078.021-0014 21078.021-0015 Please analyze the enclosed 4 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed. Date. Request verbal results by: \_\_\_\_\_ AM/PM \_ Please fax and mail the results to the above address. Rush **TURNAROUND DESIRED:** verbal results. 503-209-1503 503 969-5411

#### LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Client: PBS Engineering + Environmental

> 4412 SW Corbett Ave Portland, OR 97239

Report Number: 101223R02

P.O. No: n/a

Report Date: 06/25/2010

Job Number: 101223

Project Name:

21078.021 Phase 0003

Project Number: **Project Notes:** 

Inc

Sample ID: S1

Date Analyzed:

06/25/2010

**Client Sample Description:** 

Layer

Analyst:

Stephanie Golden

**Asbestos Mineral Fibers** 

Client Sample ID: 21078.021-0016

Percent: Chrysotile

Amosite

Crocidolite

Percent

Homogeneous

soft caulking material,

100%

Cellulose

2 %

Asbestos:

2%

3 %

offwhite Other Fibers

Fibrous Glass

Wool

Mineral

Other

Matrix

98 %

Client Sample ID: 21078.021-0017

Sample ID: S2

Amosite

Synthetic

Client Sample Description:

**Asbestos Mineral Fibers** 

06/25/2010 Date Analyzed: Analyst:

Layer Percent:

Chrysotile

Crocidolite

Stephanie Golden

Percent Asbestos:

Homogeneous

soft caulking material,

100%

3 %

tan Other Fibers

**Fibrous** 

Glass Cellulose

Mineral

Wool Synthetic

Other

Matrix 97%

Client Sample ID:

21078.021-0018

**Client Sample Description:** 

Date Analyzed: 06/25/2010

**Asbestos Mineral Fibers** 

Percent: Chrysotile

Amosite

Sample ID: S3

Stephanie Golden

Analyst:

Homogeneous

soft caulking material,

100%

Cellulose

3 %

Crocidolite

Percent Asbestos:

3 %

tan Other Fibers

**Fibrous** Glass

Wool

Mineral

Synthetic

Other

Matrix

97%

Page 1 of 2 Page No.:

## LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 101223

Report Number: 101223R02 Report Date: 06/25/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

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Page No.: Page 2 of 2



**Project No.:** 

21078,021

# Engineering + Environmental

10/223

#### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the

original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender. RECEIVER **SENDER** 10150AM **Date Received: Date Sent:** June 25, 2010 **PBS Engineering + Environmental** Company: Lab Cor Address: 4321 SW Corbett Ave Ste A **4412 SW Corbett Avenue** Portland, OR 97239 Portland, OR 97239 503-224-5055 503.248.1939, Fax: 866.727.0140 Name Name Authorized Sign⊭ture Receiver's ID No. **Brief Description** Sender's ID No. 21078.021-0016 21078.021-0017 21078.021-0018 Please analyze the enclosed 3 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed. Date. Request verbal results by: \_\_\_\_\_ AM/PM Please fax and mail the results to the above address. **TURNAROUND DESIRED:** Rush SPECIAL INSTRUCTIONS: call Steve. D. Werbals.

#### LabCor Lab/Cor Portland, Inc. **Portland**

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

Inc.//

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 101279R01

Report Date: 06/30/2010

P.O. No: n/a

Job Number: 101279

Project Name:

Project Number:

21078.021 Phase 0003

**Project Notes:** 

Client Sample ID: 21078.021-0019

Client Sample Description:

**Asbestos Mineral Fibers** 

Sample ID: S1

Amosite

Date Analyzed:

06/30/2010

Analyst:

Stephanie Golden

Percent

4 %

Homogeneous

100%

4 %

Asbestos:

Other Fibers

mastic w/ paint, brown

Percent: Chrysotile

Mineral

Other

Crocidolite

**Fibrous** Glass

Wool Cellulose 2%

Synthetic

Matrix 94%

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden **Analyst** 

> Page 1 of 1 Page No.:



21078.021

Project No.:

Engineering + Environmental

101279

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

	1 to journal and	
	Individuals signing this form warrant that the information provided is cororiginal. The Receiver should complete the form, keep a copy and return package immediately to Sender.	rect and complete. The Sender should keep a copy and send the the original to the Sender. Receiver shall report damage of
	SENDER  Date Sent: June 29, 2010	RECEIVER  Date Received: 47910 3:15pm
_	PBS Engineering + Environmental 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 866.727.0140  Harmy Clary Name  O(29/10 3pm Authorized Signature Date	Company: Lab Cor Address: 4321 SW Corbett Ave Ste A Portland, OR 97239 503-224-5055  STEPHANIE GOLDEN Name Authorized Signature Date
	Sender's ID No. Brief Description	Receiver's ID No.
	21078.021-0019	DDC
	Please analyze the enclosed 1 sample(s) for asbestos corequests prior notification if samples will be disposed.  Request verbal results by:AM/PM  Please fax and mail the results to the above address.  TURNAROUND DESIRED: Rush	ontent using PLM with dispersion staining. PBSDate.
	SPECIAL INSTRUCTIONS: Call Steve D.	w/verbals.

#### LabCor **Portland**

### Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 101304R01

P.O. No: n/a

Report Date: 07/01/2010

Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Job Number: 101304

**Project Name:** 

Project Number: **Project Notes:** 

21078.021 Phase 0003

Sample ID: S1

Date Analyzed:

07/01/2010

Analyst:

Stephanie Golden

Percent Asbestos:

NAD

NAD

Layer 01

**Client Sample Description:** 

**Asbestos Mineral Fibers** 

Client Sample ID: 21078.021-0020

50%

Layer

Percent:

Chrysotile Amosite

Crocidolite

coarse cement material,

gray

Other Fibers

Layer 02 mastic, brown

50%

Cellulose

Mineral

Wool Synthetic

Other

Matrix

Layer 01

1 %

Fibrous

Glass

2%

99% 98 %

Layer 02

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).

Layered samples are considered non-homogeneous." Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.

Asbestos detection interferences may result from material binders.

Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden **Analyst** 

> Page 1 of 1 Page No.:



Engineering + Environmental

101304

### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the

package immediately to Sender.	чете тпе тогт, кеер а сору апо гет	urn the original to the Sendel	r. Receiver shall report o	lamage of
SENDER	·	RECEIVER	. 1 1	
Date Sent: June 30, 2010	)	Date Received: _	6/30/10	3:15pm
PBS Engineering + Environment 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 866.727 H. Kilby Name Authorized Signature		Portlan	SW Corbett Ave Ste ad, OR 97239 4-5055 WIC GOLD	(6 (30 (1) Date
Sender's ID No.	<b>Brief Description</b>	Receive	r's ID No.	
21078.021-0020				
Please analyze the enclosed requests prior notification if s Request verbal results by:Please fax and mail the result TURNAROUND DESIRED:	eamples will be disposed. AM/PM	content using PLM with	n dispersion stainin	g. PBS
SPECIAL INSTRUCTIONS:	Call Jay Doar	re Verbals.		

**Project No.:** 

21078.021

#### LabCor Lab/Cor Portland, Inc. Portland

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Report Number: 101356R01

Report Date: 07/06/2010

P.O. No: n/a

Job Number:

101356

**Project Name: Project Number:** 

21078.021 Phase 0003

**Project Notes:** 

21078.021-0021 Client Sample ID:

**Asbestos Mineral Fibers** 

Sample ID: S1

Date Analyzed:

07/06/2010

**Client Sample Description:** 

Layer Percent: Chrysotile

Amosite

Analyst:

Stephanie Golden

Crocidolite

Percent Asbestos:

Homogeneous

joint compound, white

100%

Mineral

NAD

Other Fibers

**Fibrous** 

Synthetic

Other

Glass

Cellulose Wool Trace

Matrix 100 %

Client Sample ID: 21078.021-0022

Sample ID: S2

Date Analyzed: Analyst: 07/06/2010

Client Sample Description:

Stephanie Golden

**Asbestos Mineral Fibers** 

Percent: Chrysotile

Amosite Crocidolite Percent

Asbestos:

Homogeneous

joint compound, white

100%

Mineral

NAD

Other Fibers

Fibrous

Glass

Cellulose

Trace

Wool

Synthetic

Other

Matrix 100 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous." Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page No.: Page 1 of 1



#### Engineering + Environmental

### TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant that the information original. The Receiver should complete the form, keep a contact package immediately to Sender.	provided is correct and complete. The Sender should keep a copy and send the opy and return the original to the Sender. Receiver shall report damage of
SENDER	RECEIVER
Date Sent: July 06, 2010	Date Received: 7618 8:15 Am
PBS Engineering + Environmental 4412 SW Corbett Avenue Portland, OR 97239 503.248.1939, Fax: 866.727.0140  Raccan Name  Authorized Signature  Date of Corporation	Company: Lab Cor Address: 4321 SW Corbett Ave Ste A Portland, OR 97239 503-224-5055  Name Name Authorized Signature Date
Sender's ID No. Brief Descri	iption Receiver's ID No.
31078.021-0021	
21078.021-0022	·
Please analyze the enclosed 2 sample(s) for a requests prior notification if samples will be dis Request verbal results by: AM/PM Please fax and mail the results to the above ac TURNAROUND DESIRED: Rush	Date.
SPECIAL INSTRUCTIONS:	Please call Steve
8:15am	W/results 503-209-1503

8:15 am

Project No.:

21078.021

### LabCor Lab/Cor Portland, Inc. 4321 SW Corbett Ave., Ste A

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Report Number: 101363R01

P.O. No: n/a

Report Date: 07/06/2010

Portland, OR 97239 Asbestos and Environmental Analysis

Client:

Inc ///

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Job Number: 101363

Project Name:

**Project Number:** 21078.021 Phase 0003

**Project Notes:** 

07/06/2010 Client Sample ID: 21078.021-0023 Date Analyzed: Sample ID: S1 Stephanie Golden Analyst: **Client Sample Description:** Percent <u>Asbestos Mineral Fibers</u> Laver Asbestos: Percent: Chrysotile Amosite Crocidolite Layer 01 NAD 57% vinyl tile, tan Layer 02 NAD 2% mastic, brown Layer 03 NAD 1% mastic, yellow Layer 04 NAD fine cement material, 40% white Fibrous Mineral Other Fibers Other Glass Matrix Cellulose Wool Synthetic 100 % Layer 01 100 % Layer 02 100 % Layer 03 100 % Layer 04 07/06/2010 Sample ID: S2 Date Analyzed: Client Sample ID: 21078.021-0024 Stephanie Golden Analyst: **Client Sample Description:** Percent Asbestos Mineral Fibers Layer Asbestos: Percent: Chrysotile Crocidolite Amosite Homogeneous NAD 100% loose powder, tan **Fibrous** Mineral Other Fibers Other Wool Matrix Glass Synthetic Cellulose 99 % 1%

Page 1 of 2 Page No.:

# LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 101363

Report Number: 101363R01 Report Date: 07/06/2010

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

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Page No.: Page 2 of 2

101363

# TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Phase 0003

21078.021

Project No.:

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#### LabCor Portland 4321 SW Corbett Ave., Ste A

### Lab/Cor Portland, Inc.

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client:

PBS Engineering + Environmental

4412 SW Corbett Ave Portland, OR 97239

Portland, OR 97239

Report Number: 101423R01

Report Date: 07/12/2010

P.O. No: n/a

Job Number:

**Project Name:** 

Project Number: 21078.021 Phase 0003

**Project Notes:** 

Client Sample ID: 21078.021-0025 Sample ID: S1

Date Analyzed:

07/12/2010

Client Sample Description:

101423

Laver

Stephanie Golden

Percent: Chrysotile Amosite

Analyst:

Percent

Homogeneous

soft rubbery material,

100%

Trace

Crocidolite

Asbestos:

light gray

**Asbestos Mineral Fibers** 

NAD

Other Fibers

**Fibrous** Glass Cellulose Mineral Wool

Synthetic

Other

Matrix 100 %

Client Sample ID: 21078.021-0026

Sample ID: S2

Date Analyzed:

07/12/2010

**Client Sample Description:** 

Analyst:

Stephanie Golden

**Asbestos Mineral Fibers** 

Layer Percent:

Chrysotile Crocidolite Amosite

Percent

Asbestos:

NAD

Homogeneous

rubbery material, brown

100%

Other Fibers

**Fibrous** Glass

Mineral Cellulose

Wool Synthetic Other

Matrix 100 %

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Asbestos detection interferences may result from material binders.

Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Stephanie Golden

Analyst

Page 1 of 1 Page No.:



21078.021

Engineering + Environmental

# TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.:	21078.021	Phase 0003	arrest and complete. The Send	der should keep a	copy and send the
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### LabCor Portland, Inc. 4321 SW Corbett Ave., Ste A Inc

Client: PBS Engineering + Environmental

**BULK SAMPLE ASBESTOS ANALYSIS** 

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Portland, OR 97239

Asbestos and Environmental Analysis

Report Number: 101735R01 Report Date: 08/17/2010

P.O. No: n/a

Job Number: 101735

Project Name:								
Project Number: 2	21087.021	Phase 00	003					
Project Notes:								
			***************************************					00/47/0040
Client Sample ID:	21087.02	1-0027		Sample ID:	S1		Date Analyzed:	08/17/2010
Client Sample Desc	ription:						Analyst:	Stephanie Golden
Asbestos Mineral F	ibers	Layer						Percent
		Percent:	Chrysotile	Amosite	Crocidolite			Asbestos:
Layer 01								
coarse compact p	oowder	40%	-	-	-			NAD
Layer 02								
compact fibrous p w/ paper, offwhite		60%	-	-	-			NAD
Other Fibers	Fibrou	s	Mineral					
	Glass	Cellulos	se Wool	Synthetic		Other		Matrix
Layer 01	_	2 %	•	, <u>-</u>		_	•	98 %
Layer 02	_	7%	_	_		_	_	93 %
Layer 02		1 70						
Client Sample ID:	21087.02	1-028		Sample ID:	S2		Date Analyzed:	08/17/2010
Client Sample Descr	ription:						Analyst:	Stephanie Golden
Asbestos Mineral Fi	ibers	Laver						Percent
		Percent:	Chrysotile	Amosite	Crocidolite			Asbestos:
Layer 01								
•		050/						NAD
coarse compact p w/ paint, offwhite	owaer	35%	-	-	-			NAD
w/ paint, offwhite	oowaer	35%	-	-	-			NAD
	oowder	65%	- -	-	-			NAD
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite	oowder	65%	- - Mineral	-				
w/ paint, offwhite  Layer 02  compact fibrous p	oowder	65%		- Synthetic	-	Other		
w/ paint, offwhite  Layer 02  compact fibrous p  w/ paper, offwhite  Other Fibers	oowder Fibrous	65% Gellulos	e Wool	- Synthetic	-	Other		<b>NAD</b> Matrix
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers Layer 01	oowder Fibrous	65 %  Cellulos 2 %	e Wool	-		Other	<u>-</u>	NAD Matrix 98 %
w/ paint, offwhite  Layer 02  compact fibrous p  w/ paper, offwhite  Other Fibers	oowder Fibrous	65% Gellulos	e Wool	- Synthetic - -	-	Other - -	- -	<b>NAD</b> Matrix
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02	oowder Fibrous	65 %  Cellulos 2 % 6 %	e Wool	-	- - S3	Other - -	- - Date Analyzed:	NAD Matrix 98 %
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID:	Fibrous Glass - - 21087.021	65 %  Cellulos 2 % 6 %	e Wool	-	- - S3	Other - -	- - Date Analyzed: Analyst:	<b>NAD</b> Matrix  98 %  94 %
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr	Fibrous Glass - - 21087.021	65 % Cellulos 2 % 6 %	e Wool	-	- - S3	Other - -	•	Matrix 98 % 94 %
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID:	Fibrous Glass - - 21087.021 Fiption:	65 % Cellulos 2 % 6 % I-029 Layer	e Wool - -	-	S3	Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr	Fibrous Glass - - 21087.021 Fiption:	65 % Cellulos 2 % 6 % I-029 Layer	e Wool	Sample ID:		Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr	Fibrous Glass - - 21087.021 ription: bers	65 % Cellulos 2 % 6 % I-029 Layer	e Wool - -	Sample ID:		Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white	Fibrous Glass - - 21087.021 ription: bers	65 % Cellulos 2 % 6 % I-029 Layer Percent:	e Wool - -	Sample ID:		Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos:
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white Layer 02	Fibrous Glass - - 21087.021 iption: bers	65 % Cellulos 2 % 6 % I-029 Layer Percent:	e Wool - -	Sample ID:		Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos:
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white Layer 02 mastic, light brown	Fibrous Glass - - 21087.021 ription: bers der w/	65 %  Cellulos 2 % 6 %  I-029  Layer Percent: 55 %	Chrysotile	Sample ID:		Other - -	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos: NAD
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white Layer 02	Fibrous Glass 21087.021 ription: bers  der w/	65 % Cellulos 2 % 6 % I-029 Layer Percent: 55 % 45 %	Chrysotile	Sample ID:  Amosite		Other	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos: NAD
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white Layer 02 mastic, light brown Other Fibers	Fibrous Glass - - 21087.021 ription: bers der w/	65% Cellulos 2 % 6 % I-029 Layer Percent: 55% 45% Cellulos	Chrysotile  -  -  Mineral e  Wool	Sample ID:		-	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos: NAD  NAD
w/ paint, offwhite Layer 02 compact fibrous p w/ paper, offwhite Other Fibers  Layer 01 Layer 02  Client Sample ID: Client Sample Descr Asbestos Mineral Fi  Layer 01 fine compact power paint, white Layer 02 mastic, light brown	Fibrous Glass 21087.021 ription: bers  der w/	65 % Cellulos 2 % 6 % I-029 Layer Percent: 55 % 45 %	Chrysotile	Sample ID:  Amosite		-	•	Matrix 98 % 94 %  08/17/2010 Stephanie Golden Percent Asbestos: NAD

Page No.:

# LabCor Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A Portland, OR 97239

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 101735

Report Number: 101735R01 Report Date: 08/17/2010

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Reviewed by:

Stephanie Golden Analyst

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Page No.:

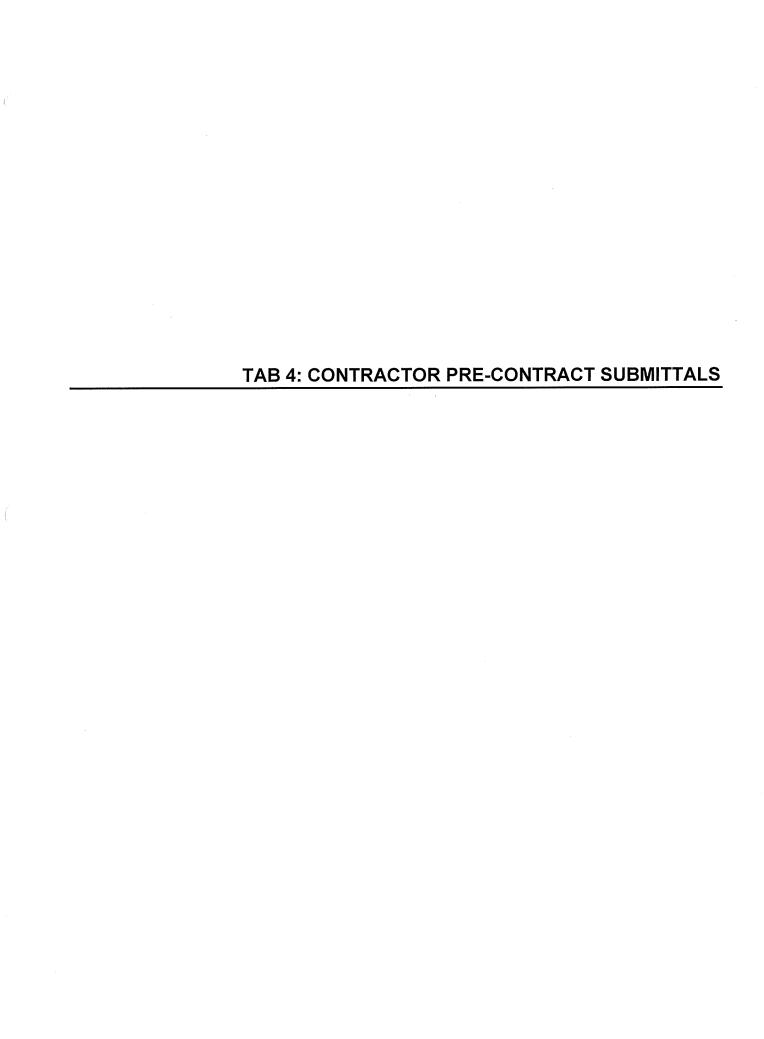
Page 2 of 2

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

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**Project No.:** 

21078.021





13600 N.E. 10th Avenue, Vancouver, WA 98685
Tel: 360-574-8400 Tel: 503-735-9603 Fax: 360-574-7607

# ASBESTOS ABATEMENT SITE WORK PLAN CONCORD ELEMENTARY

Milwaukie, Oregon

#### 1.0 General

It is the intent of this work plan to provide the reviewer with sufficient information to gain approval to commence abatement operations, to provide and serve as a working document for Performance Abatement Services (PAS) project management during the course of work, and to eliminate accidents and injuries on the project. This plan is supplemental to PAS standard operating procedures and accident prevention plan. All the requirements of these, and other PAS written programs should be considered inclusive herein. If a conflict exists between this plan, the contract documents or PAS policies and procedures, the most stringent will apply.

#### 2.0 Scope of Work

The scope of work on the project requires the abatement of the asbestos containing materials as identified in the specifications to facilitate renovation activities.

#### 3.0 Abatement Methodology

#### 3.1 OSHA Classifications

It is the intent of PAS to abate the materials identified in the specifications according to the OSHA work classification using the required engineering controls and workpractices mandated by OSHA under 29 CFR 1926.1101.

#### 3.2 Engineering Control and Work Methods

#### 3.2.1 Asbestos Flooring (Floor Tile/ AC Mastic)

Approximately 2300SF of non AC floor tile and AC mastic will be removed from the cafeteria area. Negative pressure enclosures consisting of 4' splash guards on the walls and critical barriers over vents, exterior doors and operable windows will be established and maintained. The floor tile will be removed by mechanical methods where feasible. All ACM will be removed wet and placed into mega boxes or fiber drums. Asbestos containing mastics will be abated by using non or low odor chemical mastic removers- Ecosolve or equivalent .Workers will manually remove the floor adhesive with said chemical strippers and floor buffers

#### 3.2.2 Asbestos Containing Joint Compound

The gypsum board will be removed from the walls & ceilings where specified under a negative pressure containment using wet method for dust control. The Gyp board will be packaged and disposed of as construction debris. If asbestos containing glue dots exist then it will be treated as ACM waste.

#### 3.2.3 Pipe insulation/ Hard fittings

Pipe insulation both horizontal & vertical runs will be abated using the glove bag methods in accordance with OSHA as well as PAS standard operating procedures.

#### 3.2.4 Caulking around windows/Sink

Plastic sheeting will be placed under the windows and on the inside of the windows that are scheduled for removal. The caulking will be wetted prior to removal and then removed manually. HEPA equipped vacuums will be used clean up of any debris. Sink will be properly packaged and disposed of as ACM.

#### 4.0 Chemical and Physical Hazards Associated with the Work

A joint review of the project site was conducted by PAS project management and PAS's Environmental, Safety and Health Department to identify project specific safety and health concerns. The following site specific hazards were identified:

#### 4.1 Electrical Hazards

Prior to performing work in any abatement area or where work requires use of power or the handling of electrical components (i.e., standard electrical outlets, light fixtures) PAS will ensure that all electrical power has been isolated. This will be accomplished by using PAS Lock-out/Tag-out Procedure or by complete isolation (electrical disconnect).

All power used inside negative pressure enclosures shall be equipped with ground fault circuit interrupters (GFCI). A complete electrical disconnect shall be required prior to removing light bulbs or ballasts.

#### 4.2 Fall Protection (not used)

#### 4.3 Chemical Hazards

PAS does not anticipate non-routine chemical hazards or exposures on the project site. In the event that non-routine chemical hazards are discovered, PAS's environmental safety and health department will evaluate the hazards, provide

#### 3.2.2 Asbestos Containing Joint Compound

The gypsum board will be removed from the walls & ceilings where specified under a negative pressure containment using wet method for dust control. The Gyp board will be packaged and disposed of as construction debris. If asbestos containing glue dots exist then it will be treated as ACM waste.

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#### 4.2 Fall Protection (not used)

#### 4.3 Chemical Hazards

PAS does not anticipate non-routine chemical hazards or exposures on the project site. In the event that non-routine chemical hazards are discovered, PAS's environmental safety and health department will evaluate the hazards, provide

direction with regard to PPE, workpractices and engineering controls as well as conduct employee training in accordance with the OSHA Hazard Communication Standard.

#### 5.0 Site Housekeeping Procedures

#### 5.1 Non-Asbestos Containing Debris

The site will be maintained as free as practicable of general construction debris, trash and refuse to eliminate safety and fire hazards. Where such materials cannot be readily removed from the site, the materials will be managed in a manner which eliminates it's potential for injury (i.e., segregation, containerization) or release into the surrounding environment.

#### 5.2 Asbestos Containing Debris

Waste which contains, or is contaminated with asbestos fibers shall be cleaned and containerized as soon as practicable after its disturbance or when such materials become contaminated. Asbestos will not be allowed to accumulate on work surfaces to prevent unnecessary exposure to workers, other craftspersons or the environment.

#### 6.0 Quality Assurance

#### 6.1 Asbestos Fiber and Dust Control

Good work practices (housekeeping, wet methods, use of HEPA vacuums), hygiene practices (proper decontamination procedures) and engineering controls (negative pressure enclosures, mini-enclosures, glovebags) will be used as the primary method in which to prevent, control and where possible eliminate exposure to airborne asbestos fibers. In addition, frequent inspections by project competent persons, project management and PAS's industrial hygienist will further ensure quality control on the project.

#### 6.2 Procedures for Area Air Quality Monitoring

PAS's competent persons will collect area samples on a daily basis. Such monitoring will include, but is not limited to sampling inside work areas, outside work areas, critical barriers, clean room and at the exhaust port of HEPA filtered negative pressure differential units. PAS will utilize an independent industrial hygiene laboratory to analyze all samples collected on the project. Samples will be collected in accordance with the OSHA Reference Method, NIOSH 7400.

#### 6.3 Procedures for Personnel Exposure Monitoring

PAS's competent persons will collect personal samples on a daily basis to determine exposure levels and measure the effectiveness of workpractices and engineering controls. Representative personal samples will be collected on workers performing

those tasks likely to result in the most severe exposure. In addition, representative samples will be collected to provide data with respect to each abatement task performed on the project (i.e., removal of roofing, clean-up of soil contamination, glovebag operations, etc.) PAS will utilize an independent industrial hygiene laboratory to analyze all samples collected on the project. Samples will be collected in accordance with the OSHA Reference Method, NIOSH 7400.

#### 7.0 Emergency Response Procedures for Unanticipated Releases

#### 7.1 Breaches of Enclosures

In the event of a breach of an enclosure, all work shall immediately cease until the breach is repaired. The competent person shall inspect the repairs prior to the continuation of work. In cases, where the breach is severe (i.e., complete loss of NPE integrity), environmental samples shall be collected in the affected area to document the concentration of fugitive, airborne asbestos fibers. All such breaches shall be documented in the competent person' daily report.

#### 7.2 Excessive Fiber Levels

In the event of excessive fiber levels, all workers in the affected shall stop work until a determination can be made by the competent person as to why excessive fiber levels are occurring. The competent person shall make his/her determination based on, but not limited to an evaluation of (1) workpractices (2) engineering controls (3) removal methodology, (4) the level of training and experience of the workers, (5) outside sources, (5) changes in the nature, type, and condition of the material. If airborne concentrations are above the maximum use concentration (MUC) for the selected respirator, respiratory protection must be upgraded until which time additional air samples are collected and analyzed to ensure that fiber concentrations have returned to acceptable levels. All excessive fiber levels shall be documented in the competent person's daily report.

#### 7.3 Outside Spills

In the event of any outside spills, (1) all unauthorized personnel will be removed from the area, (2) the affected area will be immediately demarcated with danger tape and placarded with OSHA asbestos warning signs, (3) personnel will immediately clean the affected area using HEPA vacuums, wet methods or other approved methods, and area samples shall be collected to document the concentrations in the spill area.

#### 7.4 Notification

Owners representative will be notified in the event that any of the above situations occur.

#### 8.0 Procedures for Personnel and Equipment Cleanup and Decontamination

- 8.1 Personnel Decontamination Procedures (Class II Work)
  - 8.1.1 Workers will remove all contaminated clothing (with the exception of respiratory protection) in the equipment room of the decontamination unit and dispose of contaminated clothing in disposal bags.
  - 8.1.2 Workers will enter the shower chamber, remove respiratory protection after thoroughly cleansing it, then wash their entire body with soap and water.
  - 8.1.3 Workers will exit the shower to the clean side of decontamination chamber and dry off with disposable towels and get re-dress in their street clothing.

#### 8.2 Equipment Decontamination Procedures

- 8.2.1 While inside the work area, all gross visible debris will be cleaned from the equipment, tool or disposal container.
- 8.2.2 The item will be passed from the work area to the first of two chambers of the equipment decontamination unit (waste load out) where the item will be wet wiped, rinsed or HEPA vacuumed.
- 8.2.3 The semi-decontaminated item will then passed into the second of two chambers of the equipment decontamination unit where it will be inspected for debris, wrapped in polyethylene, or placed in a secondary disposal container.
- 8.9.2.4 The item will then be passed through the airlock to the outside space where it will be retained and stored, stored on an interim basis awaiting disposal, or in the case of equipment moved to the next abatement area.

#### 9.0 Waste Management Plan

#### 9.1 Asbestos Waste Streams

Two waste streams are anticipated on the project. This will be both friable & non-friable asbestos containing waste material. Aside from wetting to suppress fiber release, waste will be bagged and the floor tile will be placed in drums. The TSI & tank insulation will be double bagged in 6 mil bags.

#### 9.2. Storage of Asbestos Waste Materials

Asbestos waste materials (i.e., bags, drums) will be staged in the work area until the work is completed in the immediate area. Interim storage for disposal will consist of placing the waste containers in a secure, completely enclosed disposal box (i.e., 40 yd drop box) placarded with OSHA warning signs in accordance with the Oregon Department of Environmental Quality and Oregon OSHA.

#### 9.3 Waste Minimization

PAS shall attempt to minimize the amount of waste material by segregating non-regulated materials from regulated materials, minimizing the volume of waste though processing, where possible (example, crushing fluorescent light tubes), and efficient packaging of waste materials.

#### 9.4 Container Labeling

9.4.1 Asbestos Waste Containers

Asbestos waste containers shall bear the following labels:

9.4.1.1 OSHA Hazard Communication

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE
HAZARD

9.4.1.2 Department of Transportation

ASBESTOS, NA 2212 RQ Class 9 PG III

9.4.1.3 Oregon Department of Environmental Quality (NESHAP)

Generator Name
Generating Location
Asbestos Contractor
Certified Asbestos Supervisor

9.5 Waste Transportation and Disposal

10.5.1 Asbestos Waste Transporter

To Be Determined

10.5.2 Asbestos Waste Landfill

Hillsboro Landfill

#### 10.0 Personal Protective Equipment

10.1 Respiratory Selection

10.1.1 Class II Abatement Work

Half-Face Air Purifying Respirator (HFAPR) equipped with HEPA (P100) filters; or Power Air Purifying Respirator (PAPR) equipped with HEPA (P100) filters. Use of combination Organic Vapor & HEPA when using spray adhesives or mastic

remover solvents in an enclosed area or when conditions result in levels exceed the permissible exposure limit.

#### 10.2 Personal Protective Equipment

#### 11.2.1 Asbestos Abatement

Body Covering:

Tyvex, Spun bound or similar full-body covering

Foot Protection: Head Protection:

Boots (rubber, steel shank)
Hardhat(building interior only)

Eye protection:

Safety glasses, goggles or PAPR

Hearing Protection:

Ear plugs, earmuffs

Hand Protection:

Rubber, Neoprene, Leather, Canvas

Fall Protection:

Class III, Full-body Harness (If necessary)

#### 11.0 Project team

Estimator /Project Manager

Ben Pullman

Cell -360-518-2699

Superintendent

Ryan Leffel

Cell -503-793-1970

General Foreman (On Site)

Clark Nelson

Cell -503-793-5400

Ą	Ć	ORD CER	TIFICATE OF L				DATE (MM/DD/YYYY) 4/20/20)0	
PRO	DUCE	R Lockton Companies, LLC-1 Kansas 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000	s City	ONLY AN HOLDER.	D CONFERS N THIS CERTIFIC	UED AS A MATTER OF RIGHTS UPON THE ATE DOES NOT AME AFFORDED BY THE P	HE CERTIFICATE ND. EXTEND OR	
		(010) 7007 7000		INSURERS A	AFFORDING COV	/ERAGE	NAIC#	
INSL	IRED	PERFORMANCE ABATEMENT S	SERVICES, INC.	INSURERA Ste	adfast Insurance Co	mpany (A XV)	26387	
12:	283	02-01-23		INSURER B. Am	INSURER B. American Guarantee and Liab. Ins. Co. (A XV)			
		13600 NE 10TH AVENUE VANCOUVER WA 98685		INSURER C Zui	rich American Insura	nce Company (A XV)	16535	
TARCOUTER WAY AND			INSURER D					
COVERAGES PERABUL V2			INSURER E	HIS CERTIFICATE OF INSU	RANCE DOES NOT CONSTITUTE A CO	ONTRACT BETWEEN THE ISSUIN		
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE I MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CO POLICIES, AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.					NOTWITHSTANDING MAY BE ISSUED OR			
LTR	ADD'L NSRC		POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)			
١.		GENERAL LIABILITY	CDI 0202410 01	4/1/0010	4/1/0011	PREMISES (En occurrence)	s 1,000,000	
Λ		X COMMERCIAL GENERAL LIABILITY  CLAIMS MADE X OCCUR	GPL 9383410-01	4/1/2010	4/1/2011		s 100,000 s 5,000	
		X POLLUTION/ASBESTOS				MED EXP (Any one person) PERSONAL & ADV INJURY	s 1,000,000	
		X CONTRACTUAL/MOLD				GENERAL AGGREGATE	s 2,000,000	
		GEN'L AGGREGATE LIMIT APPLIES PER	·			PRODUCTS - COMPIOP AGG	s 2,000,000	
		POLICY X PRO-						
В		AUTOMOBILE LIABILITY  X ANY AUTO	BAP 9436073-01	4/1/2010	4/1/2011	COMBINED SINGLE LIMIT (Ee accident)	s 1,000,000	
		ALL OWNED AUTOS SCHEDULED AUTOS		i:		BODILY INJURY (Per person)	s xxxxxxx	
		MIRED AUTOS NON-OWNED AUTOS				BODILY INJURY (Per accident)	s xxxxxxx	
						PROPERTY DAMAGE (Per accident)	s xxxxxxx	
		GARAGE LIABILITY	NOT ABBITOABLE			AUTO ONLY - EA ACCIDENT	s XXXXXXX	
		ANY AUTO	NOT APPLICABLE			OTHER THAN EA ACC	s XXXXXXX	
		EXCESS / UMBRELLA LIABILITY				EACH OCCURRENCE	\$ 5,000,000	
Λ		X OCCUR CLAIMS MADE	9383385-01	4/1/2010	4/1/2011	AGGREGATE	\$ 5,000,000	
		UMBRELLA			·		\$ XXXXXXX	
		DEDUCTIBLE X FORM					s XXXXXXX	
	WOR	RETENTION \$ (ERS COMPENSATION				Y WC STATU- OTH-	s XXXXXXX	
С	AND	EMPLOYERS' LIABILITY Y/N	9436079-01	4/1/2010	4/1/2011	A TORY LIMITS   ER	1.000.000	
C	OFFIC	PROPRIETOR/PARTNER/EXECUTIVE NER/MEMBER EXCLUDED?	INCLUDES USL&H INCLUDES STOPGAP			E.L. EACH ACCIDENT  E.L. DISEASE - EA EMPLOYEE	s 1,000,000 s 1,000,000	
	If ves	describe under IAL PROVISIONS below	THE BODD OF CITY			E.L DISEASE - POLICY LIMIT	s 1,000,000	
	OTHE						1,000,000	
020 INS	123 5	ON OF OPERATIONS / LOCATIONS / VEHICL 28 I NEW URBAN/SOJOURNER; NO DAS RESPECTS LIABILITY COVE CCT.	ORTH CLACKAMAS SCHOOL DI	STRICT AND NEW	URBAN/SOJOURI		ADDITIONAL	
CFF	RTIFI	CATE HOLDER		CANCELLAT	ION [M38713]			
	6028					ED POLICIES BE CANCELLED 8	EFORE THE EXPIRATION	
		CLACKAMAS SCHOOL DISTRIC	Т	DATE THEREOF	THE ISSUING INSURE	ER WILL ENDEAVOR TO MAIL	30 DAYS WRITTEN	
12	451 8	E FULLER ROAD		NOTICE TO THE	CERTIFICATE HOLDER	NAMED TO THE LEFT, BUT FA	AILURE TO DO SO SHALL	
MILWAUKIE OR 97222			1	IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.				

ACORD 25 (2009/01)

STF-ESP-101-C CW (05/08)

This endorsement, effective 12:01 AM, April 1, 2010

Forms a part of policy no.: GPL 9383410-01

Issued to: PERFORMANCE ABATEMENT SERVICES, INC.

By: STEADFAST INSURANCE COMPANY

ADDITIONAL INSURED - AUTOMATIC - OWNERS, LESSEES OR CONTRACTORS

Coverage Part One - Commercial General Liability

Coverage Part Two - Contractor's Pollution Liability

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

Environmetal Services Package Policy
COVERAGE PART ONE - COMMERCIAL GENERAL LIABILITY
COVERAGE PART TWO - CONTRACTOR'S POLLUTION LIABILITY

In consideration of the payment of premium and the Deductible by you and in reliance upon the statements in the Application made a part hereof, we agree with you, subject to all the terms, exclusions, and conditions of the policy and the terms and conditions of the endorsement, that with respect to the coverage parts indicated above the following changes shall apply:

- 1. Pursuant to Who is an Insured (Section I.) in the COMMON POLICY PROVISIONS paragraph 4., any person or organization whom you are required to add as an additional insured on this policy under a written contract or written agreement executed and effective prior to the performance of your "covered operations" which is the subject of such written contract or written agreement is added as an additional insured.
- 2. The insurance provided to the additional insured person or organization applies only to:
  - a. Under COVERAGE PART ONE COMMERCIAL GENERAL LIABILITY COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY and COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY, "claims" for "bodily injury," "property damage" or "personal and advertising injury" resulting directly from:
    - (1) Your ongoing operations; or
    - (2) "Your work" completed as included in the "products-completed operations hazards"
  - b. Under COVERAGE PART TWO CONTRACTOR'S POLLUTION LIABILITY, "claims" arising out of a "pollution event" resulting directly from your:
    - (1) "covered operations"; or
    - (2) "Completed operations" of the "covered operations,"

Performed for the additional insured which is the subject of the written contract or written agreement and only if the "claim" is otherwise covered under the terms and conditions of this policy.

Miscellancous Attachment: M38713

Certificate ID: 10860283

- 3. Regardless of the provisions in paragraphs 1. And 2. Above:
  - a.. We will not extend any insurance coverage to the additional insured person or organization:
    - (1) That is not provided to you in this policy; or
    - (2) That is broader coverage than you are required to provide to the additional insured person or organization in the written contract or written agreement; and
  - b. We will not provide Limits of Insurance to the additional insured person or organization that exceed the lower of:
    - (1) The Limits of Insurance provided to you in this policy; or
    - (2) The Limits of Insurance you are required to provide in the written contract or written agreement.
- 4. The insurance provided to the additional insured person or organization does not apply to "claims" as a result of any negligence, act, error or omission, or strict liability of the additional insured person or organization.
- 5. The insurance provided by this endorsement is primary insurance and we will not seek contribution from any other insurance available to any additional insured person or organization unless the other insurance is provided by a contractor other than you for the same operations, "covered operations" or "completed operations" of the "covered operations" and job location. Then we will share with that other insurance by method described in Other Insurance in Conditions (Section V.) of the COMMON COVERAGE PROVISIONS.
- 6. Both you and the additional insured person or organization agree to cooperate with each other and us with respect to all aspects of coverage provided under this policy. In the event that you and the additional insured person or organization are named as defendants in a "claim," and are both entitled to defense under this policy for such "claim," we shall provide common counsel to represent you and the additional insured person or organization in a joint defense. If you and the additional insured person or organization adopt positions materially adverse to each other with respect to the "claim," we shall provide the defense and make payments for "claim expenses," or any other assosicated costs of defense under this policy, only to you from the point of the adversity forward.

The rights and oblications above shall apply in any proceeding and in any forum in which you and the additional insured person or organization are a party to a "claim."

ALL OTHER TERMS AND CONDITIONS OF THE POLICY SHALL APPLY AND REMAIN UNCHANGED.

STF-ESP-101-C CW (05/08)

Miscellaneous Attachment: M38713 Certificate ID: 10860283



# FULL SCALE ASBESTOS ABATEMENT CONTRACTOR LICENSE

Department of Environmental Quality 1550 N.W. Eastman Parkway, Suite 290 Gresham, OR 97030 Telephone: (503) 667-8414 ext. 55022

Issued in Accordance with the Provisions of ORS 468A.710

Supportunishing and the support of t	
ISSUED TO:	LICENSE NUMBER:
PERFORMANCE ABATEMENT SERVICES INC 13600 NE 10TH AVE, VANCOUVER, WA 16400 COLLEGE BLVD, LENEXA, KS 66219	FSC511
	EXPIRATION DATE:
	JANUARY 01, 2011
INFORMATION RELIED UPON:	
Asbestos Abatement Contractor License Application su	bmitted JANUARY 5, 2010
ISSUED BY THE DEPARTMENT OF ENVIRO	ONMENTAL QUALITY

The contractor named above is herewith authorized to conduct asbestos abatement in the State of Oregon subject to the terms and conditions of Oregon Administrative Rules (OAR) Chapter 340 Division 248, including the conditions listed below.

Lindà Hayes Gorman Acting Air Quality Manager

Northwest Region/Gresham Office

JAN 0 6 2010

Date

1. The contractor shall ensure that each worker performs asbestos abatement work in compliance with OAR 340-248-0010 through 340-248-0290 and other applicable state and federal asbestos abatement regulations.

# STATE OF OREGON CONSTRUCTION CONTRACTORS BOARD

LICENSE CERTIFICATE

LICENSE NUMBER: 65074

This document certifies that:

PERFORMANCE CONTRACTING INC 16400 COLLEGE BLVD LENEXA KS 66219

is licensed in accordance with Oregon Law as a General Contractor/All Structures.

License Details:

EXPIRATION DATE: 04/16/2011

**ENTITY TYPE: Corporation** 

INDEP. CONT. STATUS: NON-EXEMPT

BOND AMOUNT: \$15,000

MINIMUM INSURANCE AMOUNT: \$1,000,000

RMI: MICHAEL M MATTHEWS

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# Medical Surveillance Program

Performance Abatement Services, Inc. has a medical surveillance program for all employees and while doing so, adheres fully to these work practices specified in 1529/07700/1926.1101.

For employees otherwise required by 1529/0700/1926.1101 to wear a negative pressure respirator, PAS shall ensure that employees are physically able to perform the work and use the equipment. This determination shall be made under the supervision of a physician.

Medical examinations and consultations are available to each employee on the following schedules:

- Prior to assignment of the employee to an area where negative pressure respirators are worn
- 2. When the employee is assigned to an area where exposure to asbestos may be at or above the permissible limit for 30 or more days per year, or engage in Class I, II, or III work for a combined total of 30 or more days per year, a medical examination must be given within 10 working days following the thirtieth day of exposure
- 3. And at least annually thereafter.
- 4. If the examining physician determines that any of the examinations should be provided more frequently than specified, PAS provides such examinations to affected employees at the frequencies specified by the physician.
- 5. Exception: No medical examination is required of any employee if adequate records show that the employee has been examined in accordance with this paragraph within the past 1-year period.





- 6. Performance Abatement Services, Inc. shall provide a medical examination at the termination of employment for any employee who has been exposed to airborne concentrations of asbestos at or above the permissible exposure limit and/or excursion limit. The medical examination shall be given within 30 calendar days before or after the date of termination of employment.
- 7. Examination by a physician. All medical examinations and procedures are performed by, or under the supervision of a licensed physician, and are provided at no cost to the employee, and at a reasonable time and place.
- 8. Persons other than such licensed physicians who administer the pulmonary function testing, complete a training course in spirometry sponsored by an appropriate academic or professional institution.
- 9. Medical examinations made available to employees include:
  - a. A medical and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems.
  - b. On initial examination, the standardized questionnaire contained in CFR 1926.1101 Appendix D, Part 1, and, on annual examination, the abbreviated standardized questionnaire contained in CFR1926.1101, Appendix D, Part 2.
  - c. A physical examination directed to the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered in accordance with the following table, and pulmonary function tests of forced vital capacity (FVC) and forced expiratory volume at one second (FEV(1)). Interpretation and classification of chest roentgenogram shall be conducted in accordance with CFR 1926.1101.





# PART 1 INITIAL MEDICAL QUESTIONNAIRE

1. NAME
2. SOCIAL SECURITY NUMBER
3. CLOCK NUMBER
4. PRESENT OCCUPATION
5. PLANT
6, ADDRESS
7
(Zip Code)
8. TELEPHONE NUMBER
. (Area Code)
9. INTERVIEWER
10. DATE
11. Date of Birth
12. Place of Birth
13. Sex: Male Female
14. What is your marital status?
Single Married Widowed Separated/ Divorced
15. Ethnic origin:
White Black Asian Hispanic Native American
Other
16. What is the highest grade completed in school? (For example, 12 years is
completion of high school.)





17. OCCUPATIONAL HISTORY:	
17A. Have you ever worked full time (30 hours per week or more) for six more	nths
or more? Yes No	
If Yes to 17A:	
B. Have you ever worked for a year or more in any dusty job?	
Yes No Does not apply	
Specific job/industry	
Total years worked	
Was dust exposure?	
Mild Moderate Severe	
C. Have you ever been exposed to any hazardous substances in your work?	
Yes No	
Specific job/industry	
Total years worked	
Was exposure?	
Mild Moderate Severe	
<ul><li>O. What has been your usual occupation or job - the one you have worked at</li></ul>	the
ongest?	
Job/occupation	
Number of years employed in this occupation	
Position/job title	
Business, field or industry	
Record on lines the years in which you have worked in any of these industries	es,
a 1960-1969 \	





Have you ever worked:			
	Yes		No
E. In a mine?			-
F. In a quarry?			
G. In a foundry?			
H. In a pottery?			
I. In a cotton, flax or hemp mill?			
J. With asbestos?			b
PAST MEDICAL HISTORY			
18A. Do you consider yourself to be in good health?	Yes	No	
IF NO, STATE REASON:			
B. Do you have any defect of vision?	Yes	No	
IF YES, STATE NATURE OF DEFECT:			
C. Do you have any hearing defect?	Yes	No	<del></del>
IF YES, STATE NATURE OF DEFECT:			
D. Are you suffering from or have you ever suffered to	rom:		
	Yes	No	
a. Epilepsy (or fits, seizures, convulsions)?			_
b. Rheumatic fever?			
c. Kidney disease?			
d. Bladder disease?			_
e. Diabetes?			_
f. Jaundice?		,	





CHEST COLDS AND CHE	191 ILLNE99E9
19. If you get a cold, does	it usually go to your chest? (Usually means more than
half the time).	
Yes No	Don't get colds
20A. During the past three	years, have you had any chest illnesses that have
kept you off work, indoors	at home, or in bed?
Yes No	
IF YES TO 20A:	
B. Did you produce phlegn	n with any of these chest illnesses?
Yes No	Does not apply
C. In the last three years, h	now many such illnesses with (increased) phlegm did
you have which lasted a we	ek or more?
Number of illnesses	No such illnesses
21. Did you have any lung	trouble before the age of 16?
Yes No	
22. Have you ever had any	of the following?
1A. Attacks of bronchitis?	Yes No
F YES TO 1A:	
<ol><li>Was it confirmed by a do</li></ol>	
Yes No	
C. At what age was your fir	·
Age in years	Does not apply
2A. Pneumonia (include bro	onchopneumonia)?
Yes No	
F YES TO 2A:	
Was it confirmed by a de	potor? Voe





C. At what age did you f	irst have it? Age in years Does not apply
3A. Hayfever? Yes	No
IF YES TO 3A: B. Was i	t confirmed by a doctor? Yes No
Does not Apply	
C. At what age did it star	t? Age in Years Does not apply
23A. Have you ever had	chronic bronchitis?
Yes No _	
IF YES TO 23A:	
B. Do you still have it?	
Yes No _	Does not apply
C. Was it confirmed by a	doctor? Yes No
D. At what age did it start	1?
Age in years	Does not apply
24A. Have you ever had	emphysema? Yes No
IF YES TO 24A:	
B. Do you still have it?	
Yes No	Does not apply
C. Was it confirmed by a	doctor?
Yes No	Does not apply
D. At what age did it start	?
Age in years	Does not apply
25A. Have you ever had a	asthma? Yes No
IF YES TO 25A:	
B. Do you still have it?	
Yes No	Does not apply





C. Was it confirmed by	a doctor?
Yes No	Does not apply
D. At what age did it sta	rt?
Age in years	Does not apply
E. If you no longer have	it, at what age did it stop?
Age stopped	Does not apply
26. Have you ever had?	
A. Any other chest illnes	ses? Yes No
B. Any chest operations	? Yes No
If YES, please specify	
C. Any chest injuries?	Yes No
If YES, please specify	
27A. Has a doctor ever t	old you that you had heart trouble?
	Yes No
IF YES TO 27A:	
B. Have you ever had tre	eatment for heart trouble in the past ten years?
Yes No	Does not apply
28A. Has a doctor ever to	old you that you had high blood pressure?
Yes No	
IF YES TO 28A:	
B. Have you had any trea	atment for high blood pressure (hypertension) in the pas
ten years?	•
Yes No	Does not apply
29. When did you last ha	ve your chest X-rayed?
Year:	





30. Where did you last I	nave yo	ur che	st X-rayed (ii	f known)?	?	
What was the outcome?	)					
FAMILY HISTORY						
31. Were either of your i	natural p	parents	ever told by	y a docto	r that t	hev had a
chronic lung condition, s			•	•		<b>,</b>
		FAT	HER		ТОМ	THER
			Not			Not
	Yes	No	Known	Yes	No	Known
A. Chronic Bronchitis?						
B. Emphysema?	-		<u> </u>			
C. Asthma?					• • • • • • • • • • • • • • • • • • • •	
D. Lung Cancer?			arrange de la companya de la company			-
E. Other chest conditions	;?	•••		***************************************	•	
F. Is parent currently alive	e?		-			***************************************
G. Please specify	A	ge if li	ving	A	ge if li	ving
	A	ge at o	death	A	ge at	death
•	L	Inknov	/n	U	Inknov	vn
H. Please specify cause (	of death					<del></del>
COUGH						
32A. Do you usually have	a coug	h? (Co	ount a cough	with firs	t smok	ke or on first
going out of doors. Exclud	de clear	ing of	throat.) If NO	O, skip to	31C.	
Yes No						
3. Do you usually cough a	as much	as 4 i	to 6 times a	day, 4 or	more	days out of
the week? Yes No						
C. Do you usually cough a	at all on	gettin	g up or first	thing in th	ne moi	rning?





ERISODI	ES OF COU	GH AND PHLE	EGM			
34A. Hav	e you had p	eriods or episo	des of (increased	d*) cough a	and phlegm lastir	ıg
for 3 wee	ks or more e	each year? (* F	or persons who i	usually hav	ve cough and/or	
phlegm.)			Yes	Ne	D	
If YES to	34A B. For	now long have	you had at least	one such e	episode per year'	?
Number o	of years	Does not ap	ply			
WHEEZI	NG					
35A. Doe	s your chest	ever sound wh	neezy or whistling	g:		
				Yes	No	
1. When y	ou have a c	old?				
2. Occasio	onally apart	from colds?				
3. Most da	ays or nights	?	•			
IF YES TO	) 1, 2, OR 3	IN 35A:			•	
B. For hov	v many year	s has this beer	n present?			
Number of	f years	_ Does not	apply			
36A. Have	you ever h	ad an attack of	wheezing that h	as made y	ou feel short of	
breath?	Yes	No	<del></del>			
IF YES TO	) 36A:					
B. How old	ł were you v	hen you had y	our first such att	ack?		
Age in yea	irs	Does not	apply			
C. Have yo	ou had two d	r more such e <sub>l</sub>	oisodes?			
Yes	. No	_ · Does not	apply			
D. Have yo	ou ever requ	ired medicine (	or treatment for t	he(se) atta	ick(s)?	
Yes	No	Does not	vlaas			





Yes No		
D. Do you usually cough at all during the rest	of the day or at	t night?
Yes No		
IF YES TO ANY OF ABOVE (32A,B, C, OR D	), ANSWER TH	HE FOLLOWING, IF
NO TO ALL, CHECK "DOES NOT APPLY" AN	ND SKIP TO 33	3A.
E. Do you usually cough like this on most days	s for 3 consecu	utive months or more
during the year?		
Yes No Does not apply		
F. For how many years have you had the cou-	gh?	
Number of years:		tet at-
33A Do you usually bring up phlegm from you	ur chest? (Cou	int phlegm with the
first smoke or on first going out of doors. Excl	ude phlegm fro	om the nose. Count
swallowed phlegm.) If NO, skip to 32C.	Yes	No
B. Do you usually bring up phlegm like this as	s much as twice	e a day, 4 or more
	Yes	
C. Do you usually bring up phiegm at all on g	etting up or firs	st thing in the
morning?	Yes	NO
D. Do you usually bring up phlegm at all during	ng the rest of the	ne day or at night r
		No
IF YES TO ANY OF THE ABOVE (33A, B, C	, OR D), ANSV	VER THE
FOLLOWING. IF NO TO ALL, CHECK "DOE	S NOT APPLY	AND SKIP TO 34A
E. Do you bring up phlegm like this on most	days for 3 cons	secutive months of
more during the year?		
Yes No Does not apply _		
F. For how many years have you had trouble	e with phlegm?	<b>,</b>
Number of years Does not apply _		





BRE	$\Delta TH$	IF	CCN	JESS

DUCATU	-EOONEOO		
37. If disa	bled from walk	ing by any condition other than	heart or lung disease,
please de	scribe and prod	ceed to question 39A. Nature o	f condition(s):
No. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10			
38A. Are y	ou troubled by	shortness of breath when hurr	ying on the level or
walking up	a slight hill?	Yes	No
IF YES TO	) 38A:		
B. Do you	have to walk s	lower than people of your age o	on the level because of
breathless	ness?		
Yes	No	Does not apply	
C. Do you	ever have to s	top for breath when walking at	your own pace on the
level?			
Yes	No	Does not apply	
D. Do you	ever have to st	op for breath after walking abo	ut 100 yards (or after a
few minute	s) on the level	?	
Yes	No	Does not apply	•
E. Are you	too breathless	to leave the house or breathle	ss on dressing or
climbing or	ne flight of stair	s?	
Yes	No	Does not apply	
TOBACCO	SMOKING		
39A. Have	you ever smok	ed cigarettes? (No means less	than 20 packs of
cigarettes c	or 12 ounces of	f tobacco in a lifetime or less th	ian 1 cigarette a day for
1 year).		Yes	No
IF YES TO	39A:		
B. Do you r	now smoke cig	arettes (as of one month ago)?	•
Yes	No	Does not apply	





C. How old were you whe	n you first started re	gular cigare	tte smoking?	
Age in years	Does not apply			
D. If you have stopped sm	oking cigarettes cor	npletely, ho	w old were yo	ou when
you stopped?				
Age stopped	Check here if still s	moking	·	
E. How many cigarettes de	o you smoke per da	y now?		
Cigarettes per day	Does not ap	ply		
F. On the average of the e	ntire time smoked, l	now many ci	igarettes did	you
smoke per day?			*	
Cigarettes per day	Does not ap	ply		
G. Do or did you inhale the	cigarette smoke?		. All a statements were sent and a second	
Does not apply	Not at all	Slightly		
•	Moderately	Deeply		
40A. Have you ever smoke	ed a pipe regularly?	(Yes means	s more than 1	2 ounces
of tobacco in a lifetime.)		Yes	. No	
IF YES TO 40A:				
FOR PERSONS WHO HA	VE EVER SMOKED	A PIPE:		
B. 1. How old were you wh	en you started to sr	noke a pipe	regularly? Ag	ge
2. If you stopped smoking	a pipe completely, h	low old were	you when y	ои
stopped?				÷
Age stopped Check	here if still smoking	ı pipe	Does not ap	ply
C. On the average over the	entire time you sm	oked a pipe	, how much p	oipe
tobacco did you smoke per	week?			
oz. per week (a star	ndard pouch of toba	cco contains	s 1 ½ oz.)	
Does not apply				





D. How much pipe tobacc	co are you smoking n	ow?
Ounces per week	Not currently	y smoking a pipe
E. Do you or did you inha	le the pipe smoke?	
Never smoked	Not at all	Slightly
	Moderately	Deeply
41A. Have you ever smok	ed cigars regularly?	(Yes means more than one cigar a
week for a year.)	Yes	No
IF YES TO 41A:		
FOR PERSONS WHO HA	VE EVER SMOKED	CIGARS:
B. 1. How old were you wi	nen you started smol	king cigars regularly? Age
2. If you have stopped sm	oking cigars complet	ely, how old were you when you
stopped?		
Age stopped Check	k here if still smoking	cigars
Does not apply		
C. On the average over the	e entire time you sm	oked cigars, how many cigars did
you smoke per week?		
Cigars per week	Does not apply	· 
D. How many cigars are ye	ou smoking per weel	cnow?
Cigars per week	Check here if not sr	moking cigars currently
E. Do or did you inhale the	cigar smoke?	
Never smoked	Not at all	Slightly
	Moderately	Deeply
Cianaturo		Data





# PART 2 PERIODIC MEDICAL QUESTIONNAIRE

1. NAME	
2. SOCIAL SECURITY NUMBER	
3. CLOCK OR BADGE NUMBER	
4. PRESENT OCCUPATION	
5. PLANT	
6. ADDRESS	
8	
City, State	Zip Code
8. TELEPHONE NUMBER	
(Area Code)	
9. INTERVIEWER	*
10. DATE	
11. What is your marital status?	
Single Married Widowed Separated/	Divorced
12. OCCUPATIONAL HISTORY	
12A. In the past year did you work full time (30 Hours per	week or more) for six
months or more?	
Yes No	
If Yes to 12A:	
12B. In the past year, did you work in a dusty job?	
Yes No Does not apply	
12C. Was dust exposure	
Mild Moderate Severe	





12D. In the past year	, were you exposed to gas or	r chemical fumes in your work	:?
	Yes	No	
12E. Was exposure:			
Mild Modera	te Severe		
12F. In the past year,	what was your:		
	1. Job, Occupation		_
	2. Position/job title		-
13 RECENT MEDICA	AL HISTORY		
13A. Do you consider	yourself to be in good healtl	n?	
	Yes		
IF NO, STATE REAS	ON:		
13B. In the past year	have you developed:		
		Yes No	
a. Epilepsy (or fits	s, seizures, convulsions)?		
b. Rheumatic feve	er?		
c. Kidney disease	?		
d. Bladder diseas	e?		
e. Diabetes?			
f. Jaundice?			
14. CHEST COLDS A	AND CHEST ILLNESSES		
14A. If you get a cold,	, does it usually go to your cl	nest? (Usually means more	
than half the time).		•	
Yes No	Don't get colds	,	





15A. During the past year, have	ve you had any chest	illnesses that have kept you
off work, indoors at home, or i	п bed?	
Yes No Do	es not apply	<del>_</del>
IF YES TO 15A:	. •	
15B. Did you produce phlegm	with any of these che	est illnesses?
Yes No Do	es not apply	
15C. In the past year, how ma	any such illnesses wit	th (increased) phlegm did you
have which lasted a week or n	nore?	•
Number of such illness	es	·
No such illnesses		
16. RESPIRATORY SYSTEM		
In the past year have you had		
•	Yes or No .	Further comment on
		Positive Answers
Asthma		
Bronchitis		
Hay Fever		
Other Allergies	And the second s	,
Pneumonia		-
Tuberculosis		
Chest Surgery		
Other Lung Problems		
Heart Disease		





Do you have:	Yes or No	Further comment on Positive Answers
Frequent Colds		
Shortness of breath		
when walking or		
climbing one flight of stairs		
Do you:		
· Wheeze		
Cough up phlegm		
Smoke cigarettes Packs per day	How many y	years
Cianatura	Dat	Δ





#### RECORD KEEPING PROGRAM

Objective Data For Exempted Operations.

Where Pas has relied on objective data that demonstrate that products made from or containing aspestos, tremolite, anthophyllite, or actinolite are not capable of releasing fibers of aspestos, tremolite, anthophyllite, or actinolite or a combination of these minerals, in concentrations at or above the permissible exposure level under the expected conditions of processing, use, or handling to exempt such operations form the initial monitoring requirements under paragraph CFR1926.1101 (F)(2), Performance Abatement Services, Inc. has established, and maintains an accurate record of objective data reasonably relied upon in support of the exemption.

- 1. The record shall include at least the following information:
  - a. The product qualifying for exemption;
  - b. The source of the objective data;
  - c. The testing protocol, results of testing, and/or analysis of the material for the release of asbestos, tremolite, anthophyllite, or actinolite;
  - d. A description of the operation exempted and how the data support the exemption;
  - e. Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.
- 2. Performance Abatement Services, Inc. shall maintain this record for the duration of Performance Abatement Services, Inc.'s reliance upon such objective data.





# Exposure measurements.

Performance Abatement Services, Inc. keeps an accurate record of all measurements taken to monitor employees, and PAS keeps an accurate record of all measurements taken to monitor employee exposure to asbestos, tremolite, anthophyllite, or actinolite as prescribed in paragraph CFR 1926.1101(f). Note: Performance Abatement Services, Inc. may utilize the services of competent organizations such as industry trade associations and employee associations to maintain the records required by 1529/07700/.1101.

This record shall include at least the following information:

- 1. The date of measurement:
- The operation involving exposure to asbestos, tremolite, anthophyllite, or actinolite that is being monitored;
- 3. Sampling and analytical methods used and evidence of their accuracy;
- 4. Number, duration, and results of samples taken;
- 5. Name, social security number, and exposure of the employees whose exposures are represented.

Performance Abatement Services, Inc. maintains these records for at least thirty (30) years, in accordance with 29 CFR 1910.10.

#### Medical surveillance.

Performance Abatement Services, Inc. has established and maintains an accurate record for each employee subject to medical surveillance by paragraph (m) of CFR 1926.1101, in accordance with 29 CFR 1910.1001.

The record includes at least the following information:





- a. The name and social security number of the employee;
- b. A copy of the employee's medical examination results, including the medical history, questionnaire responses, results of any tests, and physician's recommendations;
- c. Physician's written opinions;
- d. Any employee medical complaints related to exposure to asbestos, tremolite, anthophyllite, or actinolite; and
- e. A copy of the information provided to the physician as required by paragraph (m) of CFR 1926.1101.

Performance Abatement Services, Inc. ensures that this record is maintained for the duration of employment plus thirty (30) years, in accordance with 29 CFR 1910.1001 by providing permanent secure storage of all employment records.

# Training Records

Performance Abatement Services, Inc. maintains all employee training records for one (1) year beyond the last date of employment by that Performance Abatement Services, Inc..

# Records Availability

Performance Abatement Services, Inc., upon written request, shall make all records required to be maintained by CFR 1926.1101(n)(7) available to the Director for examination and copying.

Performance Abatement Services, Inc. upon request, makes any exposure records required by paragraphs (f) and (n) of CFR 1926.1101 available for examination and copying to affected employees, former employees, designated





representatives, and the Fed: Assistant Secretary/CA: Chief of DOSH/WA: Director.

### Transfer of records

Performance Abatement Services, Inc. complies with the requirements concerning transfer of records set forth in 29 CFR 1910.1001.

Whenever Performance Abatement Services, Inc. ceases to do business and there is no successor Performance Abatement Services, Inc. to receive and retain the records for the prescribed period, Performance Abatement Services, Inc. shall notify the director at least 90 days prior to disposal and, upon request, transmit them to the Director.



# ECOSOLV Chem Clear

# No Odor Mastic Remover

# MATERIAL SAFETY DATA SHEET

# SECTION I - PRODUCT IDENTIFICATION

IDENTITY:

Chem Clear No Odor Mastic Remover

SOLVENT BLEND

HFR RATING:

Health 2, Fire 2, Reactivity 0

MANUFACTURER:

EMERGENCY PHONE NUMBER

Ecosolv, Inc.

Chemtrec (800) 424-9300

P.O.BOX 231106

Portland, Oregon 97281-1106

Date Prepared:

INFORMATION:

September 1, 2000

(503)691-9703

SECTION II - COMPONENTS

Linear Olefinic Hydrocarbon Family

90% (CAS #112-41-4)

Nonionic Detergent

0-10% (CAS #9016-45-9)

#### ACUTE TOXICITY DATA

OK.

ACUTE ORAL LD50

ACUTE DERMAL LD50

ACUTE INHALATION LC50

P\*

10.0 G/KG (RAT)

10.0 G/KG (RAT)

N/A

\*RESULTS BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING.

SECTION III

#### HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD(29 CRF 1910.1200)

### EYE CONTACT

BASED ON ESSENTIALLY SIMILAR PRODUCT, PRODUCT IS MODERATELY IRRITATING TO THE EYES.

#### SKIN CONTACT

PRODUCT IS MODERATELY IRRITATING TO THE SKIN, PROLONGED OR REPEATED LIQUID CONTACT CAN RESULT IN DEFATTING AND ING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS. PRODUCT IS NOT A SKIN SENSITIZER, BUT BE SLIGHTLY TOXIC IF ABSORBED THROUGH SKIN OVER LONG PERIODS OF SKIN EXPOSURE.

#### :NHALATION

""S PRODUCT IS PRESUMED TO HAVE A LOW ORDER OF ACUTE INHALATION TOXICITY.

#### INGESTION

ASED ON SIMILAR PRODUCT TESTING. PRODUCT IS SLIGHTLY TOXIC, BUT INGESTION MAY RESULT IN VOMITING; ASPIRATION BREATHING) OF VOMITUS INTO THE LUNGS MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN ASPIRATION NEUMONITIS.

#### ·IGNS & SYMPTOMS

TILD IRRITATION AS NOTED ABOVE. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING. LABORED BREATHING AND YANOSIS (BLUISH SKIN); IN SEVERE CASES DEATH MAY OCCUR.

# GGRAVATED MEDICAL CONDITIONS

) NOT REUSE CLOTHING UNTIL CLEANED.

REEXISTING SKIN AND EYE DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

ECTION	IV	OCCUPATIO	NAL EXPOSURE	LIMITS	
o.	PEL/TWA	OSHA PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	OTHER 200 ppm
)N	V	EMERGENCY	AND FIRST AI	D PROCEDURES	

#### YE CONTACT

LUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

### KIN CONTACT

EMOVE CONTAMINATED CLOTHING/SHOES AND WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES.

DLIOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

# MHALATION

EMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

#### **MGESTION**

) NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID ITO THE LUNGS. GET MEDICAL ATTENTION.

#### THE TO PHYSICIAN

F MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND VOMITING HAS NOT OCCURRED, EMESIS SHOULD BE INDUCED WITH

ISION. KEEP VICTIMS HEAD BELOW HIPS TO PREVENT ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX,

LISIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TUBE SHOULD BE

NSIDERED.

ECTION VI SUPPLEMENTAL HEALTH INFORMATION NONE IDENTIFIED. SECTION VII PHYSICAL DATA BOILING POINT: 409 DEG F SPECIFIC GRAVITY: 0.772 VAPOR PRESSURE: 0.094 (DEG F) (H20=1) (MM HG) 20 DEG C MELTING POINT: NOT AVAILABLE SOLUBILITY: SLIGHT VAPOR DENSITY: N/A (DEG F) (IN WATER) (AIR=1)

EVAPORATION RATE (N-BUTYL ACETATE = 1): <0.03

APPEARANCE AND ODOR:

COLORLESS LIQUID. MILD HYDROCARBON ODOR.

CTION VIII

FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD

>200 DEG F (EPA1010/ASTM D93)

FLAMMABLE LIMITS / VOLUME IN AIR

..... LOWER: N/A UPPER: N/A

# EXTINGUISHING MEDIA

USE WATER FOG, FOAM, DRY CHEMICAL OF CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCTS WILL FLOAT AND CAN BE REIGNITED ON SURFACE WATER.

# SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

CAUTION. COMBUSTIBLE. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

# UNUSUAL FIRE AND EXPLOSION HAZARDS

CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.



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#### REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:

AVOID CONTACT WITH OXIDIZING AGENTS.

#### MAZARDOUS DECOMPOSITION PRODUCTS

CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

#### SECTION X

#### EMPLOYEE PROTECTION

#### LESPIRATORY PROTECTION

IF EXPOSURE MAY OR DOES EXCEED CCCUPATIONAL EXPOSURE LIMITS (SEC.IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT WEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

#### 'ROTECTIVE CLOTHING

.VOID CONTACT WITH EYES. WEAR SAFETY GLASSES OR GOGGLES AS APPROPRIATE. AVOID PROLONGED OR REPEATED CONTACT
//ITH SKIN, WEAR CHEMICAL RESISTANT GLOVES AND OTHER CLOTHING AS REQUIRED TO MINIMIZE CONTACT.

#### DDITIONAL PROTECTIVE MEASURES

SE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

#### ECTION II

#### ENVIRONMENTAL PROTECTION

#### PILL OR LEAK PROCEDURES

AUTION. COMBUSTIBLE. SPILLED MATERIAL IS SLIPPERY. \*\*\* LARGE SPILLS \*\*\* ELIMINATE POTENTIAL SOURCES OF CHITION. WEAR APPROPRIATE RESPIRATOR AND OTHER PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK CALLY IF SAFE TO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIAL: PLACE IN NON-LEAKING CONTAINERS AND SEAL TIGHTLY DR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE: DISPOSE OF FLUSH SOLUTION AS ABOVE \*\*\*

4ALL SPILLS \*\*\* TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL.

#### LECTION XII

#### SPECIAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE EVEN LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE.

WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING REFORE REUSE.

SECTION XIII

TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:

COMBUSTIBLE LIQUID. III

THE DOT INFORMATION IN THIS SECTION IS BASED UPON AN EVALUATION OF THE PRODUCT AGAINST THE REQUIREMENTS OF 49 CFR 172 AND 173 AS REVISED BY HM-181

### D.O.T. PROPER SHIPPING NAME:

BUSTIBLE LIQUID. N.O.S. (CONTAINS ALIPHATIC HYDROCARBONS)

#### OTHER REQUIREMENTS:

NOT REGULATED BY D.O.T. IF IN A CONTAINER OF 119 GALLON CAPACITY OR LESS.

SECTION XIV

### OTHER REGULATORY CONTROLS

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82. THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

SECTION IV

### STATE REGULATORY INFORMATION

BASED ON INFORMATION AVAILABLE TO ECOSOLV, THIS PRODUCT DOES NOT CONTAIN ANY CHEMICAL SUBSTANCE REGULATED BY A SPECIFIC STATE LIST IN THE QUANTITIES PRESENT.

IVX NOT

#### OTHER INFORMATION

ALL INFORMATION APPEARING HEREIN IS BASED UPON DATA OBTAINED FROM RAW MATERIAL MANUFACTURERS INFORMATION AND/OR RECOGNIZED TECHNICAL SOURCES. WHILE THE INFORMATION IS BELIEVED TO ACCURATE, ECOSOLV, INC., MAKES NO REPRESENTATION AS TO ITS ACCURACY OR SUFFICIENCY. CONDITIONS OF USE ARE BEYOND THE CONTROL OF ECOSOLV, INC., AND THEREFORE USERS ARE RESPONSIBLE FOR THE VERIFICATION OF THIS DATA AND UNDER THEIR CWN OPERATING CONDITIONS IN DETERMINING WHETHER THIS PRODUCT IS SUITABLE FOR THEIR PURPOSES AND THEY ASSUME ALL RISKS OF THEIR PARTICULAR USE, HANDLING AND DISPOSAL OF THIS PRODUCT UNDER THAT USE, OR FROM THE PUBLICATION OR USE OF, OR RELIANCE ON INFORMATION CONTAINED HEREIN. THIS INFORMATION RELATES ONLY THE THE PRODUCT HEREIN DESIGNATED AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY OTHER ACCOUNT.

MANUFACTURED FOR: ADDRESS:

INLINE DISTRIBUTING CO. 9380 SAN FERNANDO ROAD

SUN VALLEY. CA 91352

.MERGENCY PHONE NUMBER: 818-768-3333

NFORMATION NUMBER:

H. M. I. S HEALTH ? REACTIVITY D FLAMMABILITY THESE RATINGS SHOULD BE USED IONLY AS PART OF A FULLY IMPLEMENTED HMIS PROGRAM

#### MATERIAL SAFETY DATA SHEET

SECTION 1 54.6 %

PRODUCT CLASS: AEROSOL ADHESIVE

PRODUCT CODE NUMBER: POLYTACK III

DATE: 02/13/2002

HAZARDOUS MATERIAL DESCRIPTION: Consumer Commodity ORM-D

PRODUCT NAME: INLINE POLYTACK III 10 0Z. HAPS FREE

you.

# SECTION II- HAZARDOUS INGREDIENTS

INGREDIENT	CAS NO	OSHA PEL	TWA TLV	STEL	SARA 313	WT # (OPTIONAL)
ACETONE	67-64-1	750	750	1000		15 - 25
PROPANE	74-98-6	1000	1000	AŠPHYXIA	INT	20 - 30
HEPTANE	142-82-5	500	400	400		10 - 20
ISOBUTANE	75-28-5	N/A	800	N/A		5 - 15
LIPHATIC POROCARBON	110-82-7	300	300		X	1 - 10

#### SECTION III - HEALTH WAZARN INFORMATION

### EFFECTS OF OVEREXPOSURE

INHALATION: CAN CAUSE IRRITATION TO THE NOSE AND THROAT. HIGH CONCEN-TRATIONS MAY CAUSE HEADACHES. DIZZINESS, NAUSEA. AND CONFUSION. EYE: MAY CAUSE EYE IRRITATION

SKIN: MAY CAUSE TRANSIENT SKIN IRRITATION

INGESTION: MAY CAUSE GASTROINTESTINAL IRRITATION

OTHER: REPORTS HAVE ASSOCIATED PROLONGED AND REPEATED OCCUPATIONAL OVER-EXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. IN-TENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS

MAY BE HARMFUL OR FATAL.

### SECTION IV - FIRST AID PROCEDUCES

SWALLOWING: IF SWALLOWED DO NOT INDUCE VOMITING. CALL POISON CONTROL CENTER HOSPITAL EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY. INHALATION: REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP WARM AND QUIET. GET MEDICAL ATTENTION. EYE: FLUSH WITH LARGE AMOUNTS OF WATER. LIFTING UPPER AND LOWER LIDS OCCASIONALLY. CONTINUE FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. TKIN: REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH SOAP AND WATER. FT MEDICAL ATTENTION IF IRRITATION PERSISTS.

08/14/2002 16:53 FAX 2198481109

CHEK TECH INC

1003

INLINE POLYTACK III HAPS FREE

PAGE 2

### SECTION Y - PHYSICAL DATA

BOILING POINT 'APOR PRESSURE PSIB @ 70 F WAPOR DENSITY APPEARANCE AND DOOR: CLEAR LIGHT AMBER SOLUTION

-40F TO 150F 70 APPROX 2.5

SPECIFIC BRAVITY MELTING POINT # SOLIDS

0.6 N.A. 23,4%

# SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT AND METHOD ~4DF TCC

FLAMMABLE LIMITS: 1.8 LEL

UNUSUAL FIRE AND EXPLOSION HAZARDS: AEROSOL CANS MAY RUPTURE WHEN HEATED 12.0 UEL

EXTINGUISHING MEDIA: USE WATER FOG. DRY CHEMICAL, FOAM OR CARBON DIOXIDE

SPECIAL FIRE FIGHTING PROCEDURES: HEATING OF CONTENTS ABOVE 130F MAY CAUSE CANS TO BURST. arment within and a fit affective to fife.

### SECTION VII - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: STORING IN HIGH TEMPERATURES OR EXPOSING TO OPEN FLAMES INCOMPATABILITY (CONDITIONS TO AVOID): NONE

manufactures of the state of th

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION: NONE

## \_ SECTION VIII - SPILL OR LEAK INFORMATION

TEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: ELIMINATE ALL DURCES OF IGNITION. PERMIT ONLY PROPERLY PROTECTED WORKERS IN THE AREA WITH SKIN/EYE PROTECTION AND SELF CONTAINED BREATHING GEAR. ABSORB SMALL SPILLS WITH INERT ABSORBANT MATERIAL. CONTACT STATE, LOCAL, AND FEDERAL AGENCIES TO ENSURE COMPLIANCE WITH CURRENT REGULATIONS.

WASTE DISPOSAL METHOD: WASTE MUST BE DISPOSED OF ACCORDING TO LOCAL, STATE. AND FEDERAL REGULATIONS.

# SECTION IN - PERSONAL PROTECTION INFORMATION

RESPIRATION PROTECTION: IF THE TLV'S LISTED IN SECTION II ARE EXCEEDED USE A PROPERLY FITTED NIOSH/MSHA APPROVED RESPIRATOR. VENTILATION: LOCAL AND MECHANICAL VENTILATION ARE RECOMMENDED TO KEEP ANY HAZARDOUS INGREDIENTS LISTED IN SECTION II BELOW THE LOWEST EXPOSURE LIMIT. HAND PROTECTION: RESISTANT PLASTIC OR RUBBER RECOMMENDED. EYE PROTECTION: WEAR SAFETY CHEMICAL SPLASH GOGGLES. OTHER PROTECTIVE EQUIPMENT: NOT LIKELY TO BE NEEDED.

# SECTION X - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE CANS IN A COOL. DRY AND WELL VENTILATED AREA AWAY FROM ALL IGNITION SOURCES. PROLONGED EXPOSURE OF CANS TO ELEVATED TEMPERATURES MAY CAUSE CANS TO RUPTURE OR BURST.

FOREGOING DATA HAS BEEN COMPILED FROM SOURCES WE BELIEVES TO BE ACCURATE. D. WARRANTY, EXPRESS OR IMPLIED. IS INTENDED. THIS INFORMATION IS OFFERED SOLELY FOR YOUR CONSIDERATION AND INTERPRETATION.

#### MATERIAL SAFETY DATA SHEET

REVISION DATE: 02-07-2000

SUPERSEDES:

01-02-2000

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY INFORMATION Foster Products Corporation H.B. Fuller Company Subsidiary 2900 Granada Lane

Oakdale, MN 55128 Phone: 651-236-3785

> Medical Emergency Phone Number (24 Hours): 1-888-853-1758 Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

PRODUCT INFORMATION

PRODUCT IDENTIFIER:

FD3222

PRODUCT NUMBER:

FD3222

PRODUCT NAME:

**FOSTER 32-22** 

REGISTERD TRADE NAME:

PROTEKTOR SEALANT, CLEAR

PRODUCT DESCRIPTION:

Encapsulant

#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for any additional exposure limit guidelines.

Chemical Name CAS# PERCENT OSHA PEL

#### SECTION 3: HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW** 

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0 See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

EYE: No hazard in normal industrial use. SKIN: No hazard in normal industrial use.

INHALATION: No hazard in normal industrial use.

INGESTION: Ingestion is not an anticipated route of exposure.

LONG-TERM (CHRONIC) HEALTH EFFECTS

TARGET ORGAN(S):

No organs known to be damaged from exposure to this product.

### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: No medical conditions affected by exposure.

#### SECTION 4: FIRST AID MEASURES

IF IN EYES: None expected to be needed, however, use an eye wash to remove a chemical from your eye regardless of the level of hazard.

IF ON SKIN: Wash with soap and water.

IF VAPORS INHALED: This material does not present a hazard if inhaled. Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.

IF SWALLOWED: No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

### **SECTION 5: FIRE FIGHTING MEASURES**

FLASH POINT:

**AUTOIGNITION TEMPERATURE:** 

LOWER EXPLOSIVE LIMIT (% in air):

UPPER EXPLOSIVE LIMIT (% in air):

**EXTINGUISHING MEDIA:** 

UNUSUAL FIRE AND EXPLOSION HAZARDS:

SPECIAL FIRE FIGHTING INSTRUCTIONS:

HAZARDOUS COMBUSTION PRODUCTS:

Non flammable

Not established

Not established

Not established

Use water spray, foam, dry chemical or carbon dioxide.

There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

Persons exposed to products of combustion should wear selfcontained breathing apparatus and full protective equipment.

Carbon dioxide, Carbon monoxide

### SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health affects expected from the clean-up of spilled material.

Follow personal protective equipment recommendations found in Section 8

of this MSDS.

CLEAN-UP:

Dike if necessary, contain spill with inert absorbent and transfer to containers

for disposal. Keep spilled product out of sewers, watersheds, or water

systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

### SECTION 7: HANDLING AND STORAGE

No special handling instructions due to toxicity.

This product contains an ingredient that may release formaldehyde at heated cure

temperatures.

Storage:

Store in a cool, dry place.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:

No special requirements under normal industrial use.

SKIN PROTECTION:

Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and

when leaving work.

GLOVES:

Not normally required. Use nitrile gloves if conditions warrant.

RESPIRATORY PROTECTION:

No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements

found in OSHA's respirator standard (29 CFR 1910.134).

**VENTILATION:** 

No exposure limits exist for the constituents of this product. No

engineering controls are likely to be required to maintain operator

comfort under normal conditions of use.

**EXPOSURE LIMITS:** 

Chemical Name

ACGIH EXPOSURE LIMITS

AIHA WEEL

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:

COLOR: ODOR:

ODOR THRESHOLD: WEIGHT PER GALLON (lbs.):

SPECIFIC GRAVITY:

SOLIDS (% by weight):

BOILING POINT (deg. C):

FREEZING/MELTING POINT (deg. C):

VAPOR PRESSURE (mm Hg): VAPOR DENSITY:

**EVAPORATION RATE:** 

OCTANOL/WATER COEFFICIENT:

Liquid

Colorless Mild Sweet

Not established

8.45 1.01

10.0

5.1

Not established Not established

Not established

Not established Not established

Not established

### SECTION 10: STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

CHEMICAL INCOMPATIBILITY:

Not established Will not occur.

HAZARDOUS POLYMERIZATION:

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

### SECTION 11: TOXICOLOGICAL INFORMATION

CHEMICAL NAME

LD50/LC50

TOXICOLOGY SUMMARY:

No additional health information available.

### SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

### SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.

### SECTION 15: REGULATORY INFORMATION

#### **INVENTORY STATUS**

U.S. EPA TSCA:

This product is in compliance with the Toxic Substances Control Act's

Inventory requirements.

If you need more information about the inventory status of this product call 651-236-5858.

TSCA Section 12(b) - Export Notice Requirements

This product contains a chemical substance that is currently on the EPA's Section 12(b) Export List. Contact the company Global Regulatory Group at 651/236-5858 for the identity of the Section 12(b) chemical(s).

### FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 72. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name

CAS\*

CAS\*

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

#### STATE REPORTING

This MSDS is not prepared for distribution in California.

### **SECTION 16: ADDITIONAL INFORMATION**

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to Foster Products Corporation from its suppliers, and because Foster Products

Corporation has no control over the conditions of handling and use, Foster Products Corporation makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and Foster Products Corporation assumes no responsibility for use or reliance thereon. It is the responsibility of the user of Foster Products Corporation products to comply with all applicable federal, state and local laws and regulations.

### **Section Nine**

### RESPIRATOR PROGRAM

- 1. Where Respirator use is not required:
  - a. The Company may provide respirators at the request of employees or permit employees to use their own. If the Company determines that any voluntary respirator use is permissible, the Company must provide the user with the information contained in "Appendix D to 1910.134 (Non Mandatory) Information for Employees Using Respirators When Not Required Under The Standard." (See attached) A record of distribution of Appendix D must be maintained in each employee's personnel file.
  - b. If employees are using their own respirators or their respirator use is voluntary, the Company shall ensure that the employee is medically able to use the respirator and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user.

### **Exception**

Employers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks).

### 2. Where Respirator use is required:

a. The Company shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance. All respirators must be N.I.O.S.H. certified.

- b. The company shall identify and evaluate the respiratory hazard(s) in the workplace. The evaluation shall include:
  - 1. A reasonable estimate of employee exposures to respiratory hazards.
  - 2. Identification of the contaminant's chemical state and physical form.
- c. Where the Company cannot identify or reasonably estimate the employee exposure, the Company shall consider the atmosphere to be "immediately dangerous to life or health" (I.D.L.H.).
- d. The following respirators are required for employee use in (I.D.L.H.) atmospheres:
  - A full facepiece pressure demand S.C.B.A. certified by N.I.O.S.H. for a minimum service life of thirty minutes, or,
  - 2. A combination full facepiece pressure demand supplied-air respirator (S.A.R.) with auxiliary self-contained air supply.

NOTE: All oxygen-deficient atmospheres shall be considered (I.D.L.H.).

- e. Respirators for atmospheres that are not (I.D.L.H.):
  - The Company shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with OSHA requirements.
    - a. The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.
      - For protection against gases and vapors, the Company shall provide:
        - a. An atmosphere-supplying respirator, or,
        - b. Provided that the respirator is equipped with an "end-of-service-life" indicator (E.S.L.I.)

- If there is no E.S.L.I. appropriate for conditions in the workplace, the Company shall implement a change schedule for canisters and cartridges that is based on objective information. This schedule must be documented for each job. (See "Change Schedule For Canisters and Cartridges" Form.)
- 2. For protection against particulates, the Company shall provide:
  - a. An atmosphere-supplying respirator, or,
  - b. An air-purifying respirator equipped with a filter certified by N.I.O.S.H.

### 3. Medical Evaluation

- a. Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job conditions, and the medical status of the employee. Therefore, the Company must implement a medical evaluation program to determine the employee's ability to use a respirator.
- b. The Company shall provide a medical evaluation to determine the employee's ability to use a respirator before the employee is fit tested or required to use a respirator in the workplace.
  - The Company shall identify a physician or other licensed health care professional to perform a medical evaluation using the attached medical questionnaire.
- c. The Company shall ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of the questionnaire or

- whose initial medical examination demonstrates the need for a follow-up medical examination.
- d. The medical questionnaire shall be administered confidentially during the employee's normal working hours. The Company shall provide the employee with an opportunity to discuss the questionnaire and examination results with the physician. (See attached questionnaire.)
- e. The following information must be provided to the physician before he/she makes a recommendation concerning an employee's ability to use a respirator: (See attached "Supplemental Information For The Physician.")
  - 1. The type and weight of respirator to be used.
  - 2. The duration and frequency of respirator use.
  - 3. The expected physical work.
  - 4. Additional protective clothing and equipment to be worn.
  - 5. Any temperature and/or humidity extremes.
  - 6. The Company must also provide the physician with a copy of this Respirator Program and the completed Respirator Medical Evaluation Questionnaire and a copy of the OSHA Standard.
- f. In determining the employee's ability to use a respirator, the Company shall:
  - Obtain a written recommendation regarding the employee's ability to use a respirator from the physician. The recommendation shall provide the following: (See attached "Medical Determination" form that can be used for this purpose.)
    - a. Any limitations on respirator use including whether or not the employee is medically able to use the respirator.
    - b. The need, if any, for a follow-up medical evaluation.

- c. A statement that the physician has provided the employee with a copy of the physician's written recommendation.
- 4. The Company shall require that, before an employee is required to use a respirator (not a filtering facepiece) the employee must be fit tested with the same make, model, style, and size of respirator that will be used.
  - a. The Company shall ensure that employees using respirators pass an appropriate qualitative fit test or quantitative fit test.
  - b. The fit test shall be performed prior to the initial use of the respirator, whenever a different respirator facepiece is used, and at least annually thereafter. (See Fit Test Record for documentation purposes.)
  - c. The fit test shall be administered using an OSHA-accepted qualitative or quantitative protocol. (See attached Appendix A.)
  - d. A qualitative fit test may only be used to fit test negative pressure airpurifying respirators that must achieve a fit factor of 100 or less.
  - e. If the fit factor, as determined through an OSHA-accepted quantitative protocol is equal to or greater than 100 for half facepieces, or equal to or greater than 500 for full facepieces, the quantitative fit test has been passed.
  - f. Fit testing of atmosphere-supplying respirators and air-purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode.
- 5. The employer must implement procedures for the proper use of respirators.
  - a. The company shall not permit respirators to be worn by employees who have:
    - 1. Facial hair that comes between the sealing surface of the facepiece and the face, or that interferes with valve function.

- 2. Any condition that interferes with face-to-facepiece seal or valve function.
- 3. If an employee wears corrective glasses, the Company shall ensure that the corrective glasses are worn in a manner that does not interfere with the seal of the facepiece to the face.
- b. The Company shall insure that employees leave the respirator use area:
  - 1. To wash their face and respirator facepiece as necessary.
  - 2. If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.
  - 3. To replace the respirator or the filter, cartridge, or canister elements.
- 6. Procedures for atmospheres that are "immediately dangerous to life or health" require the employer to ensure:
  - a. At least one employee is stationed outside the I.D.L.H. atmosphere.
    - 1. Visual, voice, or signal line communication is maintained between the employee(s) inside and outside the I.D.L.H. atmosphere.
    - 2. The employee(s) located outside the I.D.L.H. atmosphere are trained and equipped to provide effective emergency rescue.
    - 3. Employee(s) located outside the I.D.L.H. atmosphere shall be equipped with:
      - a. Pressure demand or other positive pressure S.C.B.A.'s.
      - b. Appropriate retrieval equipment.
- 7. The Company is required to provide for cleaning and disinfecting, storage, inspection, and repair of respirators.
  - a. The Company shall provide each respirator user with a respirator that is clean, sanitary, and in good working order.

- 1. The Company shall ensure that respirators are cleaned and disinfected using the procedures recommended by the respirator manufacturer as a minimum. Respirators shall be cleaned and disinfected at the following intervals:
  - Respirators issued for the exclusive use of an employee, shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.
  - b. Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different employees.
  - c. Respirators maintained for emergency use shall be cleaned and disinfected after each use.
  - d. Respirators used in fit testing and training shall be cleaned and disinfected after each use.
- b. The Company shall ensure that respirators are stored as follows:
  - All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals.
  - 2. Emergency respirators shall be kept accessible to the work area and shall be stored in compartments or in covers clearly marked as containing emergency respirators.
- c. The Company shall ensure that respirators are inspected as follows:
  - All respirators used in routine situations shall be inspected before each use and during cleaning.
  - All respirators maintained for use in emergency situations shall be inspected at least monthly and before and after each use. (See Emergency Use Inspection Record.)

- 3. Respirator inspections shall include:
  - a. A check of respirator function, tightness of connections, and the condition of the various parts.
  - b. A check of the elastomeric parts for pliability and signs of deterioration.
- 4. Self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be fully charged and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level.
- 5. For respirators maintained for emergency use, the Company shall certify the respirator by documenting the date of the inspection, the name of the person who made the inspection, the findings, required remedial action, and the respirator serial number or other means of identifying the inspected respirator. This information shall be maintained until replaced following the subsequent inspection/certification.
- d. The Company shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:
  - 1. Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations.
  - Repairs shall be made according to the manufacturer's recommendations.

- Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or technician trained by the manufacturer.
- 8. The Company is required to provide employees using atmosphere-supplying respirators with breathing gases of high purity.
  - a. The company shall ensure that compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration accords with the following specifications:
    - Compressed breathing air shall meet at least the requirements for Type 1 – Grade D breathing air.
    - The Company shall insure that oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution.
    - The Company shall ensure that cylinders are tested and maintained as prescribed in the shipping container specification regulations of the D.O.T..
    - 4. The Company shall ensure that compressors used to supply breathing air to respirators are constructed and situated as to:
      - a. Prevent entry of contaminated air into the air-supply system.
      - b. Minimize moisture content so that the dew point at one (1) atmosphere pressure is 10 degrees F below the ambient temperature.
      - c. Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality.

- For all compressors that are not oil-lubricated, the Company shall ensure that carbon monoxide levels in the breathing air do not exceed 10ppm.
- 6. For oil-lubricated compressors, the Company shall use a hightemperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels.
- 9. The Company is required to provide effective training to all employees who are required to use respirators. <u>The training must be comprehensive</u>, <u>understandable</u>, and recur annually, and more often if necessary. The Company is also required to provide the basic information on respirators in Appendix D to employees who wear respirators when not required to do so.
  - a. The Company shall ensure that each employee can demonstrate knowledge of at least the following: (See attached written examination.)
    - Why the respirator is necessary and how proper fit, usage, or maintenance can compromise the protection effect of the respirator.
    - 2. What the limitations and capabilities of the respirator are.
    - 3. How to use a respirator effectively in emergency situations, including situations in which the respirator malfunctions.
    - 4. How to inspect, put on and remove, use, and check the seals of the respirator.
    - 5. What the procedures are for maintenance and storage of the respirator.
    - 6. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

- 7. Employee must receive at least a 70% score to pass the written examination. If the employee fails to pass the exam, he/she must be retrained and retested until a 70% score (or above) has been obtained.
- The Company shall provide training prior to requiring the employee to use a respirator.
- c. Retraining shall be administered annually, and when the following situations occur:
  - Changes in the workplace or type of respirator render previous training obsolete.
  - Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.
- 10. The Company shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented. (See attached Evaluation and Employee Assessment Form.)
- 11. The Company shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness, to identify problems and develop appropriate corrective action. The factors to be assessed are:
  - a. Respirator fit.
  - b. Respirator selection.
  - c. Proper respirator use.
  - d. Proper respirator maintenance.
- 12. The Company is required to establish and retain written information regarding:
  - a. Medical evaluations.
  - b. Fit testing.

- c. Respirator program.
- 13. Other documentation that will be maintained (not government required):
  - a. Training test.
  - b. Program evaluation and employee's assessment.
  - c. Appendix D distribution.
  - d. Cartridge change schedule.
  - e. Other medical information as necessary.
- 14. Other mandatory sections of OSHA 1910.134, Respiratory Program (See attached copy of the regulation.):
  - ◆ Appendix "A" to 1910.134: Fit Testing Procedures (Mandatory)
  - ◆ Appendix "B" to 1910.134: User Seal Check Procedures (Mandatory) and Respirator Cleaning Procedures (Mandatory).
  - ◆ Appendix "C" to 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory).
  - ◆ Appendix "D" to 1910.134: Information for Employees Using Respirators When Not Required.

## (SAMPLE - To be typed on Branch letterhead and distributed to all employees on an annual basis and at orientation.)

Appendix D to 1910.134: Information for Employees Using Respirators When Not Required By OSHA Standards.

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set of OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should read the following:

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- 2. Choose respirators certified for use to protect against the contaminant of concern. N.I.O.S.H., The National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect.
- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small solid particles of fumes or smoke.
- 4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

# (Sample – To be copies on Branch Letterhead and completed by every employee required to wear a respirator. The employee will take this questionnaire to the Physician.)

Appendix C to 1910.134: OSHA Respirator Medical Questionnaire

To The Employee:

1. Can You Read (Circle One):

Yes / No

The Company must allow you to answer this questionnaire during normal working hours, or at a time and place convenient to you. To maintain the confidentiality of this questionnaire, the Company must not review your answers to these questions. The Company will have you hand carry your completed questionnaire, along with other related documents to the physician who will review it as part of the process to determine if you are physically capable to wear a respirator and perform the required duties of the job.



13600 N.E. 10th Avenue, Vancouver, WA 98685
Tel: 360-574-8400 Tel: 503-735-9603 Fex: 360-574-7607

### North Clackamas School District

Riverside Elementary Concord Elementary New Urban/ Sojourner Oak Grove Elementary View Acres Elementary

RE: Asbestos Certifications for Oregon workers & supervisors

Please be advised that all employees on asbestos abatement projects will have the proper certification (AHERA accredited worker or supervisor class) to perform the work at the specified project sites.

Since there will be numerous certified workers on these five schools and it's not clear at this time whom they will be; all certifications will be submitted with the close out documentation.

If you have any questions regarding this matter you may contact me at the number listed below. We look forward to working with PBS and North Clackamas School District on this project.

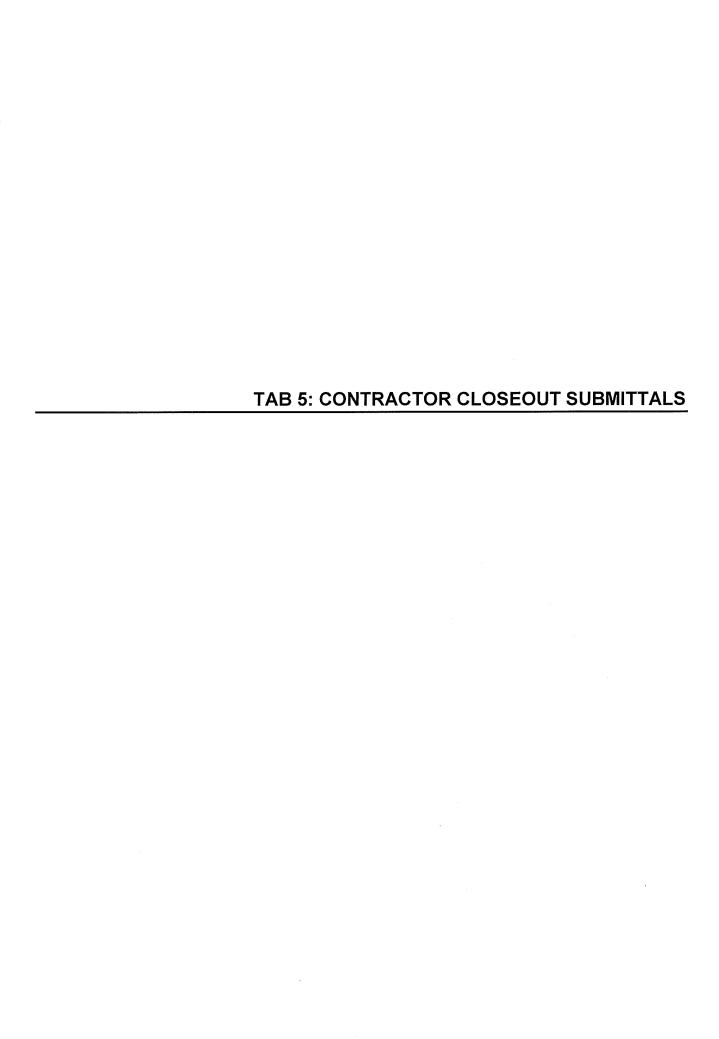
Sincerely,

PERFORMANCE ABATEMENT SERVICES

Ben Pullman

Estimator / Project Manager

360-574-8400





### DEQ PROJECT NOTIFICATION FORM



## For Removal or Encapsulation of Friable Asbestos-Containing Material

For DEQ use only	
Date Received	
Amount Received	
Check Number	
Project Number	

ATTENTION! This notification must be complete and received by DEQ at least 10 days before the start date of any friable asbestos abatement project and accompanied by the notification fee. (PLEASE TYPE OR PRINT CLEARLY)

### PROJECT CATEGORY AND NOTIFICATION FEE

A.B.C.D.E.F.G.H.I.	EMERGENCY (Emergency notifications require a 50% fee increase)  \$100 for each project with less than 40 linear or 80 square feet of asbestos-containing material or for each residential abatement project.  \$200 for projects from 40 to 259 linear feet or 80 to 159 square feet of asbestos-containing material.  \$400 for projects from 260 to 1299 linear feet or 800 to 1599 square feet of asbestos-containing material.  \$525 for projects from 1300 to 2599 linear feet or 800 to 1599 square feet of asbestos-containing material.  \$5900 for projects from 2600 to 4999 linear feet or 1600 to 3499 square feet of asbestos-containing material.  \$1,050 for projects from 5000 to 9999 linear feet or 3500 to 5999 square feet of asbestos-containing material.  \$1,700 for projects from 10,000 to 25,999 linear feet or 6000 to 15,999 square feet of asbestos-containing material.  \$2,800 for projects from 26,000 to 259,999 linear feet or 16,000 to 159,999 square feet of asbestos-containing material.  \$3,500 for projects 260,000 linear feet or more or 160,000 square feet or more of asbestos-containing material.							
ı. 2.	hin 21 2010		If Yes, enter Revis Completion da	hd 25	, 2010			
3.	Project site name: Concord Elementary school							
	Address: 3811 SE Concord Road		Milwaukie	Cla	ckamas	9	7267	
	(Street Address) (Apt #, Floor 4, Bldg #	9	(City)		(County)		(ZIP)	
4.	Property Owner: North Clackamas School District  12450 SE Fuller Road Milwaukie, OR 97222	12.	Abatement Contra	ctor Name:	PERFORMANC	E ABATE	MENT SERVIC	:ES
	Address: City) (State) (ZIP)	!	Address: 13600 N	E 10th Ave	Vancouver,	WA 986	385	
5.	Site Contact: Ryan Leffel Phone: 503-793-1970			9400	(Cx	A)	(State)	(2217)
6.	Type of structure:			Smgmbgraph by 400				
	Commercial building two story		DEQ license numb Describe method o			XI:		]
7.	Present use of structure:	Negative pressure containments, glove bag, wet method, HEPA vacuum, double bag, fiber drum					ium,	
	Elementary School							
8.	Was a survey performed? Yes: O No: O	14.	Days of week and	hours of day	to be worke	d:		
	Who performed the surveys PBS Environmental		7;00-4:30					
9.	Will this be a complete demolition? Yes: O No: O	. [						
	If yes, give demolition start date: N/A	15.	Oregon Certified S Gabriel Abac / Clark				llams/ Gary R	Irown
10.	Type of asbestos-containing material and where it is located in facility:	,		[E1202	3 / 812128/5			
	Vinyi asbestos floor tile in cafeteria, pipe insulation in classrooms & hallway, concrete asbestos board exterior	16	Oregon Certification Asbestos disposal	JU 47				
	Concrete aspestos positi exterior			Minter Bride	ge road Hillst	oro. OF		
11.	. Quantity of asbestos material to be removed or encapsulated:	-	Address:	erstate Drop				
	Linear feet: 360 Square feet: 2300		Waste Hatter: L					
	DESCRIPTION AND THE PROPERTY OF ADDITION AND		Phone:					
18.	18. Name of owner, operator, or abatement contractor:							
19.	Signature:		Date: May 25,	2010		Phone:	360-574-84	00

Sign this form and mail with the fee to the DEQ Business Office, 811 SW 6th, Portland, OR 97204. Make checks payable to "DEQ". Revisions to notifications may be faxed to the appropriate DEQ regional office in Gresham NWR (503) 674-5148, Bend ER (541) 388-8283, Medford WR (541) 776-6262, or Salem WR (503) 378-4196.

### **DEQ PROJECT NOTIFICATION FORM**



## For Removal or Encapsulation of Friable Asbestos-Containing Material

For DEQ use only	
Date Received	
Amount Received	
Check Number	
Project Number	

ATTENTION! This notification must be complete and received by DEQ at least 10 days before the start date of any friable asbestos abatement project and accompanied by the notification fee. (PLEASE TYPE OR PRINT CLEARLY)

### PROJECT CATEGORY AND NOTIFICATION FEE

EMERGENCY (Emergency notifications require a 50% fee in \$100 for each project with less than 40 linear or 80 square feet of \$200 for projects from 40 to 259 linear feet or 80 to 159 square for \$400 for projects from 260 to 1299 linear feet or 160 to 799 square for \$525 for projects from 1300 to 2599 linear feet or 800 to 1599 square for \$900 for projects from 2600 to 4999 linear feet or 1600 to 3499 square for \$1,050 for projects from 5000 to 9999 linear feet or 3500 to 5999 G. \$1,700 for projects from 10,000 to 25,999 linear feet or 6000 to 18,2800 for projects from 26,000 to 259,999 linear feet or 16,000 for \$2,800 for projects from 26,000 to 259,999 linear feet or 16,000 for \$3,500 for projects 260,000 linear feet or more or 160,000 square	f asbestos-containing material or for each residential abatement project. eet of asbestos-containing material. ure feet of asbestos-containing material. guare feet of asbestos-containing material. square feet of asbestos-containing material. 9 square feet of asbestos-containing material. 15,999 square feet of asbestos-containing material. to 159,999 square feet of asbestos-containing material. e feet or more of asbestos-containing material.						
Is this a revision to a previous notification? Yes O No O If Yes, enter Revision # 01							
2. Asbestos abatement project starting date: Jun 21, 2010	Completion date: Jul 25, 2010						
3. Project site name: Concord Elementary school	Allowalds Cladesca 67007						
Address: 3811 SE Concord Road	Milwaukie Clackamas 97267  (City) (County) (ZIP)						
(Street Address) (Apt #, Floor #, B)dg North Clackamas School District	i "						
4. Property Owner: 12450 SE Fuller Road Milwaukle, OR 97222	12. Abatement Contractor Name: PERFORMANCE ABATEMENT SERVICES						
(City) (State) (ZIP)	Address: 13600 NE 10th Ave Vancouver, WA 98685						
5. Site Contact: Ryan Leffel Phone: 503-793-1970	Phone: 360-574-8400 (City) (State) (ZIP)						
6. Type of structure:							
Commercial building two story	DEQ license number: FSC 511						
Commercial building two story	13. Describe method of removal or encapsulation:						
7. Present use of structure:	Negative pressure containments, glove bag, wet method, HEPA vacuum, double bag, fiber drum						
Elementary School							
8. Was a survey performed? Yes: No: O	14. Days of week and hours of day to be worked:						
Who performed the survey? PBS Environmental	6:00- 2:30 Monday - Friday - Starting June28th						
9. Will this be a complete demolition?  Yes: O No: O							
If yes, give demolition start date: N/A	15. Oregon Certified Supervisor on this project:						
10. Type of asbestos-containing material and where it is located in facility:	Gabriel Abac / Clark Reynolds/ Charlie Haluapo/ Bo Williams/ Gary Brown  Oregon Certification #: S12033 / S12128/S11977/S11898/S11						
Vinyl asbestos floor tile in cafeteria, pipe insulation in classrooms & hallway,	Oregon Certification #:						
concrete asbestos board exterior	16. Asbestos disposal site: Hillsboro Landfill						
11. Quantity of asbestos material to be removed or encapsulated:	Address: 3205 DE Minter Bridge road Hillsboro, OR						
Linear feet: 360 Square feet: 2300	17. Waste Hauler: Interstate Drop Box						
Search Control of the	Phone: 360-887-8034						
18. Name of owner, operator, or abatement contractor: PERFORMANCE AB	ATEMENT SERVICES						
19. Signature:	Date: Jun 25, 2010 Phone: 360-574-8400						

Sign this form and mail with the fee to the DEQ Business Office, 811 SW 6th, Portland, OR 97204. Make checks payable to "DEQ". Revisions to notifications may be faxed to the appropriate DEQ regional office in Gresham NWR (503) 674-5148, Bend ER (541) 388-8283, Medford WR (541) 776-6262, or Salem WR (503) 378-4196.

### DEQ PROJECT NOTIFICATION FORM



### For Removal or Encapsulation of Friable Asbestos-Containing Material

For DEQ use only	
Date Received	
Amount Received	
Check Number	
Project Number	

ATTENTION! This notification must be complete and received by DEQ at least 10 days before the start date of any friable asbestos abatement project and accompanied by the notification fee. (PLEASE TYPE OR PRINT CLEARLY)

### PROJECT CATEGORY AND NOTIFICATION FEE

EMERGENCY (Emergency notifications require a 50% fee increase.  A. O. \$100 for each project with less than 40 linear or 80 square feet of as \$200 for projects from 40 to 259 linear feet or 80 to 159 square feet.  B. O. \$200 for projects from 260 to 1299 linear feet or 160 to 799 square feet.  B. O. \$525 for projects from 1300 to 2599 linear feet or 800 to 1599 square feet.  B. O. \$525 for projects from 1300 to 2599 linear feet or 800 to 1599 square feet.  B. O. \$525 for projects from 2600 to 4999 linear feet or 1600 to 3499 square feet.  B. O. \$525 for projects from 2600 to 9999 linear feet or 3500 to 5999 square feet.  B. O. \$1,050 for projects from 10,000 to 259,999 linear feet or 6000 to 15,900 for projects from 26,000 to 259,999 linear feet or 16,000 to 11.  B. O. \$3,500 for projects 260,000 linear feet or more or 160,000 square feet.	bestos-containing material or for each residential abatement project. of asbestos-containing material. re feet of asbestos-containing material. are feet of asbestos-containing material. uare feet of asbestos-containing material. uare feet of asbestos-containing material. 199 square feet of asbestos-containing material. 199 square feet of asbestos-containing material.						
1. Is this a revision to a previous notification? Yes O No O	If Yes, enter Revision #						
Asbestos abatement project starting date: Jun 21, 2010	Completion date: Jul 25, 2010						
Project site name: Concord Elementary school							
Address: 3811 SE Concord Road	Milwaukie Clackamas 97267						
(Street Address) (Apt #, Floor #, Bldg #)	(City) (County) (ZIP)						
Property Owner: North Clackamas School District  Address: 12450 SE Fuller Road Milwaukie, OR 97222	12. Abatement Contractor Name: PERFORMANCE ABATEMENT SERVICES						
(City) (State) (ZIP)	Address: 13600 NE 10th Ave Vancouver, WA 98685						
5. Site Contact: Ryan Leffel Phone: 503-793-1970	Phone: 360-574-8400 (City) (State) (ZIP)						
6. Type of structure:							
Commercial building two story	DEQ license number: FSC 511						
,	13. Describe method of removal or encapsulation:						
Present use of structure:  Elementary School  Negative pressure containments, glove bag, wet method, HEPA vacuum, double bag, fiber drum							
8. Was a survey performed? Yes: O No: O	14. Days of week and hours of day to be worked:						
Who performed the survey? PBS Environmental	6:00- 2:30						
9. Will this be a complete demolition? Yes: O No: O	Monday - Friday - Starting June28th						
If yes, give demolition start date: N/A	15. Oregon Certified Supervisor on this project:						
10. Type of asbestos-containing material and where it is located in facility:	Gabriel Abac / Clark Reynolds/ Charlie Haluapo/ Bo Williams/ Gary Brown  Oregon Certification #: S12033 / S12128/S11977/S11898/S119						
Vinyl asbestos floor tile in cafeteria, pipe insulation in classrooms & hallway, concrete asbestos board exterior	16 Achestos dienosal eite: Hillsboro Landfill						
Stronger et vir et skalle et nek en et met met et skalle sk	Address: 3205 DE Minter Bridge road Hillsboro, OR						
11. Quantity of asbestos material to be removed or encapsulated:	17. Waste Hauler: Interstate Drop Box						
Linear feet: 360 Square feet: 2300							
PERFORMANCE ABATE	Phone:						
18. Name of owner, operator, or abatement contractor: PERFORMANCE ABATE							
19. Signature:	Date: Jun 25, 2010 Phone: 360-574-8400						

Sign this form and mail with the fee to the DEQ Business Office, 811 SW 6th, Portland, OR 97204. Make checks payable to "DEQ". Revisions to notifications may be faxed to the appropriate DEQ regional office in Gresham NWR (503) 674-5148, Bend ER (541) 388-8283, Medford WR (541) 776-6262, or Salem WR (503) 378-4196.

### ASBESTOS WASTE SHIPMENT REPORT FORM



PLEASE PRINT OR TYPE! If you have questions, contact your local DEQ Regional Office in Gresham at (503) 667-8414 x 55018, Salem at (503) 378-5086, Medford at (541) 776-6010 ext. 235, or Bend at (541) 388-6146 ext. 226, Pendleton (541) 278-4626, OR call (800) 452-4011 for the location of your local regional DEQ office.

W.	ASTE GEN	ERAT	OR: (Contra	ctor, Facility, or	Operator)		F			
	Asbestos			and address:		Concord	Element	The P. Landson Commission of the Commission of t		
L	7811	st.	Conco	<u> </u>		Milwanter	î. 00	Clack	mus 107267	
	_		treet	7 7	A 1	City/State		County	Zip	
	Contact p	_	Ky/s	n Lef		200	Phone:	1360	574 8400	
2.	Operator'	s name	and addres	E PERFORM	MANCE ABA	TEMENT SERV	ICES Phone:	360.574.8400		
13	600 NE 10	TH AVE	NUE			VANCOUVER	, WA	CLARK	98,685	-
		-	treet			City/State .		County	Zip	
3.	Waste dis	posal si	te: <u> </u>	Show L	and Fill	· · · · · · · · · · · · · · · · · · ·	Phone:	5036409	7427	
L	2205	3F	Minter	Bridge	hoad	Hillshore	OK	Weshints	97123	
	-		irect			City/State		County	Zip	-
4.	Describe a	sbestos	materials:	ACA	coulling	_ window	+ trans	ite panels		
5.	Containers	s:	N	umber: 3	1 65		Туре:	do himil bay	act mother	
6.	Total quan	itity (cu	bic yards):	h	4			wrap bu	il double	
	7. OPF	ERATO	R'S CER	TIFICATIO	N: I hereby	declare that the	contents of thi	s consignment are	fully and accurately	7
	desc	ribed al	bove by pro	per shipping	name and a	re classified, pac	kaged, marke	d and labeled, and	l are in all respects in	
	prop	er cond	ition for tra	insport accor this Waste S	ding to all g	overnment regul	ations. All m	ovement of this as	sbestos-containing	+
	mace	F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		NATIONAL PROPERTY AND ADDRESS OF THE PARTY O	CONTRACTOR AND ADDRESS OF THE ADDRES	cora roim.			110-23-110-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
	Nam	e:	Clark.	Legrold	<u></u>		Compa	ny: PERFORMAN	ICE ABATEMENT	
	Sign	ature: _	AL	n			Da	ate: 7/12/1	0	
	<del></del>									J
	INSPORTE				•				•	
8.	Agent:		cknowledgn مح ب	nent of receipt			Company:	703		-
	Address	e e a seguina e	Bes			eren ecta	<del>waren</del> F	3 9	5>-8031	=
		,	7	······································	, 25 reg		Phone:			_
	Signature:		127					_ Date:	13. 20	1
9.		r#2: (A	cknowledgn	ent of receipt	of materials)		r	NAME OF THE OWNER O		
	Agent:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					Company:			ᆜ
	Address:						Phone:			_1
	Signature:							_ Date:		
									ميدر	
			Commence of the Party and Party		CONTRACTOR OF THE PARTY OF THE	THE RESERVOIS OF THE PERSON OF	THE RESERVE AND ADDRESS OF THE PARTY OF THE	ed in item 11 below		
10.	Waste Disp	7924	THE PERSON NAMED IN COLUMN	THE THE OCCUPANION OF THE OWNER,		32GS SE	monty 1	Branc RLH.	NKberoon 97/2.	Ī
	Name and 1	itle:	Visto	Fula	in			Date: 7-1	?- <i>J</i>	
	Signature: _				<del>~</del>			Phone: Sc.	3 640-9427	
11.	DISCREP.	ANCY	SPACE: (	Add attachmer	nts as needed)	)				
					V 17 17 17 17 17 17 17 17 17 17 17 17 17	LANGER ET ALLE SOME OF ETTER THE THE STATE OF THE STATE O	and the second of the second o			977
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(Revise	ed 12/07)				·	<del></del>				

### ASBESTOS WASTE SHIPMENT KEPORT FORM





PLEASE PRINT OR TYPE! If you have questions, contact your local DEQ Regional Office in Gresham at (503) 667-8414 x 55018, Salem at (503) 378-5086, Medford at (541) 776-6010 ext. 235, or Bend at (541) 388-6146 ext. 226, Pendleton (541) 278-4626, OR call (800) 452-4011 for the location of your local regional DEQ office.

WASTE GENERATOR: (Contractor, Facility, or Operator)  A shestos removal site name and address:  Concerd  Elementary  School
3611 SE Concord Road Milwankie /OR Clackands 17267
Contact person: 1 76.0 Leffel Phone: 503 763 1970
Contact person.
Operator's name and address: PERFORMANCE ABATEMENT SERVICES Phone: 360.574.8400
13600 NE 10 TH AVENUE VANCOUVER, WA CLARK 98,685
Street City/State County Zip
Waste disposal site: Hulsborg Centfill Phone:
3205 St Minter Bridge Road Hillsboro OK Washington 97121
Street City/State County Zip
. Describe asbestos materials: sheet rock oint compount / mastic + tile
. Containers: Number: 229 / 14 Type: dyl buil bac wet brothely
back barrel
. Total quantity (cubic yards):
7. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately
described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in
proper condition for transport according to all government regulations. All movement of this asbestos-containing material is recorded on this Waste Shipment Record Form.
Name: Clark Reynolds Company: PERFORMANCE ABATEMENT
Signature: 6/29/10
TRANSPORTER(S):
. Transporter #1: (Acknowledgment of receipt of materials)
Agent: Temp 650511 Company: 208
Address 1 (2) 901, 6196 551268 Phone: 300-887-9031
Signature:
. Transporter #2: (Acknowledgment of receipt of materials)
Agent: Company:
Address: Phone:
Signature: Date:
Venocity of the district of the second of th
DISPOSAL: (Certification of receipt of asbestos materials covered by this manifest, except as noted in item 11 below.)  **THILLSBORO LANDFILL**
0. Waste Disposal Site:
Name and Title: (503) 640-9427 Date:
Signature: BRAD BLUE - OPS Phone:
11. DISCREPANCY SPACE: (Add attachments as ponded) 9 2010
Bull Blue
Johns Milks



## Ashestos Project Daily Log

Br	anch:	02-01-23	_ Project Name	: Concord	Ele	<u>m,                                     </u>	Date:_	6/21/10
Bı	ıilding/F	ioor/Area: _	15+12nd				Job#: 5	
Hai pro Arc Arc Is t Hav Arc glo	s each empored approved a dust continue abatemic work are personne the proper lives, work	ployee received on the type of wor abatement technology of procedures bent/work area is the barriers been a barriers been lexposure levels Personal Protection boots, and back	e Job Site Orientation Cl documented training and rk being conducted? niques being used? eing complied with? plated and are the approp checked at the beginning being monitored (by Pa ive Equipment being use supports)?	I instruction on pro priate warning sign g and end of each s AS and/or others)?	s posteo	1?	s and	es/No Y Y Y Y V V V V V V V V V V V V V V V
Toc #	lay's Crew 	r: NAI	VIE.	CERT.#		1X	1.5X	2X
1	Clark	A.	4	12128		8		
2.	CTOTY	Brown		11869		8		
3	Vivin	- 01	ndh .	16218		8		
4	Scott	Martin		16097	:	8		
5	Ferna	lo Arm	naute	1493		.8	\	
6	1)010	Croci	_	16094		8		
7	And	rea Ca	pello	15980		8	,	
8								
9								
10		<del>le                                    </del>					<del> </del>	
11						·		
12							·	
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14	••••							
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Project Name: Concord Eten	Job #: Date:
Description of Work:	
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job and take care or	
Mobiliza in supplies a	and excilement.
Start building containm	at in cateting left
Coary in charge while	rannies to Somme
New Woban and View	teves.
Met with PDS (S	ters 1) and Jay).
Crow nearly completed	by land wife
containment in cafeteria.	Stut on containment in
main office.	
Oderal connex and	make run to shop
for additional supplies and	equipment shit down
by 330 pm.	01
	Office Program
I have not had a safety willation, in ur, or accident to Sign:	oday and am eligible for the Safety Incentive Program. Sign:
Signi	Sign:
Signer My Man	Sign:
terrando francute	Sign:
Sign: Laule Cappell	
Sign:	Sign:
	Supervisor Cert#: 12128
Prepared by: C. Keyrold	Supervisor Cert.#
Contractor License Numbers Washington - PERFOAS134LC-	
Oregon · 66421 WORLD-CLASS CO	ONSI RUCTION



Br	anch:	02-01-23	Project Name:	Concord		Date:	24
		loor/Area:	Lur			Job#: <u>   \$</u>	2.80
Has prod Are Are Is the Are Is the	seach emp cedures for approved dust cont he abatem re work ar personne he proper	ployee received door or the type of work I abatement technic rol procedures bein ent/work area isolate tea barriers been chall exposure levels b Personal Protective boots, and back su	being conducted? nues being used? ng complied with? need and are the appropriecked at the beginning eing monitored (by PA e Equipment being used	instruction on proper we riate warning signs post and end of each shift?	ed?	and	es/No Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
Tod #	lay's Crev	v: NAM	F.	CERT.#	1X	1.5X	2X
1	Clar	h handl	<u> </u>	12124	8		
2	Gar	y Brown		11869	8		
3	,		uss	16094	8		
4	An	Mu Cm	and de :	15980	4		
5.	1	Mr. Mar		-16097	8		
6	lline	amia Re	2mas	16218	8		
7	Terrai	ada Arana	note.	16493	8		
8	12(10)	1400 bereaf		_			
9		-					
10		•					
11							
12	,		•				
13				_	1		
14							
15							



Project Name: Concord Gleri	Job #: Date:
DESCRIPTION OF WORK:	
Set up final stems Crary takes part of	rep on office space.  in cateteria.  cren down to
Catetona and starts	non Ach file removal.
most up by hunch	b.
Gary left in ch	arge while checking
on Oak one and	iverside schools.
By I'm start	m master removal
Work for rest of st	att on mastic
shift complete by	early am next
2-11	
	·
I have not had a safety violation, injury or accident	today and am eligible for the Safety Incentive Program.
220) No he tenigo hinguna vibiación de segi	Iridad herida o accidente e con al alla I
Programa-Incentivo de Seguridad (Safety Ince	ntive Program).
	Sign:
Sign: B	Sign:
Sign Cass	Sign:
Sign: Tirsing Relman	Sign:
Sign:	Sign:
tomada francista	Sign:
ign: Aruf Cu ul	Sign:
ign:	Sign:
repared by: C. Reguelly	Supervisor Cert.#: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

WORLD-CLASS CONSTRUCTION™



## **Project Daily Log**

			•	4		-		
Bra	anch:_	02-01-23	Project Nan	ne: Jasa	er tepp	Concord	Date:	, PSA
Bu	ilding/l	Floor/Area:	Eur Ju	fper			Job#: <i>6</i> /	23/10
Has Has proo Are Are Is th Hav Are Is th glov	each em cedures for approved dust con ne abatem we work a personne ne proper ves, work	ployee signed the ployee received d or the type of wor d abatement techn trol procedures be nent/work area iso rea barriers been a el exposure levels Personal Protecti k boots, and back	Job Site Orientation ocumented training a k being conducted? iques being used? eing complied with? dated and are the approchecked at the beging being monitored (by ve Equipment being supports)?	and instruction propriate war ning and end PAS and/or	ming signs pos I of each shift? cothers)?	ted?	and —	es/No Y Y Y Y Y
#	ay's Cre	w: NAN	AF.		CERT.#	1X	1.5X	2X
1	Clar	L Rem	olds		128	8		
2	D	n Cross	7		094	8		
3	No.	rung R	ednia	16	218	8		
4	Da	I M	aftin	160	097	8		<u> </u>
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Project Name:	Job #:	Date:
DESCRIPTION OF WORK:		
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on office stace	stains to continu	il pref.
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The Other 1	der A coen or	mestre
Care at View Area	early morning in cet	my with
P. I	1 '1 42 A1	
timish mastro m	ork shortly after	land
care of some Pul	leaving one	to the
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with PBS (Tax) St. of	stainment and a	chech
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abun by all of	shift, Secure	desnis
fill bag . Clean up	- by 330, h	:11
1111 481 3	clean up next	shift.
Holder lid needed to	containment. 1	vill 60
up betwee any more	temo takes pla	icc.
		£
I have not had a safety violation, injury or accident they no he tenido ninguna violación de com-		/
		Incentive Program.
Programa Incentivo de Seguridad (Safety Ince	ntive Program).	y elegible por el
	Sign:	
Sign: Viseinin Relina	Sign;	
Sign: Leon Mark	Sign:	
Sign:	Sign:	
sign. I som do to hack	Sign:	· · · · · · · · · · · · · · · · · · ·
ign: I day do 1-amagita	Sign:	
ign:	Sign:	
gn:	Sign:	
	uigu.	
repared by: C. Reyroll	Cunamia C "	
	Supervisor Cert.#:	

WORLD-CLASS CONSTRUCTION™



## Project Daily Log

		,				
Br	ranch: 02-01-23	Project Name	: Concord Ele	<u>/</u>	Date: <u>(</u>	2724/K
Bu	uilding/Floor/Area:	Lux Super			Job#: 5°	282
Ha Pro Are Are Is to Have Are	sestions: seach employee signed the seach employee received decedures for the type of work approved abatement technic dust control procedures be the abatement/work area isolate work area barriers been of personnel exposure levels the proper Personal Protectives, work boots, and back seach area to the proper personal protectives.	ocumented training and a being conducted? iques being used? ing complied with? lated and are the approphecked at the beginning being monitored (by Pare Equipment being use	instruction on proper variate warning signs pog and end of each shift'	sted? ?	and	es/No  Y  Y  Y
Toc #	lay's Crew: NAM	T To	Company v	· · · · · · · · · · · · · · · · · · ·		
1	Clark Republis	i E	1212 Y	1X	1.5X	2X
2	Fernando Ara	ngute	16493	8		
3	Don Cross		16094	8		

1 Clark Republic 1212Y 8  2 Fernando Arangute 16493 8  3 Don Cross 16094 8  4 Virginia Redman 1621Y 8  5 Hadren Capipello 25980 8  6 Scott Martin 16097 4  8  9  10  11  12  13  14			CIDACIA III	1 10	1.37	44
3   Don Cross   16024   8   4   Virginia Redman   16214   9   5   Hadrea Capipello   15980   8   6   Scott Martin   16097   8   8   9   10   11   12   13   14		Clark Republis	12124	8		
3   Don Cross   16024   8   4   Virginia Redman   16214   9   5   Hadrea Capifello   15980   8   6   Scott Martin   16097   8   8   9   10   11   12   13   14		Formando Arangute	16493	8		
Virginia Redman 16214 8  Hadrea Capipello 15980 8  Scott Martin 16097 8  10  11  12  13  14	3	Don Cross			•	<u> </u>
5 Hadren Cappello 15980 8 6 Scott Martin 16097 8 8 9 10 11 12 13	4	Virginia Redman	<del>~~}</del>			
7         8         9         10         11         12         13         14		Hadren Capipello	15980	1		
7         8         9         10         11         12         13         14	6	Scott Mutin	16097	V		
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to make a financial contract of the contract o	15					



Project Name: Concord blen	Job #: Date:
Description of Work:	
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of lid . Continues a	a clean up of ramainder
of debris.	,
Arrange for dumpster	to be delivered
	<sup>2</sup> sl,ft
, <i>f</i> .	Classrooms, and toch
one bank (6) andors	out. Clean up dan
debris	
Crew Arishes final	down and bulk
of double buy by and	l of shift, will
	shot of next shift.
Coex at end of	day starts loal
put of debris from	outetring containment.
90% out by end of	shift.
Scrisson lift from	Sunbolt on site
by onl of shift	
Extra clean us activities	es done on lower floor
from plumbers	
I have not had a safety violation, injury or accident to Sign:	nday and am eligible for the Safety Incentive Program.    Sign:
Sign:	Sign:
man say	Sign:
Sign: Horana Redman	
Sign Com	Sign:
Sign:	Sign:
Significance Arangite	Sign:
Sign:	Sign:
Sign:	Sign:
Prepared by: C. Reynold	Supervisor Cert.#: 1212 x

Contractor License Numbers Washington - PERFOAS13ALC Oregon - 66421



Project Name: Concord blan	Job #:	Date:
Description of Work:		
Crew puts up	cetre lid after	nit puch.
of lid. Continues	Λ .	ramainder
of debris.		
Arrange for dumpston	to be deliv	erel
- arrived to end of	2 84,67	
Try in lower	classrooms, and	toch
one bank (6) andors	out. Clean	us don
debris		
Crew Arishes Final	dours and	bulh
of double by the	l of shift.	<u> </u>
load out at the sx	elet of next shift	
Coex at end of	day starts	
out of debris from	cafetrina cont.	ainmont,
90% out by end of	shoft.	
Scissor lift from	Sunbelt on sote	
by onl of shift		· · · · · · · · · · · · · · · · · · ·
Extra clean us activities	is done on love	er floor
from plumbers		-
I have not had a safety violation, injury or accident to Sign:	Sign:	centive Program.
Sign:	Sign:	
Sign: 1 Paul Capull	Sign:	
Sign	Sign:	
Sign:	Sign:	·
Sign. The same of Arrange to	Sign:	
Sign:	Sign:	
Sign:	Sign:	
Prepared by: Co Reynold	Supervisor Cert.#:	12128

Contractor License Numbers Washington • PERFOAS 134LC Oregon • 66421



Branch: 02-01-23 Project Name	Date: 6/25/10
Building/Floor/Area: Uper Office / Lur/windows J	Job#: <u>#528</u> 0
Questions: Has each employee signed the Job Site Orientation Checklist? Has each employee received documented training and instruction on proper work practices procedures for the type of work being conducted? Are approved abatement techniques being used? Are dust control procedures being complied with? Is the abatement/work area isolated and are the appropriate warning signs posted? Have work area barriers been checked at the beginning and end of each shift? Are personnel exposure levels being monitored (by PAS and/or others)? Is the proper Personal Protective Equipment being used (including hard hats, safety glasses, gloves, work boots, and back supports)?	<del>-</del>
Todov's Crew	1 6W 2W

Today's Crew:	CERT.#	1X	1.5X	2X
# NAME				
1 Clark Regnolds	12128	8		
2	16094	5.5		,
3 Andrea Canado	15980	8	<u> </u>	
1 Soll Martin	6097	8		
5 L land	16493	18_		
6 Ternanch INongeles	1			
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		+;	+	<del>                                     </del>
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12				
13			•	
14				
15				



DESCRIPTION OF THE		Job #:	Date:
DESCRIPTION OF WORK:			
hoel out Ac	M bigs fr	n off	ice to
dumpster, Final cher	un contain	+ C	ice to
and here van Call	1 PBS For	, ,	my down
go what al lock of		recol	Jay sives
Lot the shift	my This	activity	took most
Take 15		1	
" 1 1 Oct	Mandone a	est tro	m around
201 at GC's reques	f for me	ecurend	Incloses.
100 realy for	running	Clyarun	P
1			
·			
have not had a safety violation, injury or accid	dent today and am eli	zible for the Safe	sty Incoming D
have not had a safety violation, injury or accidence of the safety violation, injury or accidence of the safety of	dent today and am eli seguridad, herida	gible for the Safe	ty Incentive Program.
have not had a safety violation, injury or accidence for the tenido ninguna violación de rograma Incentivo de Seguridad (Safety igní	Incentive Program	gible for the Safe o accidente, y	ty Incentive Program. soy elegible por el
rograma Incentivo de Seguridad (Safety	Incentive Program	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
rograma Incentivo de Seguridad (Safety ign:	Incentive Program	zible for the Safe o accidente, y	zy Incentive Program. soy elegible por el
rograma Incentivo de Seguridad (Safety ign:	Incentive Program  Sign:  Sign:	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
rograma Incentivo de Seguridad (Safety ign:	Incentive Program    Sign:   Sign:   Sign:	zible for the Safe o accidente, y	zy Incentive Program. soy elegible por el
rograma Incentivo de Seguridad (Safety ign: gn: gn: gn: gn:	Incentive Program    Sign:   S	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
gn:  gn:  gn:  gn:  gn:  gn:  gn:  gn:	Incentive Program  Sign:  Sign:  Sign:	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
ign:  gn:  gn:  yn:  gn:  yn:  yn:  yn:	Incentive Program    Sign:   S	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
gn:  Jan Lornanda Hranger e  m:	Incentive Program) Sign: Sign: Sign: Sign: Sign: Sign: Sign:	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el
ign:  gn:  gn:  yn:  gn:  yn:  yn:  yn:	Incentive Program) Sign: Sign: Sign: Sign: Sign: Sign:	gible for the Safe o accidente, y	ety Incentive Program. soy elegible por el

Conserve planeau Manham F. midnyou - FEPSDAS76415 Congo: - colod)

Supervisor Cert.#:\_



# Assestor, Demolition, Lead, Mold Project Daily Log

Br	anch:_	02-01-23	Project Name:	Contonl	ble	in	Date:	128/1
Bu	ıilding/I	Floor/Area:	low / windows				Job#:	PERL
Has pro Are Are Is the Are Is the	s each em cedures for approved dust confine abatem we work as personne the proper	ployee signed to ployee received on the type of will abatement tectrol procedures the type of type of the type of type of type of the type of type	he Job Site Orientation Chal documented training and ork being conducted? huiques being used? being complied with? solated and are the appropenchecked at the beginning is being monitored (by PActive Equipment being use k supports)?	instruction on proper oriate warning signs; g and end of each sh and/or others)?	posted ift?	?	s and	es/No
#			ME	CERT.#	•	1X	1.5X	2X
1	50	TI Ma	tin	1609	フ	8		
2	Des	1005	$\sim$	16094	,	ч		
3	An	elne (	einallo	15980		8	·	
4	Clark	· hegholi	. 17	12128		8		
5	•							
6			·					
7								
8			,					
9				<del></del>				
10				**************************************				
11								
12				1	$\neg \dagger$			
13					$\neg \dagger$			
14.		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
15	4 34 H	e sa silves miles, til silves miles, til silves miles	The second secon	A CONTRACTOR OF THE CONTRACTOR				



Project Name: Concart Clore	Υ ,	Job #:	Date: 6/28/10
Description of Work:			
Minor work n	celed aft	u tear	low
of cafeteria.	-		
Set even up	to o	rep clas	srooms.
and exterior for	umlar !	emoral	
Removed 3 for	U bunks	od unif	ous.
from contyard area	(south).	Craw sc	rapes
and cheans areus	after n	ords.	
will more to	north	sile ne	of shift
to complete window	3 Seton	e site	contractor
needs access to a	reu.		
		•	
	,		
		-	**************************************
	•		, , , , , , , , , , , , , , , , , , ,
I have not had a safety violation, injury or a		eligible for the Safety	Incentive Program.
Sign:	Sign:		
Sign:	Sign:		
Sign:	Sign:		•
Sign: For Carlle	Sign:		
Sign:	Sign:		*
Prepared by: C. Reyully		Supervisor Cert	#: 12/29 =

Contractor License Numbers Washington - PERFOAS134LC Oregon - 66421



## Achelos Panelline I and Mold

Branch: 02-01-23	Project Name:_	Concord	<u>Etem</u> I	Date 6/29/17
Building/Floor/Area:	apper /Lun /	timbers	Jo	ob#:
Ouestions: Has each employee signed the J. Has each employee received doc procedures for the type of work Are approved abatement techniq Are dust control procedures being Is the abatement/work area isola Have work area barriers been chare personnel exposure levels be Is the proper Personal Protective gloves, work boots, and back su	cumented training and in being conducted? ques being used? ng complied with? ted and are the appropri- ecked at the beginning a eing monitored (by PAS). Equipment being used	nstruction on pr  . iate warning sig and end of each S and/or others)	ns posted? shift? ?	Yes/No  Yes/No

Today's Crew:

#	NAME	CERT.#	1X	1.5X	2X
1	Scott Martin	16097	8		
2	Scott Martin	16094	8		
3	Andrea Camello	15980	8		
4	Clark Regnolds	12128	8		
5					
6					
7					
8	· · · · · · · · · · · · · · · · · · ·				
9					
10				· ·	
11					
12		· · · · · · · · · · · · · · · · · · ·	·		
13					
14					
15					



Project Name: C. Legals	Job #:	Date:
Description of Work:		
Prop and go	on 4 more	barley.
of windows . 3 compt	etal by and of sil	ift.
Charace on office	some in late in the	sh.H.
Take down signs	not will tear d	m
contain ment first thing	next slift	
Horange for de	livery of boom	1,Ft
for late this week	- or early next	weeh.
Call for dump	and return on	asbestos
dampster will transfe	or to been hors.	
Will also get	additional supplies	and
ig and ment for other	1 1	eas
school and to	start glove buy	
activities (Both Scope a	l extra)	
·		
		<del>*************************************</del>
		· · · · · · · · · · · · · · · · · · ·
I have not had a safety violation, injury or accided		entive Program.
	Sign:	
Sign! Mark	Sign:	
Sign.	Sign:	
Sign: Taul Capello	Sign:	
Sign. //	Sign:	·
Sign:	Sign:	
Sign:	Sign:	÷ .
Sign:	Sign:	
		13121/ =
Prepared by: O. Keyrolds	Supervisor Cert.#:	12124 =
ontractor License Numbers		

Contractor License Numbers Washington • PERFOAS134LC Oregon • 66421

WORLD-CLASS CONSTRUCTIONTM

· 阿拉拉斯斯



## Ashestor, Demolition, Lead, Mold

Branch: 02-01-23 Project Name: Co	ncort - lementary Date: 6/30/10
Building/Floor/Area:	Job#:
Questions:	Yes/No
Has each employee signed the Job Site Orientation Checklist?	
Has each employee received documented training and instruction	on on proper work practices and
procedures for the type of work being conducted?	
Are approved abatement techniques being used?	
Are dust control procedures being complied with?	
Is the abatement/work area isolated and are the appropriate wa	rning signs posted?
Have work area barriers been checked at the beginning and end	f of each shift?
Are personnel exposure levels being monitored (by PAS and/o	r others)?
Is the proper Personal Protective Equipment-being used (included)	ling hard hats, safety glasses,
gloves, work boots, and back supports)?	The second second second control of the second seco

#	NAME	CERT.#	1X	1.5X	2X
1	Clark Regnolds	12128	8		
2	Doll Martin	16097	8		
3(	Wan Cross	1990076	10816	19 HZ	
4	Andrea Coppello	15980	1 8	· · ·	
5	Fernando Avangate	16493	6		
6					
7					
8					
9	7 <b>4</b>				
10	¥**				
11					
12					11
13					
14		1			-214
15		100	-		



DESCRIPTION OF WORK:	
Com preps	for windows.
1B5 and Shy	nal have expan in office
arl gipe ump.	•
5 tat on we	Long - only get 2 hays
100% frushed Third	one out but not cleaned
ud-	
Start glove Garrie	in cal rooms of cast
wing. Finish 2	rooms by and of slift.
PBS in sects	/
1. 12 1 1	moved in office - need
to scrape mastic	(PBS determined was ACM)
clean one shear or	ac and I'm but over to
3 word :	
HI areas inche	I up by out of shift.
I have not had a safety violation, injury or a Hov no he tenido ninguna violación	accident today and am eligible for the Safety Incentive Program. de seguridad, herida o accidente, y soy elegible por e
Programa Incentivo de Seguridad (Saf	fety Incentive Program).
	Sign:
Sign: MA	
Sign: MA	Sign:
Sign:	Sign: Sign:
Sign: Sign: Augh Maylo	
Sign:	Sign:
Sign:	Sign: Sign:
Sign: Sign: Sign: Sign: Sign:	Sign: Sign:

Contractor License Numbers Washington - PERFOAS1 34LC Overage - 66621

0.10404.154



## **Project Daily Log**

	ranch: 02-01-23 ]			,	Date:	71/10	)
Bı	uilding/Floor/Area:	nor W	mlas		Job#:d	<b>BOYL</b>	
	uestions: s each employee signed the Job Si	ite Orientation Che	cklist?		Υe	s/No	
Ha pro	s each employee received docume ocedures for the type of work being approved abatement techniques be	nted training and i g conducted?		work practices	and	<del></del>	_
Ard Is t	e dust control procedures being con the abatement/work area isolated a ve work area barriers been checken	mplied with? and are the appropr				<del>\frac{\frac}{\frac{\fir}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}{\frac{\frac{\frigk}}}{\firan}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}</del>	
Are Is t	e personnel exposure levels being a he proper Personal Protective Equ ves, work boots, and back suppor	monitored (by PA)	S and/or others)?		7	<del>}</del>	=
Tod	lay's Crew:		··				
#	NAME		CERT.#	1X	1.5X	2X	
1	Clah Republis		12128	8			
2	Scott Martin	-	16097	8			
3 '	Ch Coo	D	16094	8			
4	Andrea ( )	osella	15480	8			
5	Pernanda Arangu	Fi	16493	6			!
6						,	
7							
8	The state of the s			·			
9							
10	,						
11							
12							
13							
14							
15							



Contractor License Numbers Washington - PERFOAS 134LC

DESCRIPTION OF WORK:	
Preg for w	inter vemoral.
Continue alo	ve Saying (in cluding extra
work areas \ lametum	· · · · · · · · · · · · · · · · · · ·
Window remo	and an north side
mostly complete	
will finish	sile next shift
Arrange to 1	borrow GC's Soram lift -
Call off Sunbelt	until next week
**************************************	
	•
have not had a safety violation, injury or a loy no he tenido ninguna violación Programa Incentivo de Seguridad (Saf	accident today and am eligible for the Safety Incentive Program de seguridad, herida o accidente, y soy elegible por elevative Program)
Sign:///	Sign:
	Sign:
ign:	•
Sout / land	Sign:
ign: Awell Cansell	Sign: Sign:
ign: Jully appell	
sign: Jully appell sign:	Sign: Sign:
Sign:  Sign:  Sign:  Sign:  Sign:  Sign:  Sign:	Sign:



## Asheston Demolition Lead Mold Project Daily Log

	•	02-01-23			Concord			Date:_	7/2/10
Bı	uilding/F	loor/Area:	Lux	1 4	ulous_	***********		Job#:	* ***
Ha	<u>iestions:</u> s each emp	oloyee signed the	Job Site Orie	ntation Chec	klist?				es/No
Are Are Is t	ocedures for e approved e dust contr he abatem	ployee received of the type of wor abatement techn rol procedures be ent/work area isc ea barriers been	k being condu iques being u eing complied blated and are	icted? sed? with? the appropris	ate warning sig	gns posted		and	<del></del>
Are Is t	e personnel he proper I	l exposure levels Personal Protecti boots, and back	being monito ve Equipment	red (by PAS	and/or others)	?	ty glasses		Υ— Υ—
	lay's Crew								-
1	Clark	NAM Regueld	Je		SIZ (28	#	1X	1.5X	2X
2(		2	20			1094	8		
3	Sco	11 Mar	tin		1609	7	8		
4	Andre	ed Cappe	10		15980		81		
5	Firma	indo Avan	este		16493		8		
6			·		···				
8		······································							
9									
10	***************************************		······································						
11	·								
2	·								
3									
4		A A A A A A A A A A A A A A A A A A A							
5			<del>.</del>			•			



Contractor License Numbers Washington - PERFOAS 134LC

DESCRIPTION OF WORK:	
Prep for win	rda removal of north
way wing	<u> </u>
One on glow	n bagging an lower
Chassooms.	
Last man 5.	anh on north west site
completed, Briles	at the end of tie
of shift,	pleted might at the end
· ·	and obean us . Secure
spirites and trailer	
) i '/	1 ./ 4 / / .
A 1 A	Cres to start at 6 sm
from here on out;	<u> </u>
	•
	accident today and am eligible for the Safety Incentive Program
oy no he tenido ninguna violación : ograma Incentivo de Seguridad (Safe	de seguridad, herida o accidente, y soy elegible por
gn:///	Sign:
W Comment	Sign:
And Curry 110	)
Avels Cuppello	Sign:
gn: Arylli (uppell) gn:	Sign:
gn: Arylli Cuppello gn: gn: gn:	Sign: Sign: Sign:
gn: Ayulu (uppull) gn: gn: gn:	Sign: Sign: Sign: Sign:
gn: Arylli Cuppello gn: gn: gn:	Sign: Sign: Sign:



# Asbestos, Demolition, Lead, Moid Project Daily Log

B	Branch: 02-01-23 Project Name	: Cone and Flen	w	Date:_	7/10/10	)
В	Building/Floor/Area: Wyndows	Lux		Job#:	DS2	
H	uestions: as each employee signed the Job Site Orientation C	hecklist?			es/No	
pr Ai Ai Is He	as each employee received documented training and occdures for the type of work being conducted? re approved abatement techniques being used? re dust control procedures being complied with? the abatement/work area isolated and are the approave work area barriers been checked at the beginning.	d instruction on proper wo		s and	<del>***</del>	_
At Is	re personnel exposure levels being monitored (by Posthe proper Personal Protective Equipment being use oves, work boots, and back supports)?	AS and/or others)?	fely glasses		<u>¥</u>	_
	day's Crew:	•		,	/	
1	NAME	CERT.#	1X	1.5X	2X	
2	Charle Reynolls	512124	18			
	La Case	16094	8			
3	Sott Martin	16097	8			
4	Virginia Religion	16218	8			
5	Francis Arum L	16493	8			
6	Andre Caralla	. 15780	7			
7	That in The 112	10100	'			
8						
9						
10						
11						
12						
13						
14						
15	*:					



Contractor License Numbers Washinaton - PERFOAS134LC

DESCRIPTION OF WORK:	
Set up for	· countried windows
Firmula on	last of the rooms
for glove saying	
Finish	2 more banks of
windows including	down of
blove bassing	3 completel by und
Shipt	· · · · · · · · · · · · · · · · · · ·
1 rep for	gusher start on windows
for rest shift	· · · · · · · · · · · · · · · · · · ·
A-1	
I have not had a safety violation, injury	or accident today and am eligible for the Safety Incentive Program.
Hoy no he tenido ninguna violacion Programa Incentivo de Seguridad (S	ión de seguridad, herida o accidente, y soy elegible por el Safety Incentive Program)
Sign:	Sign:
Sign:	
OIMIT:	Sign:



## Ashestos, Demolition, Lead, Mold

## **Project Daily Log**

B	ranch: 02-01-23	Project Name:	Concord	Flemetre	<del></del>	Date: Z	1/1/10	ク
B	uilding/Floor/Area:	Winlows				Job#:		
Ha Ha pro Arc Arc Is t Ha Arc Is t glo	uestions: as each employee signed the Lass each employee received do occdures for the type of work he approved abatement technique dust control procedures being the abatement/work area isolated work area barriers been che personnel exposure levels being the proper Personal Protective eves, work boots, and back su	cumented training and being conducted? ques being used? ag complied with? ated and are the approprecked at the beginning eing monitored (by PA Equipment being used	instruction on p riate warning si and end of eac S and/or others	gns posted? b shift?			es/No	
Too	day's Crew:	FC	CERT	#	1X	1.5X	2X	l
1	( ) ( ) )	1/			1/1	I.JA		
2	tank Keyn	./ <u>(A</u>	3(2124	<u> </u>			ļ	
3	6	in the second	16094					
	Soll Mary	liv	1607	7				
4	Virginia Red	4006	16213	>				ĺ
5	Adres Casalli	h .	15980		· · · · · · · · · · · · · · · · · · ·			٠
6	more process						<del>  </del>	
7					<u>ian 1</u>			
8					,		·	
9								
10								
11								
12			······································					
13	Andrew Company of the		**************************************					
4		٠-,						
5	*							



1 . 1	F WORK:	1 1 1 1 1	•	
5et u	1001	lust of wirler	1 In C	early end
Jasan	. 7	would like to	muc. all	the
3yon windo	us vemovel	1	orto Z-500 or folas	14.
And the	Window (2 m	• \ . '1/	1	. 1.
Whe was	1	pening / Will	have to	5eF
shoot to	and scrap	a usag c	500m 1 gr	ans_
41/	ulous on	wire com	141	
Start	erce for	South uson	- in its la	1
	111 (01	Jens affe	·	<u> </u>
-				<del></del>
		,		
	51.0 E			
	**************************************			
			· · · · · · · · · · · · · · · · · · ·	***************************************
I have not had a safety vic	olation, injury or acciden	t today and am eligible for th	e Safety Incentive I	rogram.
How no he tenide nin	iguna violacion de se	eminan, nema o accinei	ite, y soy elegioi	e bor er
Hoy no he tenido nin	Seguridad (Safety In	centive Program).		
Hoy no he tenido nin Programa Incentivo de Sign:	Seguridad (Safety Inc	centive Program).		
Hoy no he tenido nin Programa Incentivo de Sign:	e Seguridad (Safety Inc	centive Program).		
Hoy no he tenido nin Programa Incentivo de Sign:	e Seguridad (Safety Inc	centive Program).		·
Hoy no he tenido nin Programa Incentivo de Sign:	e Seguridad (Safety Inc	Sign:		
Hoy no he tenido nin Programa Incentivo de Sign: Sign:	e Seguridad (Safety Inc	Sign: Sign: Sign:		
Hoy no he tenido nin Programa Incentivo de Sign: Sign: Sign: Sign:	e Seguridad (Safety Inc	Sign: Sign: Sign: Sign: Sign: Sign:		
Hoy no he tenido nin Programa Incentivo de Sign: Sign: Sign: Sign: Sign:	e Seguridad (Safety Inc	Sign: Sign: Sign: Sign: Sign: Sign: Sign:		
Hoy no he tenido nin Programa Incentivo de Sign: Sign: Sign: Sign:	e Seguridad (Safety Inc	Sign: Sign: Sign: Sign: Sign: Sign:		



## Asbestos Project Daily Log

Branch: 02-01-23 Project Name: Concoul Gten	Date: 7/8/10
Building/Floor/Area: South Windows (hoper)	Job#: 🞾
Questions: Has each employee signed the Job Site Orientation Checklist?	Yes/No
Has each employee received documented training and instruction on proper work pr procedures for the type of work being conducted? Are approved abatement techniques being used?	actices and
Are dust control procedures being complied with?  Is the abatement/work area isolated and are the appropriate warning signs posted?	<del></del>
Have work area barriers been checked at the beginning and end of each shift?  Are personnel exposure levels being monitored (by PAS and/or others)?	<u> </u>
Is the proper Personal Protective Equipment being used (including hard hats, safety; gloves, work boots, and back supports)?	glasses, Y
Today's Crew:	

	day's Crew:				
#	NAME	CERT.#	1X	1.5X	2X
1	Charle Reynolls	512124	8		T ===
2	Case	16094	8	<del></del>	1
3	Sott Marin Virginia Reducan	16097	8		
4	Virginia Reduna	16218	8	<del></del>	
5			1		
6					<del>                                     </del>
7					<u> </u>
8					<u> </u>
9					
10					
11					
12					
13					
14					
15			<u> </u>		
				.	l

.....



Contractor License Numbers Washington - PERFOAS1 34LC

DESCRIPTION OF WORK:		
Prep and	remove south upper	er unlas.
Area scrapel	and cleaned , Va	e inside
and oull me	trav sheets.	
With remaind	er of shift sta	at oref
for gym minden	vanoval.	
I have not had a safety violation, injury	or accident today and am eligible for the Si ión de seguridad, herida o accidente,	afety Incentive Program.
Programa Inceptivo de Seguridad		y objected por co
Sign:	Sign:	
	Sign:	
Sign:		
Am Break 1 ADD	Sign:	
- Ken ( see	Sign:	
Sign: Lett leter		
Sign:	Sign:	
Sign: Sign:	Sign: Sign:	





## **Project Daily Log**

B	ranch: <u>02-01-2</u>	23 Project Name	: Concort Flor		Date:	1/1/10
B	uilding/Floor/Are	a:yynw	ulous	o Petho	Job#: 🗸	XZ_
Qı	uestions:	ed the Joh Site Orientation C		······································	Ye	s/No
Ha pro Ar Ar Is t	is each employee rece ocedures for the type of e approved abatement e dust control proceduth the abatement/work and	ived documented training and of work being conducted? techniques being used? tres being complied with? the isolated and are the approximation.	d instruction on proper we be instruction on proper we be instruction on proper we be instruction on proper we instruction on the proper we instruction of the proper we i	•	and	<del>У</del> У
Ard Is t	e personnel exposure	heen checked at the beginning levels being monitored (by Pa otective Equipment being use back supports)?	AS and/or others)?	afety glasses		¥ 
	day's Crew:		-		<u> </u>	<del>,</del>
1	CLI	NAME	CERT.#	1X	1.5X	2X
2	( )	5 cynolis	312128	8		
3	-TT-N	1 -11	16094	1 0 C		
4	1	Car fried	10097	8		
5	Orginia 1	- exthan	16218	0		
6						
7		777				
8						
9						
10						
11						
12						
13						
14		**************************************		+		
15	-					



Prepared by:\_\_

Contractor License Numbers Washington - PEPFOAST 3410

•	Project Name: Concord	Job #: Date: 7/9/10
	DESCRIPTION OF WORK:	
	Start and finish	work on gight
	Windows out	shortly after lunch
	Viely for disposal	wrapping all and having
	Even clears out	school and loads
	Not all windows	walled, will come
	back on monday to	lock out last of
	Ach debris and of	nt demobilizing supplies
.	and equipment.	<i>, , , , , , , , , , , , , , , , , , , </i>
	Call off all	lift equipment.
		<i>U</i>
ŀ		
-		
-		
ŀ	I have not had a safety violation, injury or accident t	today and am eligible for the Safety Incentive Program.
.]	Hoy no he tenido ninguna violación de segu	ıridad, herida o accidente, y soy elegible por el
	Programa Incentivo de Seguridad (Safety Ince Sign:	ntive Program). Sign:
L	Sign:	Sign:
L	- Jan lake	
	Sign:	Sign:
L	Sign! Vilyania Redman	Sign:
1	Sign: /	Sign:
L		1 Cim.
L	Sign:	Sign:
	Sign:	Sign:

Supervisor Cert.#: 12/2 ¥



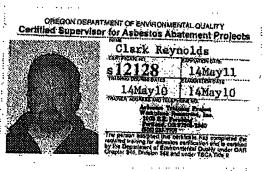
Branch: 02-01-23	Project Name: Concord	Date: 7/10/(
Building/Floor/Area:	Estino School	Job#: <u>([{{}}</u>
Has each employee received do procedures for the type of work Are approved abatement techni Are dust control procedures bei Is the abatement/work area isol Have work area barriers been control procedures.	iques being used? ing complied with? lated and are the appropriate warning sign checked at the beginning and end of each being monitored (by PAS and/or others)? We Equipment being used (including hard	ns posted?

oday's Crew:	NAME	CERT.#	1X	1.5X	2X
<i>t</i>			8		
Clash	harally	16168	8		
Clash Scott 1	rutra	12128	8		
3					
1					_
5	<u>,</u>				_
6					_
7					
8					
9		Wil-4.			
10				. (1)	
11					
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4 17 4114



DYGGE			
DESCRIPTION OF WORK	7.	Job #:	Date:
1 1) 1			
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2 1/ nwestee			3000
- Januarya	y mais mut	and sull	lies out
50 school and	into conne	x. 71	THE DW
Walk school	with Jo	uson. Ok	
I Clarke Convex	and supplier	far	bust
of work in of	her North	Chuland	41 /
		Contract of the Contract of th	Sayos (1
			•
I have not had a safety violation, injury or	accident to A.		
I have not had a safety violation, injury or Hoy no he tenido ninguna violación	accident today and am eling the seguridad, herida	gible for the Safe	ety Incentive Program.
I have not had a safety violation, injury or Hoy no he tenido ninguna violación Programa Incentivo de Seguridad (Sa Sign:	fety Incentive Program)	gible for the Safe o accidente, y	ety Incentive Program, soy elegible por el
Sign: Sign:	accident today and am eli n de seguridad, herida fety Incentive Program Sign:	gible for the Safe o accidente, y	ety Incentive Program, soy elegible por el
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#### **Concentra Medical Centers**

12519 NE Airport Way #110 PORTLAND, OR 97230 Phone: (503) 256-2892 Fax: (503) 258-0717

### RESPIRATORY FIT TEST ASSESSMENT RECORD

Service Date:	11/19/2009	Respirator Type; NOV H	half-minst
Employee Name:	Reynolds, Clark D.		100 +301
Employee SSN:	XXX-XX-0009	Cartridge Type:	
Employer:	Performance Abalement Services		
Department:		Amucipated Osage. 5202	Minutes/day
., ., .,		<del></del>	Hours/day Days/week
Qualitative Fit Test (	QLFT) Prolacol used:	Everates (each assets a short to a	•
Utsuamyl Acelate (R	espirator must be equipped with an organic vapor filter)	Exercise (each exercise shall be con except for grimace which shall be co	dicted for one minute.
DSaccharin Solution (	Must use DeVilbiss Model 40 Inhalation Medication		inducted for 15 seconds)
Nebulizer or equiva	lent)	Breathing	( Street )
Bitrex (Denalonium	Benzoale) Aerosol	Normal	(Pass   Fail
Quantitative Fit Test	(QNFT) Protocol used:	Deep	Fail
	ber: Circle one of the following:	Head	Fast, Fail
Corn Oil		Turn Left	Fast Fail
Polyethylene glycol		Turn Right	Pass Fail
di-2-ethyl hexyl seba	cate (DEHS)	Side: Leff	Fail
Sodium Chloride		Side: Right Move Up	Fail
Concensation Nucle	Counter: ambient perosol	моче ор Моче Оомп	(Fass) Fall
Cres No Subject don	ned respirator et least 5 minutes prior to assessment	Talking.	Fans Fail
Ges No Subject con	ducted user seal check	Name	
Ces No Apparel inte	dering with a satisfactory fit must be removed or altered.	55N#	Passi Fail
Cies No Stolect Bine	en a description of the fit jest and his/her responsibilities	Read	Pass Fall
přior to asse		Rainbow Passage observed by teste	i (Pass) Fall
Assessment of Com	e applicable safety equipment during fit test fört (C: Comfortable, NC: Nöt Comfortable)	Facial Expressions	
NC Position of the	he mask on the noce	Grimace	Fast Fail
O NG Room for ey	e erotection	Smile	Page Fail
NC Room to talk		Frown	Pass Fail
7,000	nask on lace and cheeks	Body Movement	
	A: Adequate, NA: Not Adequate)	Bend at waist	Pass Fall
	y placed	Jog in place	Pass Full
NA Chin propert  NA Adequate st  NA Fit scross no  NA Proper size  NA Tendency of  NA Subject obse	rap tension, not overly tight	Subject:rales comfort of respirator: 1	2 3 4 5 6 7 8 /9 10
A) NA FILBOROSS NO			eäst Most
A NA Proper size	to span length from nose to chin	Yes No Subject made no attempt(s) to	
NA Tendency of	respirator to slip		
A) NA Subject obse	erved self in mirror to evaluate fit and position.	Assessment (CHECK VALL THAT A	PPLY)
Physician's Comme	ents	Test disconlinged due to:	
••		Hair growth; beard, mustache sealing surface.	sideburns which cross respirator
-		D Diffiguity broathing we	
***********		Comfort or Fit of respirator wa	na rindagaliklahlala
		Recommendation(s)	is unacceptable to employee.
		1.44444444444444	
Pessed Fit T	Act		
/ 103500177			
☐ Failed Fit Te	\$1		
	**	A series	
Applicant pre	sents for fit testing only. Respiratory clearance not presen	nied //	
Shalesty	i - C. Der	The state of the s	
••••		- Aggregation of	••
•	Technician	•	

This record is to be maintained by the employer in accordance with 29 CFR 1910.134 Peragraph (m) (2)(I)(A) - (E).

Re-lesting must occur ANNUALLY as long as the employee is required to wear a respirator.

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# Concentra Medical Centers 12518 NE Moor Way #110 PORTLAND OR \$7230 Priore (503) 256-2992 Few (503) 258-0717 Medical Surveillance - Asbestos

Service Date: 11/19/2009

Patient:	Reynolds, Clark I	<b>)</b> .	Job Title:		
	XXX-XX-0009	<u></u>		Performance Abatemen	t Service
	08/16/1973	and the same of th		13600 NE 10th Ave	
Gender:	A STATE OF THE STA		••		
Marital Status:		<del></del>		Vancouver, WA 986852	677
			Job Contact:	Ryan Leffel	
Address:	17148 SE Marke	t Șt.	Role:	Primary Contact	
	PORTLAND, OR	97233	Phone:	(360) 574-8400 Ext.:	pooler transport and the second secon
Home Phone:	(503) 793-5400	<u> </u>	Fax:	(360) 574-7607	and the contract of the contract of
		Ext.:		and the second s	a stille on time and a fall familiary design, comme
			Race	ASIAN BLACK HISPA	NIC INDIAN WHITE OTHER
The above Individ	lual was seen on	11/19/2009 in acci	ordance With:	29 CFR 1926.110 40 CFR 763.121.	1.
The following w	as performed:				
				and work history with speci ndix D in 1926.1101.	al emphasis directed to the
				they relate to the employe on equipment to be utilized	e's exposure, the employee's I by the employee.
Review of	information from pr	evious medical exar	ninations if avail	able ·	
سمز				vascular, and gastrointestic	na! sÿstemš.
A pulmon		proed vital capacity			second (FEV 1) in accordance
	entgenogram, poste 5.1101. (M)(2)(ii)(C).		inches (or curre	nt film on file) with interpret	ation in accordance with 29
NOTE: A		1926.1101 (M)(2)(ii)	)(C), it is up to th	e discretion of the physician	n whether or not a chest X-ray
from asbe				exemiand of any medical c r attributable to the combin	
employee at an inc	reased risk of mate		nt from exposure	etected medical conditions to asbestos; and there are ement or respirator.	
Comments of limits	ations (if any):		غسط هده و در د و در		
					42
	· ·	1	1 May 1 7 7 7 7 7 1	* * : '	11-19-2007
	<u> </u>	Provider Sig	nature	**************************************	Date

Evaluation - Asbestos Medical Surveillance

Page 1 of 1

Revision Date: 07/21/1999

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Certified Supervisor for Asbestos Abatement Projects



Gary Brown

STIRES 21Aug10

TRUMENT COURSE DATES 21Aug10

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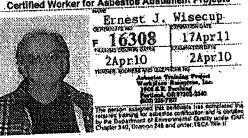
TRUMENT ACCRESS AND TELEPHORN TO ACCRESS AND TE

#### Concentra Medical Centers 349 NASANCSI SIGNAN PORTLAND, OR 97217 Phone: (503) 283-0013 Fax: (503) 283-0765 Medical Surveillance - Asbestos

Service Date: 03/31/2010

Patient:	Brown, Gary L.		Job Title:		
	XXX-XX-4002			Performance Abat	ement Service
DOB:	09/10/1957			13600 NE 10th Av	
Gender:	М				A ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
Marital Status:	M			Vancouver, WA 98	6852677
Address:	34509 N Honey	man Rd	Job Contact: Role:	Ryan Leffel Primary Contact	
	000000000	NO 67050		(360) 574-8400 I	======================================
14 / m / 191 mm -	SCAPPOOSE, C	XK 8/056		(360) 574-7607	
	(503) 543-3766	100	•	Andrew Commission of the Commi	
Work Phone:	(360) 574-8466	EXt.;	Räce	ASIAN BLACK H	SPANIC INDIAN WHITE OTHER
The above individ	ual was seen on	03/31/2010 in acc	ordance with:	29 CFR 1926 40 CFR 763.1	
The following wa	as performed:				
				and work history with a ndix D in 1926,1101.	special emphasis directed to the
					oloyee's exposure, the employee's ilized by the employee.
Review of	information from pr	evious medical exan	ninations If availa	ble.	
A physical	examination with e	mphasis upon the p	ulmonary, cardio	rascular, and gastroin	testinal systems.
	ry function test of f I and ATS standar		FVC) and forced	expiratory volume at	one second (FEV-1) in accordance
	entgenogram, posto 1101. (M)(2)(II)(C).		inches (or curren	t film on file) with inte	rpretation in accordance with 29
NOTE: Active la required.		1926:1101 (M)(2)(ii)	(C), it is up to the	discretion of the phys	ician whether or not a chest X-ray
	tos exposure inclu				al conditions that may result
	eased risk of mater	tal health impairmen	it from exposure l	o aspestos, and there	ons that would place the are no recommended
Comments or limitat	ions (if any):	4-4-1			· · · · · · · · · · · · · · · · · · ·
		**************************************			
Marie Carlo	PORTUGUES SERVICES SERVICES SERVICES COMMON COMPON COMMON COMPON COMMON COMPON	a de		· · · · · · · · · · · · · · · · · · ·	3/32/60
		Provider Sign	nature	***************************************	Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Certified Worker for Asbestos Absternent Projects



PeaceHealth Workplace Wellness Services	Employee Name: Wise Cup, Farnest J.				
1405 Delawate St., Longview, WA 98632 (360) 414-2332	รท:				
RESPIRATOR REQU					
Company Performance Condocting Group Job C	Passification;				
Type of respirator(s) this individual/job required (check all that apple Half-mask Full face in Helmet Hood in Escape in Non-powered cartridge or canister in Powered alr-purifying condition in Disposable filtering face-piece in Self-contained breathing apin Other:	☐ TB Mask artridge respirator (PAPR) paratus (SCBA) - ☐ demand or ☐ pressure				
Exposure Risks  X Dust Asbestos D Benzene Q Lead CHaza  CI Smoke A firritant fumes D Temperature extremes  O Other:	rdous waste — Particulate — TB Se Confined spaces				
Workload: XVaries DHeavy DMedium DLigh					
Frequency of use: 20 hours/week 0 >1 hour/day 0 :	>1 hour/month				
Company Representative Signature:	<u>/</u>				
RESPIRATOR CLE	RESPIRATOR CLEARANCE				
Recommendations based on:	tionnaire and physical exam				
Recommendations based on:	he employer, this individual:				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations	he employer, this individual:				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations Is medically cleared for use of the respirator(s) with the following limitations.	he employer, this individual:				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations. Is medically cleared for use of the respirator(s) with the following limitations:  Under the conditions with the following limitations. Is not medically cleared for use of a respirator.  Workload Limitations:  Understricted	he employer, this individual: imitations:  dium				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations.  Is medically cleared for use of the respirator(s) with the following limitations:  Understricted	imitations:  dium				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations. Is medically cleared for use of the respirator(s) with the following limitations:  Under the conditions with the following limitations. Is not medically cleared for use of a respirator.  Workload Limitations:  Understricted	imitations:  dium   Light    edical evaluation(s). The recommended follow-up    are at or above the action levels    om this respirator clearance form is provided has				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations.  Is medically cleared for use of the respirator(s) with the following limitations:  Under the conditions with the following limitations.  Workload Limitations:  Understricted Heavy Medical Evaluations  This individual will will not (circle one) require additional follow-up mevaluations, if necessary are as follows:  Personal Medical Condition  Medical surveillance program required if exposure risks to as defined by OSHA regulation.  Employee Notification: I certify that the above named individual for who	imitations:  dium				
Respirator Clearance Under the conditions described in the above information provided by the Is medically cleared for use of the respirator(s) without limitations.  Is medically cleared for use of the respirator(s) with the following limitations:  Us not medically cleared for use of a respirator  Workload Limitations:  Workload Limitations:  Unrestricted  Heavy  Medical Evaluations  This individual will will not (circle one) require additional follow-up measulations, if necessary are as follows:  Personal Medical Condition  Medical surveillance program required if exposure risks to as defined by OSHA regulation.  Employee Notification: I certify that the above named individual for whe received a copy of this recommendation. (initial)	imitations:  dium				

#### 05/11/2010

LAST NAME WISECUP FIRST NAME EARNEST

#### FIT TEST REPORT

177	NUM	000	6073
112	LAST MI	856	1711/X

LAST NAME WISECUP

FIRST NAME EARNEST

CUSTOMI

CUSTOM2

COMPANY PERFORMANCE ABATEMEN

CUSTOM3 **CUSTOM4** 

LOCATION

NOTE

TEST DATE 05/11/2010 PORTACOUNT SIN

80247793

TEST TIME 18:59

N95-COMPANION

N

DUE DATE 05/11/2011

RESPIRATOR

NORTH 76008A FULL FACE

PROTOCOL

OSHA 29CFR1910.134

MANUFACTURER

NORTH

PASS LEVEL

500

MODEL 76008A

MASK STYLE FULL FACE APPROVAL

MASK SIZE M/L

EFFICIENCY <99%

EXERCISE	DURATION (sec)	FIT FACTOR	PASS
NORMAL BREATHING	60	2980	Y
DEEP BREATHING	- 60	1350	Y.
HEAD SIDE TO SIDE	60	2190	Y
HEAD UP AND DOWN	60	1370	¥
TALKING	60	2740	¥
GRIMACE	15	Exct.	
BENDING OVER	60	3480	Y
NORMAL BREATHING	60	10900	¥

**OVERALL FIT FACTOR** 

2327

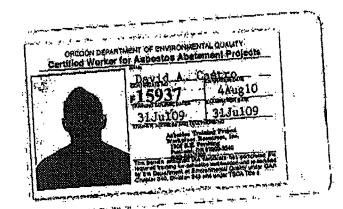
FITTEST OPERATOR

EARNEST

DATE 5 11 10

NAME

WISECUP



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Employee Name:\_

### RESPIRATOR FIT TESTING FORM

S.S. No.

Model:\_

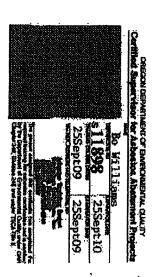
Respirator Manufacturer: Vorest	Model: 770-0
Approval Number:	Size:
Test conductor: Ray C. Ceffe	C Test Date: 11.20.09
Circle the type of test protocol	
SACCHARINE BANANA OIL	PROTOCOL: INDIMAT SALVICE
comfortable.  2. Perform positive and negative user seal checks, Platte challenge media around the respirator. Do not a Breathe normally for 1-minute.  b. Breathe deeply for 1-minute.  c. Turn head from side to side for 1-minute.  d. Nod head up and down for 1-minute.  c. Read the "Rainbow passage" or talk for 1-minute.  When the sunlight strikes rejindrops in the air to the ends apparently beyond the horizon. There is the sunlight strikes rejindrops in the air to the ends apparently beyond the horizon. There is the sunlight strikes rejindrops in the air to the end of the rainbow.  f. Grimson for 15 Seconds:  g. Band over as in touching your toes, or if not poth. Breathe normally for 1-minute.  4. If banana oil is smalled or the saccharine is tasted.	te: they act like a prism and form a rainbow. The rainbow is a division of the halps of a jong round arch, with its path high above, and its a specifing to legend, a boiling pot of gold at one end. People took, something beyond his reach, his friends say he is looking for the pot assible took in place, for 1-minute the respirator test is failed. A different respirator must be selected, the respirator test is failed. A different respirator must be selected, the respirator test is failed.
PASSED	FAILED
Remarks:	
Test conductor initial ful	Expiration Date: //. 20. 200
	8-28

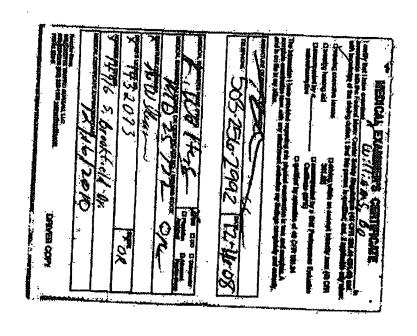
# Concentra Medical Centers 12518 NE Airport Way \$130 PORTUNIO, OR 87230 Phone: (503) 256-2992 Fax: (503) 246-0737 Medical Surveillance - Asbestos

Service Date: 11/19/2009

Patient:	Castro, David A.	Job Title:		
	XXX-XX-2824	Employer:	Performance Abate	ement Service
	09/09/1987		13600 NE 10th Ave	
Gender:				hadradan had
Marital Status:			Vancouver, WA 98	6852677
		Job Contact:	Ryan Leffel	<del>44</del>
Address:	4607 Adobe St SE	Role:	Primary Contact	-
	SALEM, OR 97317	Phone:	(360) 574-8400 E	<u> </u>
Home Phone:	(971) 240-9130	Fax:	(360) 574-7607	
Work Phone:		Race:	ASIAN BLACK H	ISPANIC INDIAN WHITE OTHE
The following w	h and review of the standardized med	ical questionnaire	29 CFR 1926 40 CFR 763.	121.
pulmonan	, cardiovascular, and gastrointestinal	systems per Appe	ndix D in:1926.1101.	
Review of represent	the employers description of: this en ative or anticipated exposure level, an	nployee's duties as d personal protect	they relate to the emion equipment to be u	ployee's exposure, the employee's lilized by the employee.
Beview of	Information from previous medical ex	aminations if availa	able.	•
A physica	l examination with emphasis upon the	pulmonary, cardio	vascular, and gastroir	ntestinal systems:
A pulmon	ary function test of forced vital capacit			
	pentgenogram, posterior-anterior, 14x1 3.1101. (M)(2)(ii)(C),	7 inches (or curre	nt film on file) with inte	erpretation in accordance with 29
NOTE: A is required	ocording to 29 CFR 1926.1101 (M)(2)( d.	(ii)(C), it is up to the	e discretion of the phy	sidan whether or not a chest X-ray
7 from asbe	oyee was informed by the physician of istos exposure including the increased exposure.	f the results of the I risk of lung cance	exam and of any med ar attributable to the co	ical conditions that may result embined effect of smoking and
employee at an inc	noted below, this evaluation indicates to creased risk of material health impairm imployee concerning the use of person	ent from exposure	to asbestos, and thei	itions that would place the re are no recommended
Comments or limit	ations (if-any);			
				,
	7	1		
**************************************	asher al	K		11/19/09
	Provider S	ighaline 00		Date

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#### Concentra Medical Centers

12518 NE Airpon Way #110 PORTLAND, OR 87230. Phone: (503) 258-2992 Fax: (503) 258-0717

### RESPIRATORY FIT TEST ASSESSMENT RECORD

Service Date:	02/19/2010	Respirator Type:	North	
Employee Name:	Williams, Bo	Respirator Model:	7700 -304	
Employee SSN:	XXX-XX-3378	Cartridge Type:	Almth	
Employer:	Performance Abatement Services	Anticipated Usage:	Minutes/day	
Department:		Size-Large	Hours/day Days/week	
Qualitative Fit Test	QLFT) Protocol used:	Exercise (each exercise sh		
Discamyl Acetate (R	espirator must be equipped with an organic vapor filter)	except for grimace which s	shall be conducted for 15	seconds)
DSaccharin Solution	Must use DeVilbiss Model 40 Inhalation Medication	Breathing		۸۰
Nebulizeror equiva		Normal	Page	Fail
Bilrex (Denatonium		Deep:	Pass	Fall.
Quantitative Fit Test	(QNFT) Protocol used:	Head-	Päss	Fail
D Test Cham	ber: Circle one of the following:	Turn Left	Pasa	Fail
Corn Oil		Turn Right	Pass	Pall
Polyethylene glycol	400 (PEG 400)	Side: Left	SPasse.	Fall
di-2-elhyi hexyl sebi	ecéle (DEHS)	Side: Right	Page	) Fail
Sodium Chloride		Move Up	Pass	) Fail.
	H Counter: ambient aerosol	Move Down	Pass	Fail
Yes No Subject don	med respirator at least 5 minutes prior to assessment	Talking	- Anti-	
(Yes) No Subject con	ducted user seat check	Name	( Pass_	<i>→</i> Fail
Yes No Apparel Inte	erfering with a satisfactory fit must be removed or altered.	SSN#	Pasa	Ç Fail:
Yes No Subject give	en a description of the fit test and his/her responsibilities	Read	Pase	Fall
prior to ass		Rainbow Passage obsen	ved by tester Pass	) Fail
Yes No Subject wor	re applicable safety equipment during fit test	Facial Expressions		<b>\</b>
Assessment of Com	fort (C: Comfortable, NC: Not Comfortable)	Grimace	Pass	/ Fall
	the mask on the nose	Smile	Pess	🤇 Fali
NC Room for e		Frown	Pass	) Fail
NC Room to tal		Body Movement	ساللت مرمو	Ġ
(C) NC Position of	mask on face and cheeks	Bend at waist	Pass	Fall
	(A: Adequate, NA: Not Adequate)	Jog in place	P850	Fail
(A) NA Chin proper		Subject rates comfort of res	spirator: 1 2 3 4 5	6 7 8 9 10
( ) The second of the second o	trap tension, not overly light		Least	
NA Fit across r		Yes/No Subject made no a		
	to span length from nose to chin		• • • • • • • • • • • • • • • • • • • •	
Y ./1	of respirator to slip	Assessment (CHECK -/ Al	LL THAT APPLY)	
NA Subject obs	served self in mirror to evaluate fit and position.	Test discontinued due to:		
Physician's Comm	ents	D Hair growth; bear	rd, mustache, sidebums whi	ich cross respirator
••		sealing surface,		
<del></del>	<del></del>	- D Difficulty breathing	19, or	
	<del></del>	- D Comfort or Fit of r		e to employe <del>e</del> .
		<ul> <li>Recommendation</li> </ul>	n(s)	
Passed Fit	Test			
☐ Failed Fit T	es!			
D. Applicant b	resents for fit testing only. Respiratory clearance not pres	sented.		
/ \ /	14			
Kerke	7 Mag e/ez j			

This record is to be maintained by the employer in accordance with 29 CFR 1910.134 Paragraph (m) (2)(I)(A) - (E). Re-testing must occur ANNUALLY as long as the employee is required to wear a respirator.

# Concentra Medical Centers 12518 NE-Arpantway #110 PORTLAND, OR 97230 Phone: (503) 255-2992 Fax (503) 255-0717 Medical Surveillance - Asbestos

Service Date: 02/19/2010

Patient:	Williams, Bo	Job Title:		
	XXX-XX-3378		Performance Abatement Serv	rice
	08/08/1951		13600 NE 10th Ave	ngui-guad
Gender:		<del></del>		
Marital Status:			Vancouver, WA 986852677	officers of the second
		Job Contact:		
Adaress:	14916 S Brookfield Dr	,	Primary Contact	
	OREGON CITY, OR 97045		(360) 574-8400 Ext.:	
Home Phone:	(503) 723-0665	Fax:	(360) 574-7607	·······
Work Phone:	(360) 574-8400 Ext.:	- Race:.	asian black hispanic i	NDIÁN WHITE OTHER
Thiệ abové Individ	lual was seen on 02/19/2010 in a	accordance with:	29 CFR 1926.1101. 40 CFR 763.121	
The following w	as performed:			
Completion pulmonary	n and review of the standardized me , cardiovascular, and gastrointesting	edical questionnaire: al systems per Appel	and work history with special emp ndix D in 1926.1101.	inasis directed to the
Review of represents	the employer's description of: this ative or anticipated exposure level, a	employee's duties as and personal protecti	they relate to the employee's exp on equipment to be utilized by the	osure, the employee's employee.
Review of	information from previous medical e	examinations if availa	able.	
A physical	examination with emphasis upon th	ne pulmonary, cardio	vascular, and gastrointestinal sys	tems.
	ary function test of forced vital capac H and ATS standards:	city (FVC) and forced	expiratory volume at one second	l (FEV:1) in accordance
	entgenogram, posterior-anterior, 14 :1101. (M)(2)(II)(C).	x17 inches (or currer	nt ilijm ớn tile) with interpretation ir	i accordance with 29
NOTE: Ac	cording to 29 CFR 1926 1101 (M)(2	2)(ii)(C), it is up to the	e discretion of the physician whelf	ner or not a chest X-ray
The emplo from asbes	yee was informed by the physician stos exposure including the increase exposure.	of the results of the e ed risk of lung cence	exam and of any medical conditions r attributable to the combined effe	ns that may result act of smoking and
employee at an inc	oted below, this evaluation indicates reased risk of material health impair mployee concerning the use of pers	rment from exposure	to asbestos, and there are no rec	ould place the commended
Comments or limits	ntions (if any):	begins	3 DINNUM	5 Mex
- Yall		-	***************************************	. A
<del>()</del>		1/		
·····		10	2	19/11
	Provider	Signature		Date



## Scott R. Martin

Has completed the Oregon Worker Asbestos Course, Portland, OR, has passed the exam and satisfied all the AHERA, ASHARA, and TSCA/Title II requirements on December 8-11, 2009.

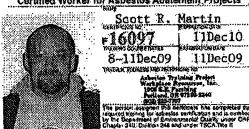
Asbestos Training Project
Workplace Resources, Inc.
1908 SE Pershing St, Portland, OR 97202
(503) 233-7707

Edwin E. Edinger, Manager

Expire Date: December 11, 2010

Certification No.: F16097

onegon benantinent of environmental culality Certified Worker for Asbestos Abstement Projects



#### Concentra Medical Centers

12518 NE Airport Way #110 PORTLAND, OR 97230 Prone: (503) 256:2992 Fax: (503) 258-07.17

#### RESPIRATORY FIT TEST ASSESSMENT RECORD

Service Date:	12/14/2009	Respirator Type:	take	1881	<u> </u>
Employee Name:	Martin, Scott R.	Respirator Model:	NOVA		
Employee SSN:	XXX-XX-2889	Cartridge Type:	314		
Employer	Performance Abatement Services	Anticipated Usage:	GODE Minu	les/day	<del></del>
Départment:			10 Hour	s/day	
			Days	/week	
Qualitative Fit Test I	QLFT) Protocol used:	Exercise (each exercise	shall be conducte	ad for one mir	nute
	espirator must be equipped with an organic vapor filter)	except for grimace which			
	Must use DeVilbiss Model 40 Inhalation Medication	Breathing		-	
Nebulizer or equiva	lent)	Normal		(Pass	Fail
Denatorium		Deep		Pass	Fall
	(QNFT) Protocol used:	Head		(Pass)	Fail
	ber. Circle one of the following:	Turn Left		Pass	Fail
Corn Oil	, , , , , , , , , , , , , , , , , , ,	Turn Right		Pass	Fail
Polyethylene glycol	· · · · · · · · · · · · · · · · · · ·	Side: Left		Pass	Fail
di-2-ethyl hexyl seba Sodium Chloride	acale (DEHS)	Side: Right		7455	Fáil
	Counter: ambient aerosol	Move Up		Pass	Fail
	ned respirator at least 5 minutes prior to assessment	Move Down	,	Pass >	Fail
	ducied user seal check	Talking			:.
	removed or altered.	Name		Pass	Fail
	en a description of the fit test and his/her responsibilities	SSN#		Pass	Fail
prior to asse		Read	فمدمط ببط استس	Pass	Fail Fail
Yes No Subject wor	e applicable safety equipment during fit test	Rainbow Passage obs Facial Expressions	erved by tester .C		ган
Assessment of Com	fort (C: Comfortable, NC: Not Comfortable)	Grimace		Pass	Fail
	he mask on the nose	Smile		Spass 5	Fail
NC Room for ey		Frown		Pass	Fail
NC Room to tall	•	Body Movement			
<b>4</b> .	hask on face and cheeks	Bend at walst.		P155	Fáji
Z. 1	A: Adequate, NA: Not Adequate)	Jog in place		CE343	Fall
NA Chin properi	y piaced trap teosion, not overly tight	Subject rates comfort of r	espirator: 1 2	3 4 5 6	7 8 9 109
NA Fil across no			•	,,,	Mosi
	tò span length from nose to chin	Yes: No Subject made no	o altempl(s) to adju	si respirator di	iring assessment
	f respirator to slip	Assessment (CHECK -	•		
*2X	erved self in mirror to evaluate fit and position.	Test discontinued due to:		,	
Physician's Comme	ents	Hair growth; be		ebirns which'r	ross respirator
i Wandiku a odunin	a (138	sealing surface		south Minds o	
<del></del>		D Difficulty breath			
~:·····	· · · · · · · · · · · · · · · · · · ·	O Comfort or Fit of	of respirator was un	acceptable to	employee.
<del>}</del>		Recommendati	ion(s)	·	
		•	· · · · · · · · · · · · · · · · · · ·		
Passed Fit T	Fest.				
1-14-44-11-1					
D Failed Fit Te	est				
	and the same of th				
☐ Applicant en	fold of lit testing only. Respiratory clearance not prese	nled.			
	7.47 -				
	y com				
•	Technician				

This record is to be maintained by the employer in accordance with 29 CFR: 1910.134 Paragraph (m).(2)(I)(A) - (E).
Re-testing must occur ANNUALLY as long as the employee is required to wear a respirator.

#### Concentra Medical Centers 12518 NE Airport Way #110 PORTLAND, OR 197230 Phone: (503) 256-2692 Fax: (503) 258-0717 Medical Surveillance - Aspestos

Service Date: 12/14/2009

Patient:	Martin, Scott:R:	Job Title:	
	XXX-XX-2889	<b></b> '	Performance Abatement Service
	08/18/1976	_	13600 NE 10th Ave
Gender:			
Marital Status:		<del></del>	Vancouver, WA 986852677
		Job Contact:	Ryan Leffel
Address:	PO Box 112	- Role:	Primary Contact
	YACOLT, WA 98675	Phone:	(360) 574-8400 Ext.:
Home Phone:	(360) 686-0984	Fax:	(360) 574-7607
Work Phone:	(360):852-6035 Ext.:	- Race:	ASIAN BLACK HISPANIC INDIAN WHITE OTHER
The above individ	dual was seen on 12/14/2009 In a	accordance with:	29 CFR 1926.1101. 40 GFR 763.121.
The following w	as performed:		
	n and review of the standardized m cardiovascular, and gastrointestin		and work history with special emphasis directed to the ndix D in 1926:1101.
Review of represents	the employer's description of: this salve or anticipated exposure level, a	employee's duties as and personal protecti	they relate to the employee's exposure, the employee's on equipment to be utilized by the employee.
Review of	information from previous medical of	examinations if aveila	ble.
☐ Ä physical	examination with emphasis upon the	ne pulmonátý, cardio	vascular, and gastrointestinal systems.
A pulmone	•		expiratory volume at one second (FEV 1) in accordance
	entgenogram, posterior-anterior, 14 .1101. (M)(2XII)(C).	x17 inches: (or currer	nt film on file) with interpretation in accordance with 29
NOTE: Ad		2)(ii)(C), it is up to the	discretion of the physician whether or not a chest X-ray
	stos exposure including the increase		exam and of any medical conditions that may result r attributable to the combined effect of smoking and
employee at an inc	oted below, this evaluation indicate reased risk of material health impair mployee concerning the use of pers	ment from exposure	stected medical conditions that would place the to asbestos, and there are no recommended iment or respirator.
Comments or limita	ilions (if any):		
······································	<del>alla esta de la composition de la comp</del> Nota	~~)	*
			:
and the second s		- Commission	1. 1. 15 A
		Assertion 1	12/14/199
	Provider	Signature	Date /

CONTROL OF CANADAMENTAL OUALITY
COntilled Worker for Aspesios Abstement Projects

Fernando A. Arangute
Fernando A. Arangute
File 1643
This control of the second of the



CFEECU DEPARTUENT CE DALIFONNIE TAL CUALITY
Cartiffed Worker for Asbestos Abatement Projects

Fernando A. Arangute

Arangute

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#### **Concentra Medical Centers**

12518 NE Airport Way #110 PORTLAND, OR 97230 Phone: (503) 256-2992 Fax: (503) 258-0717

#### RESPIRATORY FIT TEST ASSESSMENT RECORD

Service Date:	06/02/2010	Respirator Type:	Nos		
Employee Name:	Arangute Garcia, Fernando	Respirator Model:		-30/>	
Employee SSN:	XXX-XX-8730	Cartridge Type:	00	<u>P 2 7 A</u>	9
Employer:	Performance Abatement Services	Anticipated Uşage:	Minute	es/day	•
Department:		Metion .	Hours		
			Days/	week	
Qualitative Fit Test (	QLFT) Protocol used:	Exercise (each exercise sha	ill be conducte	d for one mi	nute
	espirator must be equipped with an organic vapor filter)	except for grimace which st	nall be conduct	led for 15 sec	:onds)
☐Saccharin Solution (	Must use DeVilbiss Model 40 Inhalation Medication	Breathing			
Nebulizer or equiva		Normal		Pass	Fail
Bitrex (Denatonium		Deep		/ Pass \	Fall
•	(QNFT) Protocol used:	Head		Pass	Fail
	ber: Circle one of the following:	Turn Left	ļ	Pass	Fail
Corn Oil	400 /PEC 400)	Turn Right	1	Pass	Fail
Polyethylene glycol di-2-ethyl hexyl seba	•*	Side: Left		Pass	Fail
Sodium Chloride	acate (DEno)	Side: Right		Pass	Fail
	el Counter: amblent aerosol	Move Up	'	Pass	Fall
•	aned respirator at least 5 minutes prior to assessment	Move Down		Pass	Fail
1 1	ducted user seal check	Talking		Pass	Faii
	erfering with a satisfactory fit must be removed or eltered.	Name SSN#		Pass	Fail
	en a description of the fit test and his/her responsibilities	, 55N# Read		Pass	Fail
prior to asse	essment.	Rainbow Passage observe	d by tester	Pass	Fail
	e applicable safety equipment during fit test	Facial Expressions	- u,	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Assessment of Com	fort (C: Comfortable, NC: Not Comfortable)	Grimace		Pass	Fail
<b>\</b>	the mask on the nose	Smile		Pass )	Fail
C NC Room for ey	•	Frown		Pass	Fail
C NC Room to tall		Body Movement		$\nearrow$	
	mask on face and cheeks	Bend at waist		/Pass )	Fail
A NA Chin proper	A: Adequate, NA: Not Adequate)	Jog in place		Pass	Fail
	trap tension, not overly tight	Subject rates comfort of respi-	rator: 1 2 3	3 4 5 6	7 8 9 (0)
A NA Fit across n			Least -		Most
	to span length from nose to chin	Yes No Subject made no atte	empt(s) to adjus	it respirator di	ıring assessmer
	f respirator to slip	Assessment (CHECK VALL	THAT APPLY	<b>,</b>	
•	erved self in mirror to evaluate fit and position.	Test discontinued due to:		•	
Physician's Comm	ents	☐ Hair growth; beard,	mustache, side	burns which o	cross respirator
,		sealing surface,			•
		D Difficulty breathing,	, or		
		Comfort or Fit of re	spirator was una	acceptable to	employee.
		Recommendation(s	;)		•
Passed Fit	Test				
☐ Failed Fit Te	est				
Applicant pr	esents for fit testing only. Respiratory clearance not prese	inted.			
n d	7	fac !			
Klist					
	Technician				
	Leconician				

This record is to be maintained by the employer in accordance with 29 CFR 1910.134 Paragraph (m) (2)(i)(A) - (E).

Re-testing must occur ANNUALLY as long as the employee is required to wear a respirator.

: 1

Print Date: 06/02/2010 08/21/2009

## Concentra Medical Centers 12518 NE Airport Way #110 PORTLAND, OR 97230' Phone: (503) 256-2992 Fax: (503) 258-0717

#### Medical Surveillance - Asbestos

Patient:	Arangute Garcia, Fernando	Job Title:	
	XXX-XX-8730	•	Performance Abatement Service
	04/30/1973		13600 NE 10th Ave
Gender:		•	
Marital Status:	M		Vancouver, WA 986852677
A daluamas	4488 SW 201st Ave	Job Contact:	
Address:	4400 SVV 2013t AVE		Primary Contact
	BEAVERTON, OR 97007	_	(360) 574-8400 Ext.:
Home Phone:	(503) 880-7987	Fax:	(360) 574-7607
Work Phone:	Ext.:	Race:	ASIAN BLACK HISPANIC INDIAN WHITE OTHER
		Nuov.	
The above individ	iual was seen on 06/02/2010 in a	accordance with:	29 CFR 1926.1101. 40 CFR 763.121.
The following w	as performed:		
Completio pulmonary	n and review of the standardized me	dical questionnaire al systems per Appe	and work history with special emphasis directed to the and in 1926.1101.
Review of representa	the employer's description of: this e ative or anticipated exposure level, a	mployee's duties as nd personal protecti	s they relate to the employee's exposure, the employee's ion equipment to be utilized by the employee.
Review of	information from previous medical e	xaminations if availa	able.
A physical	examination with emphasis upon the	e pulmonary, cardio	vascular, and gastrointestinal systems.
	ary function test of forced vital capac	ity (FVC) and forced	d expiratory volume at one second (FEV 1) in accordance
	entgenogram, posterior-anterior, 14x .1101. (M)(2)(ii)(C).	(17 inches (or curre	nt film on file) with interpretation in accordance with 29
NOTE: A	ccording to 29 CFR 1926.1101 (M)(2	)(ii)(C), it is up to the	e discretion of the physician whether or not a chest X-ray
The emplo from asbe asbestos	stos exposure including the increase	of the results of the e ed risk of lung cance	exam and of any medical conditions that may result er attributable to the combined effect of smoking and
employee at an inc	noted below, this evaluation indicates reased risk of material health impain mployee concerning the use of perso	ment from exposure	etected medical conditions that would place the to asbestos, and there are no recommended pment or respirator.
Comments or limits	ations (if any):	· · ·	
<b>*************************************</b>	Shu Co	Signature (	w 6/2/D

Evaluation - Asbestos Medical Surveillance

Page 1 of 1

Revision Date: 07/21/1999

Service Date: 06/02/2010

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Certified Worker for Asbestos Abatement Projects



14/6/2010

THUNSH ADDRESS AND TELEPHONE TO

OSILETT (541) 745-5513

6011 NE Marcus Harris Ave.

Corvallis, OR 97330

The person assigned the certification has completed the required training for absence certification and is certified by the Department of Environmental Quelity under OAR Chapter 340, Division 248 and under TSCA Tatle II.

## Concentra Medical Centers 12518 NE Arport Way \$110 PORTLAND. OR. 97290 Phone: (503) 256-2992 Fax: (503) 256-07.17 Medical Surveillance - Asbestos

Patient:	Redman, Virginia C.	Job Title:	
SSN:	XXX-XX-3475	Employer:	Performance Abatement Service
DOB:	05/10/1955	Address:	13600 NE 10th Ave
Gender:	F		
Marital Status:	S		Vancouver, WA 986852677
Address:	7902 SE 92nd Ave	Job Contact:	Ryan Leffel Primary Contact
			· · · · · · · · · · · · · · · · · · ·
	PORTLAND, OR 97266		(360) 574-8400 Ext.:
Home Phone:	(503) 505-9373	rax:	(360) 574-7607
Work Phone:	Ext:	Race:	ÁSIÁN BLACK HISPANIC INDIÁN WHITE OTHER
	ual was seen on 06/14/2010 in ac	ccordance with:	29 CFR 1926.1101. 40 CFR 763.121.
The following wa	••		
	n and review of the standardized med , cardiovascular, and gastrointestinal		and work history with special emphasis directed to the ndix D in 1926.1101.
Review of representa	the employer's description of: this entitle or anticipated exposure level, an	nployee's duties as d personal protecti	they relate to the employee's exposure, the employee's on equipment to be utilized by the employee.
Review of	Information from previous medical ex	aminations if availa	bię.
A physical	examination with emphasis upon the	pulmonary, cardio	vascular, and gastrointestinal systems.
A pulmona			expiratory volume at one second (FEV 1) in accordance
A chest roe		(7 Inches (or cúrrer	it film on file) with interpretation in accordance with 29
-	cording to 29 CFR 1926.1101 (M)(2)(	ii)(C), it is up to the	discretion of the physician whether or not a chest X-ray
The employ	yee was informed by the physician of tos exposure including the increased	the results of the e risk of lung cancer	xam and of any medical conditions that may result attributable to the combined effect of smoking and
employee:at:an incr	oted below, this evaluation indicates t eased risk of material health impairm nployee concerning the use of persor	ent from exposure	tected medical conditions that would place the to asbestos, and there are no recommended ment or respirator.
Comments or limited	lons (if any):		
***************************************		7	
-		//	7.
		<del></del>	
			(d lnH11
	Provider S	Ignature	Date

Evaluation - Asbestos Medical Surveillance

Page 1 of 1

Revision Date: 07/21/1999

Service Date: 06/14/2010

#### Concentra Medical Centers

12518 NE Airport Way #110 PORTLAND, OR 97230 Phone: (503) 258-2992 Fax: (503) 258-0717

#### EMPLOYER AUTHORIZATION AND INFORMATION FOR RESPIRATORY EVALUATION

.:

EMPLOYER TO COMPLETE THE FOLLOWING:	Address:
Employee Name: Redman, Virginia C.	7902 SE 92nd Ave
	PORTLAND OR 97266
Employer: Performance Contracting Group	Employee SSN: XXX-XX-3475
Check Type of Respirator(s) To Be Used (Check ALL that apply)	Extent of Useage (Check VALL that apply)
Air-purifying (non-powered)  Air-purifying (powered)	On a daily basis Total Hours
Atmosphere supplying Respirator	Occasionally - but not more than twice a weekTotal Hours
Combination air-line and SCBA	Rarely - or for Emergency situations only Total Hours
Contingus:Flow Respirator Supplied-Air Respirator	Expected Physical Effort Required (Chack VALL that apply)
Open Circuit SCBA Closed Circuit SCBA	Light: Moderate Heavy
Dust Mask 1/2 Face with Canisters Full Face with Conisters	Exposure to Hazardous Materials (Check /ALL that apply)
Make: Model: Cartridge:	Arsenic Benzene
Special Work Conditions	Coke Oven Cotton Seed / Oust
(Check ALL That Apply When Wearing Respirator)	☐ Cadmium ☐ Fòrmaldehyde ☐ Lead
High Places Enclosed Places Protective Clothing	Textiles Chromium
Temperature Extremes	Other(s):
Questionare will be:	EVALUATION AUTHORIZATION BY:
	Signature of Employer Representative
PLHCP WRITTEN STATEMENT for RE	SPIRATORS (EMPLOYER)
PHYSICIAN WILL COMPLETE THE FOLLOWING	A Section 1
This report may contain confidential medical information and is intended for the designated em	ployer contact only. The Americans with Disabilities Act
(ADA) imposes very strict limitations on the use of information obtained during physical exami- niust be collected and maintained on separate forms, in separate lites, and must be treated as	nation of qualitied moviduals with the following exceptions:
Supervisors and managers may be informed about necessary restrictions on the work or d	luties of an employee and necessary accommodations:
First sid and safety personnel may be informed, when appropriate, if the disability might re	quire emergency treatment.
Based upon my findings, I have determined that this individual Gheck ALL that ap	
Employee must schedule a medical examination with Concentra Medical Cen	ters prior to respirator approval and usage.
☐ Class I - No Restrictions on Respirator Use ☐ Class II - Some Specific Use Restrictions ☐ To be used for Emergency Resp	onse ör Escape Ohly Others.
Class III - Respirator Use is NOT PERMITTED	orac or escape only
Further Testing / Evaluation is Required. 2	
Fit Test Required Fit Test Performed Satisfactorily	
Fit Test Performed Unsatisfactority	
abandurkanan diaman dia	al brezoubgou exemest urreque to accommodate resburgios
Facial hair needs to be shaved to assure tight seat on certain face masks.	
Physician or other Licensed Healthcare Professional  Employee must seek further medical evaluation by a private physician who must submit a	report to Concentra Medical Centers
of his/her findings to	
(Check ALL that apply)	
The above individual HAS been examined for respirator filness in accordance with 29 CF	R 1910 134. This limited evaluation is specific to respirator
use only. Employees should be instructed to report any difficulties in using respirators or o	change of any physical status to their supervisor or physician.
This evaluation included the Respiratory Questionnaire outlined in 29 CFR 1910.134.  The above individual HAS NOT been exemined by me for respirator filess. The employed	se's medical evaluation consisted of a review of QSHA's Medical Evaluation
Questionnaire in Appendix C Parl A Section 2. In accordance with 29 CFR 1910.134, this	fimiled evaluation is specific to respirator use only. Employees would be instructed
to report any difficulties in using respirators or change of any physical status to their supe	rvisor or physician. This evaluation included the Respiratory Questionnaire:
outlined in 29.CFR 1610.134 In accordance with specific OSHA requirements, I have informed the above named individual to the control of the c	dual of the results of this evaluation and of any medical conditions resulting from
exposures that may require butther explanation or treatment. Where applicable, the above	nismed individual has been informed of the increased risk of lung cancer
attribulable to the combined effect of smoking and asbastos, lead and/or other chemical e	exposure(s). RANCY BORNAN DO
Physician's Signature	Physician's Name (Printed)
Physician's Signature	10/14/11 10/14/11
Physician's License Number (Optional in Most States)	Date of Exam Expires On

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Certified Worker for Asbestos Abatement Projects



DON R. Cross

DON R. Cross

ERROWANTEN

F 16094

11Dec 10

TRUNKS COURSE DATE

8-11Dec 09

TRUNKS COURSE DATE

8-11Dec 09

TRUNKS CROSS COURSE NO TELEBRATE PROJECT

Abortos Truining Project

Truining Cross-1 as Project

#### **Concentra Medical Centers**

12518 NE Airport Way #110 PORTLAND, OR 97230 Phone: (503) 256-2992 Fax: (503) 256-0717

#### RESPIRATORY FIT TEST ASSESSMENT RECORD

Service Date:	40/44/0000	Respirator Type: Half	mask
Employee Name:	12/14/2009 Cross, Donald R:	Respirator Model:	2
Employee SSN:	XXX:XX-9111	Carlidge Type:	
, ., .,	Performance Abatement Services		inules/day
Employer:	Performance Adatement Services		ours/day
Department:			ays/week
Qualitative Fit Test (	QLFT) Protocol used:	Exercise (each exercise shall be condu	•••
	espirator must be equipped with an organic vapor filter)	except for grimace which shall be con-	lucted for 15 seconds)
☐Saccharin Solution (	Must use DeVilbiss Model 40 Inhalation Medication	Breathing	_
Nébulizer or equiva	lent)	Nomal	Pass Fall.
Bitrex (Denatorium		Deep	Fass Fall
	(QNFT) Protocol used:	Head	Eass) Fail
	ber: Circle one of the following:	Tum Left	Chase Fall
Corn Qil		Turn Right	Pass Fall
Polyethylene glycol	· · · · · · · · · · · · · · · · · · ·	Side: Left	Pass Fall
di-2 ethyl hexyl seba	scale (DEHS)	Side: Right	(Pass) Fall
Sodium Chloride	! Daywhay was thank warrand	Move Up	Pais Fail
	l Counter: ambient serosol ned respirator at least 5 minutes prior to assessment	Moye-Down	(Pass: Fail
	dnoted nzeuseal check uien teahuaiot at least 5 miuntes buot to assessment	'Talking	A CONTRACTOR OF THE PARTY OF TH
	inforing with a satisfactory fit must be removed or altered.	Name	Pass Fall
	en a description of the fit test and his/her responsibilities	SSN#	Pass Fail
prior to asse		Read	Pass Fail
No Subject war	e applicable safety equipment during fit test	Rainbow Passage observed by tester	Pass Fall
	fort (C: Comfortable, NG: Not Comfortable)	Facial Expressions	
	he mask on the nose	Grimace	Page Fail
NC Room for ey		Snile -	Fail
NC Room to tall		Frown	Pass Fall
(C) NC Position of	nask on face and cheaks	Body Movement	
	A: Adequate, NA: Not Adequate)	Bend at waist	Pass Fall
A NA Chin proper		họđ yu bịacë	Fass Fall
NA Adequate st	rap tension, not overly tight	Subject rates comfort of respirator: 1	,
A) NA Fil across no			st Most
	to span length from nose to chin	Yes: No Subject made no attempt(s) to a	djust respirator during assèssmen
	f respirator to stip	Assessment (CHECK VALL THAT APP	LY)
NA Subject ops	erved self in mirror to evaluate fit and position.	Test discontinued due to:	
Physician's Comme	ents	Hair growth; beard, mustache,	ideburns which cross respirator
		sealing surface.	
		Difficulty breathing, or	
-		Comfort or Fit of respirator was	unacceptable to employee.
<del> </del>		Recommendation(s)	
Passed Fit T	est		
[] Failed Fit Te	ši.		
D Applicant pre	esenti for til testing only. Respiratory clearance not prese	inted.	
	d)		
	Technician		

This record is to be maintained by the employer in accordance with 28 CFR 1910.134 Paragraph (m) (2)(I)(A) - (E).

Re-testing must occur ANNUALLY as long as the employee is required to wear a respirator.

Concentra Medical Centers: 12518:NE Aight Way #110 PORTLAND, OR 97230 Phono: (503) 256-2902 Fax: (503) 256-9717

Medical Surveillance - Asbestos

Job Title: Patient: Cross, Donald R. Employer: Performance Abatement Service SSN: XXX-XX-9111 Address: 13600 NE 10th Ave. DOB: 02/15/1971 Gender: M Vancouver, WA 986852677 Marital Status: S Job Contact: Ryan Leffel Address: 14812 NE 86th Ave Role: Primary Contact Phone: (360) 574-8400 Ext.: BRUSH PRAIRIE, WA 98606 Fax: (360) 574-7607 Home Phone: (360) 521-2633 Work Phone: Ext.: Race: ASIAN BLACK HISPANIC INDIAN WHITE OTHER The above individual was seen on 12/14/2009 in accordance with: 29 CFR 1926.1101, 40 CFR 763.121. The following was performed: Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101. Review of the employer's description of, this employee's duties as they relate to the employee's exposure, the employee's representative or anticipated exposure level, and personal protection equipment to be utilized by the employee. Review of information from previous medical examinations if available. A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems. A pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV 1) in accordance with NIOSH and ATS standards. A chest roentgenogram, posterior-anterior, 14x17 inches (or current film on file) with interpretation in accordance with 29 CFR 1926.1101. (M)(2)(li)(C). NOTE: According to 29 CFR 1926,1101 (M)(2)(ii)(C), it is up to the discretion of the physician whether or not a chest X-ray is required. The employee was informed by the physician of the results of the exam and of any medical conditions that may result from asbestos exposure including the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure. Unless otherwise noted below, this evaluation indicates that there are no detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employée concerning the use of personal protective equipment or respirator. Comments or limitations (if any): Provider Signature KAVIN WALTERS, MD

Evaluation - Asbestos Medical Surveillance

Page 1 of 1

Revision Date: 07/21/1999

Service Date: 12/14/2009

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Certified Worker for Asbestos Abatement Projects



ANDREA CAPPELL

ANDREA CAPPELL

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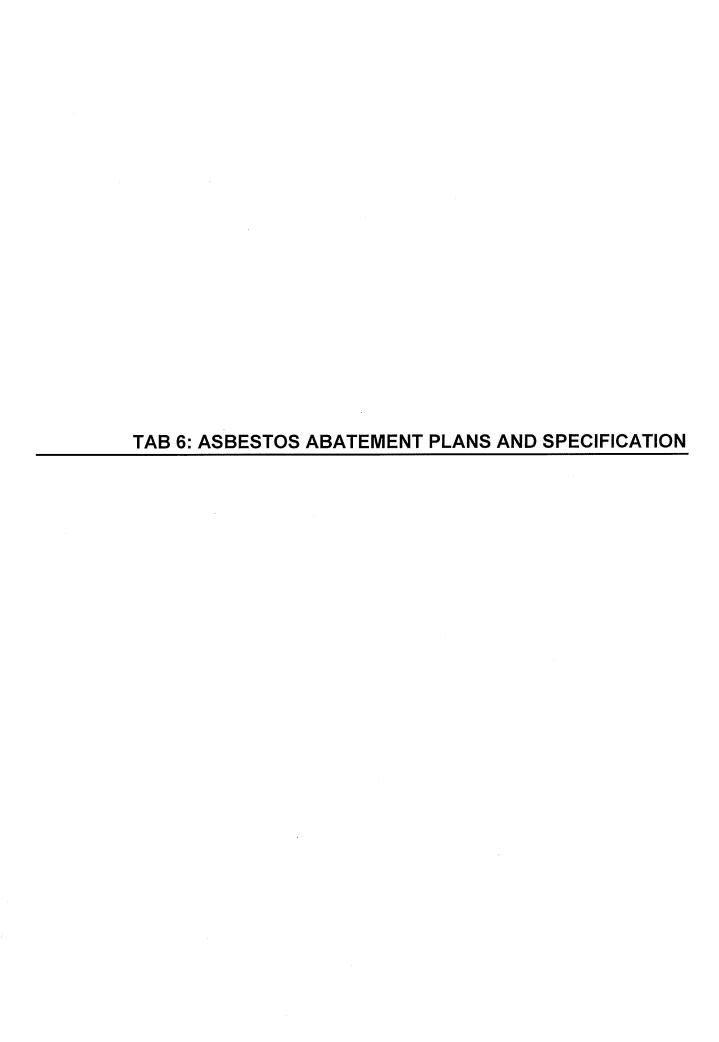
### RESPIRATOR FIT TEST RECORD

A.	EMPLOYEE: Andrea Cappello Date 06-10-10
	Employee Job Title/Description: AS bestos Revvova
в.	Project Name PERFORMANG ABANDANA
	Project No.
į	$\cdot$
C.	Respirator Selected: HAVE MASK MOOGUM  Manufacturer - NOOTH Model 7200 - 2000
	NIOSH approval Number: DIOO Model: 7700 -50M
Ď,	Chairmin miletan and the second and
.μ,	Conditions which could affect Respirator Fit; (Circle any that apply)  Clean Shaven Facial Scar Dentures Absent
	1-2 Day Beard Growth Glasses None of these
	2+ Day Beard Growth Moustache Comments/Other
E	Fit.Testing:
	Qualitative: Bitrex Irritant Smoke Saccharine Quantitative: Pass Pass Pass
	Fail Fail Fail
	Fit Factor -
	Comments -
F.	Employee Acknowledgement of Test Results:
	Employee Signature: And Cundly Date: (0-11)-10
	and the state of t
	Test Conducted By: Nathan Lee 44 Date: 06.10
,, o,, a	AIMER: This respirator fir test(s) training was performed on and by the persons listed. The results indicate the performance isted respiratory protective device under controlled conditions, as tested on the employee named. Hit testing, as performed,
onduci	ior express or imply so guarantee that this or any identical resultance protective device will provide adequate protection and the provider adequate protection and the provider adequate protection and the protection and th
MIGHT.	ons other than were present when this test was performed. Improper use, maintenance, or application of this or any other by protective device will reduce or eliminate protection.

## Concentra Medical Centers 3449 N Actor St Ste 300A PORTLAND, OR 97217 Phone: (503) 283-9013 Fax: (503) 283-9765 Medical Surveillance - Asbestos

Service Date: 06/10/2010

Patient:	Cappello, Andrea J.	Job Title:		
	XXX-XX-1160		Performance Abatemen	nt Service
DÖB:	04/28/1981		13600 NE 10th Ave	
Gender:				Committee of the commit
Marital Status:	,		Vancouver, WA 986852	267.7
Addrage	3665 NE Merges Dr	Job Contact:		Carrante Contraction Contracti
Address,	anda IAE Met Dea Di		Primary Contact	<del>ferdinal desirations</del> ,
	PORTLAND, OR 97212		(360) 574-8400 Ext.:	<del>Magazinas in Joseph M</del> .
Home Phone:	(503) 729-1851	Fax:	(360) 574-7607	Angus de Ang
Work Phone:	Ext.;	Racet	ASIAN BLACK HISPA	NIC INDIAN WHITE OTHER:
	ual was seen on 06/10/2010 in a	ccordance with:	29 CFR 1926.110 40 CFR 763,121.	1.
The following wa	·			~ . ~
	n and review of the standardized mei cardiovascular; and gastrointestina			al emphasis directed to the
Review of representa	the employer's description of: this entity or anticipated exposure level; or	mployee's dulies as	they relate to the employed	e's exposure, the employee's by the employee.
	nformation from previous medical ex			
<b>b</b> .	examination with emphasis upon the			al systems.
A pulmonal with NIOSE	y function test of forced vital capacil Land ATS standards	y (FVC) and forced	expiratory volume at one s	econd (FEV 1) in accordance
No Archest roe CFR 1926.	nigenogram, posterior-anterior, 14x 1101. (M)(2)(ii)(C).	17 inches (or curren	t film on file) with interpreta	ition in accordance with 29
NOTE: Acc Is required.	cording to 29 CFR 1926.1101 (M)(2)	(ii)(C), it is up to the	discretion of the physician	whether or hot a chest X-ray
The employ from asbes asbestos ex	ree was informed by the physician or tos exposure including the increased xposure.	f the results of the e I fisk of lung caricer	xam and of any medical co attributable to the combine	nditions that may result at the defect of smoking and
employee at an incre	ted below, this evaluation indicates to be a second risk of material health impairm oppose concerning the use of person	ent from exposure t	to asbestos, and there are i	nat would place the no recommended
Comments or limitati	ion's (if any): News	······································		<del></del>
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		12		6/10/10
	Provider S	ignature	And the state of t	Date





#### NORTH CLACKAMAS SCHOOL DISTRICT #12

6566 SE LAKE ROAD, STE. F MILWAUKIE, OREGON 97222 PURCHASING DEPARTMENT (503) 353-6036

# Bid Specifications ASBESTOS ABATEMENT OF SIX SCHOOLS

Bid # 990-10-2800

DUE Wednesday, April 14, 2010 2:00 PM, PACIFIC TIME

PURCHASING DEPARTMENT 6566 SE Lake Road, Ste. F Milwaukie, OR 97222 503-353-6036

MANDATORY PRE-BID MEETING/WALKTHROUGH
Wednesday, March 31, 2010
\*9:00 AM, PACIFIC TIME
Facilities Department
12451 SE Fuller Road
Milwaukie, OR 97222

NOTE: All proposals are to be filed in accordance with Rules, Regulations, Statute, Ordinances, and Specifications as outlined in the attached material and as applicable by the Federal, State and Local Governments. Vendors/Contractors are advised to familiarize themselves with applicable ORS, OAR, AG Model Public Contract Rules, and UCC as applicable in Oregon. All are applicable and may not be spelled out in detail in this document.

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#### NOTE

N.C.S.D. will guarantee that we will post, by FIRST CLASS U.S. MAIL, Official Addenda to all known Plan/Specification holders of record at the PURCHASING DEPARTMENT.

N.C.S.D. will guarantee that no Addenda will be issued less than THREE WORKING DAYS prior to Bid Opening. It shall be the SOLE RESPONSIBILITY OF THE Bidder/Contractor/Vendor to be certain that he or she has received all such Addenda.

Results will not be provided by telephone. Those wishing copies of recaps are requested to submit a POSTAGE PAID, 9 X 12, SELF-ADDRESSED ENVELOPE WITH ADEQUATE POSTAGE.

Recaps will normally not be available for at least THREE WORKING DAYS after the Bid Opening, and in case of bids involving large numbers of items such as supply bids, normally not available for EIGHT to TEN WORKING DAYS OR MORE.

#### ANNOUNCEMENT OF CALL FOR BIDS

#### ASBESTOS ABATEMENT OF SIX SCHOOLS BID# 990-10-2800

#### NORTH CLACKAMAS SCHOOL DISTRICT NO. 12, MILWAUKIE, OREGON

Sealed bids will be received at the Purchasing Department of North Clackamas School District #12, 6566 SE Lake Road, Ste. F, Milwaukie, Oregon until 2:00 PM Pacific Time, Wednesday, April 14, 2010, for ASBESTOS ABATEMENT OF SIX SCHOOLS as described in the specifications on file in the Purchasing Department. Susan L. Jeremiah, Purchasing Specialist 2, is the designated District official for receipt of bids. All interested persons are entitled to attend the bid opening to be held at 6566 SE Lake Road, Milwaukie, Oregon on April 14, 2010 at 2:00 PM Pacific Time.

The work consists of procurement of all permits and removal of all asbestos-containing materials at five school locations in North Clackamas School District in Clackamas County, Oregon in accordance with the description of the project outlined on the drawings and each bid package, agreement form with revisions, general conditions with revisions, supplementary conditions, abatement and air monitoring Specifications and applicable federal, state, and local EPA, OSHA, DEQ, and AHERA regulations.

Plans and specifications may be obtained by contacting Su Jeremiah, Purchasing Specialist 2, Ph: 503-353-6036. FAX: 503-513-4010. E-mail: <a href="mailto:jeremiah@nclack.k12.or.us.">jeremiah@nclack.k12.or.us.</a> in the Purchasing Department of North Clackamas School District located at 6566 SE Lake Road, Ste. F, Milwaukie, Oregon 97222, upon deposit of such uniform amount as the District may require.

A mandatory pre-bid conference and tour of all six schools will begin at 9:00 AM Pacific Time, Wednesday, March 31, 2010 at North Clackamas School District Facilities Department located at 12451 SE Fuller Road, Milwaukie, Oregon. Maps and times for the mandatory walkthrough of each school site will handed out at this meeting. Immediately following this mandatory meeting, the Alder Creek Middle School Site (Bid Pkg. #1) will be walked and questions taken. The meeting/tour will be adjourned for lunch and will recommence at 12:15 PM at Concord Elementary and continue on to Riverside Elementary (Bid Pkg. #2) where the sites will be walked and questions taken. The meeting/tour will then continue on to the New Urban High School/Sojourner Elementary complex (Bid Pkg. #3) where the sites will be walked and questions taken. The meeting/tour will then be moved to Oak Grove and View Acres Elementary Schools where the sites will be walked and questions taken. Please check in at the main entrance of each school site. Bids for this project will be considered from only those contractors promptly attending this conference and the appropriate tour for each bid package. All others will be returned unopened. Pre-bid meeting decisions will be distributed in an addendum.

Attention is called to the provisions of the Oregon Statutes, Chapter 279. The bidder shall agree to abide by the requirements of ORS 279C.800 – 279C.870. The bid must indicate if bidder is a resident bidder as defined in ORS 279C.375 and if the contractor and subcontractors are licensed under ORS 701.005 – 701.055.

The School District reserves the right to reject any bid not in compliance with all prescribed public procedures and requirements or all bids and to waive informalities in this bid.

Formal contractor pre-qualification is not required.

Su Jeremiah Purchasing Specialist 2 (503) 353-6036

Publish: Daily Journal of Commerce Monday, March 22, 2010 .

## BID DOCUMENT AND GENERAL SPECIFICATIONS ASBESTOS ABATEMENT OF SIX SCHOOLS

BID NUMBER: 990-10-2800

#### 1. ANNOUNCEMENT OF CALL FOR BID

Sealed bids will be received at the Purchasing Department of North Clackamas School District #12, 6566 SE Lake Road, Ste. F, Milwaukie, Oregon until 2:00 PM Pacific Time, Wednesday, April 14, 2010, for ASBESTOS ABATEMENT OF SIX SCHOOLS as described in the specifications on file in the Purchasing Department. Susan L. Jeremiah, Purchasing Specialist 2, is the designated District official for receipt of bids. All interested persons are entitled to attend the bid opening to be held at the address above immediately following the bid close.

The work consists of procurement of all permits and removal of all asbestos-containing materials at six school locations in North Clackamas School District in Clackamas County, Oregon in accordance with the description of the project outlined on the drawings and each bid package, agreement form with revisions, general conditions with revisions, supplementary conditions, abatement and air monitoring Specifications and applicable federal, state, and local EPA, OSHA, DEQ, and AHERA regulations.

A mandatory pre-bid conference and tour of all six schools will begin at 9:00 AM Pacific Time, Wednesday, March 31, 2010 at North Clackamas School District Facilities Department located at 12451 SE Fuller Road, Milwaukie, Oregon. Maps and times for the mandatory walkthrough of each school site will handed out at this meeting. Immediately following this mandatory meeting, the Alder Creek Middle School Site (Bid Pkg. #1) will be walked and questions taken. The meeting/tour will be adjourned for lunch and will recommence at 12:15 PM at Concord Elementary and continue on to Riverside Elementary (Bid Pkg. #2) where the sites will be walked and questions taken. The meeting/tour will then continue on to the New Urban High School/Sojourner Elementary complex (Bid Pkg. #3) where the sites will be walked and questions taken. The meeting/tour will then be moved to Oak Grove and View Acres Elementary Schools where the sites will be walked and questions taken. Please check in at the main entrance of each school site. Bids for this project will be considered from only those contractors promptly attending this conference and the appropriate tour for each bid package. All others will be returned unopened. Pre-bid meeting decisions will be distributed in an addendum.

The Bid Announcement was published in The Daily Journal of Commerce on Monday, March 22, 2010.

#### 2. PROCUREMENT OF PLANS & SPECIFICATIONS

Plans and specifications may be obtained by contacting Su Jeremiah, Purchasing Specialist 2, Ph: 503-353-6036. FAX: 503-513-4010. E-mail: <a href="mailto:jeremiah@nclack.k12.or.us">jeremiah@nclack.k12.or.us</a>. in the Purchasing Department of North Clackamas School District located at 6566 SE Lake Road, Ste. F, Milwaukie, Oregon 97222, upon deposit of such uniform amount as the District may require.

#### 3. INQUIRIES

All inquiries regarding technical specifications in this bid should be directed to Steve Dilling, Environmental Consultant, PBS Engineering. Ph: 503-248-1939 Fax: 503-248-0223 E-mail: <a href="mailto:steve\_dilling@pbsenv.com">steve\_dilling@pbsenv.com</a>, JOANNA EVENSON, Project Manager, Ph: 503-353-7079 FAX: 503-353-6065. E-mail: <a href="mailto:jevenson@jihenri.com">jevenson@jihenri.com</a>.

All inquiries related to procedure or the actual bid documents should be directed to Su Jeremiah, Purchasing Specialist 2, Ph: 503-353-6036. FAX: 503-513-4010. E-mail: <a href="mailto:jeremiah@nclack.k12.or.us.">jeremiah@nclack.k12.or.us.</a>

#### 4. PREQUALIFICATION OF BIDDERS

North Clackamas School District requires each Contractor to provide a completed BIDDERS RESPONSIBILITY FORM to assist in our evaluation to determine the "Lowest Responsible Bidder" as required by ORS 279C.375. See: Item 15, BIDDER RESPONSIBILITY FORM for detailed submittal information. Those who are in doubt as to their qualifications are encouraged to contact the Director of Business Operations informally to determine if they are qualified. Formal pre-qualification is not required.

#### 5. BID SCHEDULE

The following schedule is provided to disclose anticipated timelines for this project. This is given for general information. The District reserves the right to adjust any dates listed below in accordance with legal requirements and Bid specifications in the best interests of the District.

AD	3/22/10
PRE-BID	3/31/10
LAST ADDENDA	4/09/10
BID OPEN	4/14/10
INTENT TO AWARD	4/22/10 APPX
BOARD AWARD	5/06/10
NOTICE OF AWARD	5/10/10 APPX
NOTICE TO PROCEED	5/21/09 APPX
PROJECT START	6/21/09 APPX (See ITEM 28, Instruction to Bidders)
PROJECT COMPLETION	Various (See ITEM 28, Instruction to Bidders)

#### 6. ADDENDA

The District will issue any approved interpretation or correction as an Addendum. No clarification, whether made orally or in writing, is effective unless made by written Addendum. Addenda shall be numbered consecutively and shall be published to all persons/planholders who attended the pre-bid meeting. Bidders shall ascertain prior to submitting their bid that they have received all Addenda issued and shall acknowledge their receipt in their bid submission.

#### 7. INTERPRETATION OF SPECIFICATIONS

No officer or employee of North Clackamas School District #12 has any authority to place any interpretation, either verbal or written, upon the foregoing or annexed specifications.

Any attempt by bidder or representative to bribe, in any manner, anyone employed by North Clackamas School District #12 could cause bidder to be debarred from any further contracts or sales to North Clackamas School District #12.

#### 8. REQUESTS FOR CLARIFICATION/CHANGE/PROTEST TO BIDDING DOCUMENTS

(A) Clarification. Two (2) days prior to the deadline for submitting a written request for change or protest, a Bidder may request that the District clarify any provision of the Bidding Documents. A Bidder shall submit such requests to North Clackamas School District Purchasing Department, Attn. Su Jeremiah, Purchasing Specialist 2, 6566 SE Lake Road, Ste. F, Milwaukie, Oregon 97222, Fax: (503)513-4010. The District's clarification to a Bidder, whether orally or in writing, does not change the Bidding Documents and is not binding on the District unless the District amends the Bidding Documents by Addendum as provided in Item 6, ADDENDA above.

#### (B) Request for Change.

(1) <u>Delivery</u>. A Bidder may request in writing a change to the Bidding Documents. A Bidder must deliver the written request for change to the District not less than 10 Days prior to Closing. A Bidder shall submit such requests to North Clackamas School District Purchasing Department, Attn. Su Jeremiah, Purchasing Specialist 2, 6566 SE Lake Road, Ste. F, Milwaukie, Oregon 97222, Fax:(503) 513-4010 Ph: (503) 353-6036.

#### (2) Content of Request for Change.

- (a) A Bidder's written request for change shall include a statement of the requested change(s) to the Bidding Documents, together with the reason for the requested change.
- (b) A Bidder shall mark its request for change as follows:
  - (i) "Bidding Documents Request for Change"; and
  - (ii) Bidding Documents.

#### (C) Protest.

(1) <u>Delivery</u>. A Bidder may protest Specifications or other terms and conditions in the Bidding Documents. A Bidder must deliver a written protest on those matters to the District not less than 10 Days prior to Closing. A Bidder shall submit such written protest to North Clackamas School District Purchasing Department, Attn. Su Jeremiah, Purchasing Specialist 2, 6566 SE Lake Road, Ste. F, Milwaukie, Oregon 97222, Fax:(503) 513-4010 Ph: (503) 353-6036.

#### (2) Content of Protest.

- (a) A Bidder's written protest shall include:
  - (i) A detailed statement of the legal and factual grounds for the protest;
  - (ii) A description of the resulting prejudice to the Bidder; and
  - (iii) A statement of the desired changes to the Contract terms and conditions, including any Specifications.
- (b) A Bidder shall mark its protest as follows:
  - (i) "Bidding Documents Protest"; and
  - (ii) Bidding Documents number
- (D) <u>District Response</u>. The District is not required to consider a Bidder's request for change or protest if it has not received the written request or protest in form required above by the deadline established for submitting such request or protest. The District shall provide notice to the requestor if it entirely rejects a request or protest. If the District agrees with the Person's request or protest, in whole or in part, the District shall either issue an Addendum reflecting its determination or cancel the solicitation. All issues with regard to clarifications, changes, or protest to the Bidding Documents must be raised pursuant to this section. Issues that could have been raised pursuant to a request for clarification, change, or protest, but were not, shall not be grounds for protest of an award. All requests received prior to said time will be reviewed and acknowledged.
- (E) <u>Extension of Closing</u>. If the District receives a written request for change or protest from a Bidder in accordance with this rule, the District may extend Closing if the District determines an extension is necessary to consider the request or protest and issue an Addendum, if any, to the Bidding Documents.

#### 9. COLLUSION

A bidder submitting a proposal hereby certifies that no officer, agent or employee of the District has a pecuniary interest in this proposal; that the proposal is made in good faith without fraud, collusion or connection of any kind with any other bidder and that the bidder is competing solely in its own behalf without connection with, obligation to any undisclosed person or firm. No employee or elected official of the District may own more than 5% of a business that is submitting a bid on any awards with the District unless it is fully disclosed in the bid documents.

#### 10. ACCEPTANCE OF CONDITIONS

Each bidder, by the submission of a bid, assents to each and every term and condition set forth anywhere in these specifications and agrees to be bound thereby.

#### 11. SUBMISSION AND OPENING OF BIDS

Each bidder is invited to bid upon any one of the items described under the general specifications or upon any number of items described or upon all the items described. Each line item will be considered a separate bid unless otherwise indicated.

IMPORTANT NOTICE: Oregon State statutes require that North Clackamas School District #12 go through a prescribed bid/quote/proposal process. A Bid is allowed under O.A.R. for certain goods or services. This Bid allows bidders the opportunity to submit to the District the bid or bids that they feel will best serve the interests of the District. The District takes the bid/quote/proposal process seriously, and it is its intent to solicit bids/quotes/proposals that are accurate and that each bidder intends to honor. Bidders are expected to submit bids/quotes/proposals that are accurate, complete and contain all terms and conditions that they feel are necessary. If after submitting a bid/quote/proposal, the bidder finds changes are necessary, the bidder may change or withdraw their bid ANY TIME UP TO the time of the bid/quote/proposal closing time.

However, after the closing time, the bid/quote/proposal MAY NOT be changed or altered in any way. If accepted, a bid/quote/proposal is considered a binding contract and non-cancelable that the bidder will be expected to honor. If for any reason the bidder does not perform, the District can be expected to take whatever action it believes appropriate, including but not limited to, the removal of that bidder name from future bid lists.

- (A) <u>Submittal Deadline</u>: Sealed bids must be received at the address below by 2:00 PM Pacific Time, Wednesday, April 14, 2010. Su Jeremiah, Purchasing Specialist 2, is the designated District official for receipt of bids. All bids must be received by the Purchasing Department of North Clackamas School District No. 12 at the address below (B) no later than the date and time specified. Late bids will be rejected. The District WILL NOT be responsible for bids delivered to any location other than the Purchasing Department. If bids are mailed or delivered to a location other than the Purchasing Department, but are not received by the Purchasing Department by the time and date of bid closing noted above, they will be rejected. *Facsimile or other electronic transmissions will not be accepted.*
- (B) Form of Submittal. All bids shall be sealed in an opaque envelope or package and addressed as follows:

NORTH CLACKAMAS SCHOOL DISTRICT #12 Attention: Su Jeremiah, Purchasing Department 6566 SE Lake Road, Ste. F Milwaukie, Oregon 97222

In addition, the name and address of the bidder and the title of the bid should be IDENTICAL in wording to that appearing on the cover of these specifications and MUST appear on the outside of said envelope. (i.e.: BID #990-10-2800 ASBESTOS ABATEMENT OF SIX SCHOOLS). Use the attached label to affix to the outside of the envelope is recommended.

Bids which are incomplete or conditioned, or which contain any erasures, alterations, addition of items not called for in the itemized bid, or that contains irregularities or any kind, or which are not in conformity with the law may be rejected.

- (C) <u>Signatures Required</u>: The bid sheet of these specifications shall be signed with ink or indelible pencil, as follows:
  - 1. In the case of an individual bidder, by such individual bidder.
  - 2. In the case of a partnership, the name of the partnership must appear on such bid and it shall be signed in the name of such partnership by at least one partner. In addition to such signature, the names of all partners shall be stated in such bid.
  - 3. In the case of a corporation, the president or other managing officer shall subscribe the corporate name, and there shall be set forth under the signature of such officer the name of the office he holds or the capacity in which he acts for such corporation.
- (D) Confidential Information The District is subject to the Oregon Public Records Law (ORS 192.410 to 192.505), which requires the District to disclose all records generated or received in the transaction of District business, except as expressly exempted in ORS 192.501, 192.502, or other applicable law. Examples of exemptions that could be relevant include trade secrets (ORS 192.501) and information submitted in confidence (ORS 192.502). The District will not disclose records submitted by a bidder that are exempt from disclosure under the Public Records Law, subject to the following procedures and limitations:

A bidder must mark all pages containing records exempt from disclosure as "confidential" and segregated in the following manner:

- 1. It shall be clearly marked in bulk and on each page of the confidential document.
- 2. It shall be kept separate from the other BID/RFP documents in a separate envelope or package.
- 3. Where this specification conflicts with other formatting and response instruction specifications, this specification shall prevail.
- 4. Where such conflict (in 3. above) occurs, the Proposer is instructed to respond with the following: "Refer to confidential information enclosed."
- 5. This statement (in 4. above) shall be inserted in the place where the requested information was to have been placed.

Bidders who desire that additional information be treated as confidential must mark those pages as "confidential"; cite a specific statutory basis for the exemption, and the reasons why the public interest would be served by the confidentiality.

The entire bid cannot be marked confidential, nor shall any pricing be marked confidential. Should a bid be submitted in this manner, no portion of it can be held as confidential unless that portion is segregated in the above manner and meets the above criteria?

Notwithstanding the above procedures, the District reserves the right to disclose information that the District determines, in its sole discretion, is not exempt from disclosure under the Public Records Law or that the District is directed to disclose by the District Attorney or a court of competent jurisdiction as the result of a public records inspection request.

- (E) <u>Acknowledgment of Receipt of Addenda</u>. A bidder shall provide written acknowledgment of receipt of all issued addenda with its bid.
- (F) <u>Bid Opening</u>. All interested persons are entitled to attend the bid opening to be held at 6566 SE Lake Road, Ste. F, Milwaukie, Oregon at 2:00 PM Pacific Time, Wednesday, April 14, 2010. Except as provided in subsection (D), above, the bids will be available for public inspection after opening.

#### 12. DURATION OF BID PROPOSALS

- 1. No bidder may withdraw his bid after the hour set for the opening thereof or before award of the Contract, unless said award is delayed for a period exceeding Thirty (30) -DAYS.
- 2. An award of the contract to any bidder shall not constitute a rejection of any other bid.

#### 13. BID GUARANTEE

Attach bid security to all proposals in the form of a surety bond, cashier's check, or certified check of the bidder in the amount equal to TEN PERCENT (10%) of the total bid amount made payable to North Clackamas School District #12 as a guarantee that the bidder will, if awarded the Contract, execute same and furnish specified Performance Bond and Payment Bond. (See: CONTRACT, PERFORMANCE AND PAYMENT BONDS, Item 14 below).

#### 14. CONTRACT, PERFORMANCE AND PAYMENT SURETY BONDS

(1) Within TEN (10) CONSECUTIVE CALENDAR DAYS after receipt of "Notice of Bid Award", the bidder to whom the Contract is awarded, shall execute a formal, written contract and shall furnish a Corporate Performance Surety Bond and a Corporate Payment Surety Bond in form and with surety satisfaction to the District in an amount equal to the full contract sum for the faithful performance and payment of said contract and all provisions thereof; provided, that the formation of said contract shall not be complete and the District shall not be liable thereon until said formal written contract has been executed both by the successful bidder and by the District and said Performance Bond and Payment Bond, properly executed, have been delivered to and accepted by the District.

The form of contract, which the successful bidder will be required to execute, is on file at the Purchasing Department of the District for inspection by bidders.

If it is determined to be in the best interests of the District to split the award of this bid and if said split results in the award of a project to a contractor for less than \$10,000.00, said Performance Bond and Payment Bond may be waived at the discretion of the District. (AG-MPC Rule 137-049-0460(3))

- (2) The Certified Check or Bid Bond of the bidder with whom the contract is entered into will be returned when said contract has been properly executed by the bidder and said Performance Bond and Payment Bond, properly executed, has been delivered to and accepted by the District. The Certified Check or Bid Bond of each bidder, who was not awarded the contract, will be returned immediately thereafter.
- (3) Any bidder or bidders to whom the contract is awarded and who shall default in executing said formal written contract or in furnishing a satisfactory Performance Bond and/or Payment Bond within the time and in the manner required by these specifications shall be liable to the District and forfeit the bid security that accompanied his bid. The bid security shall be taken and considered as liquidated damages and not as a penalty for failure of the bidder to execute the contract and bond, pursuant to ORS 279C.385.

#### 15. INSURANCE - PROOF OF COVERAGE

Work shall not commence until all insurance requirements have been met and certificates thereof have been filed with the Purchasing Department. (See: GENERAL CONDITIONS, Item 6)

#### 16. BIDDER RESPONSIBILITY FORM

North Clackamas School District requires each Contractor to provide a completed BIDDERS RESPONSIBILITY FORM to assist in our evaluation to determine the "Lowest Responsible Bidder" as required by ORS 279C.375.

The two apparent low Bidders shall complete and submit within 16 working hours of bid close, the Bidder Responsibility Form (See Sample Forms section, sample copy and submittal copy in Submittal Packet ) signed by the Bidder that states the qualifications of the firm for accomplishing the specified work on this project.

The Bidder Responsibility Form addresses the following standards of responsibility:

- 1. Evidence of previous similar projects of similar scope undertaken by the bidder and completed for local government agencies within the last three (3) years. Previous project information should include examples of scope of work similar to the North Clackamas School District project, the name of the project, the bidder's role on the project (general contractor or subcontractor), the date completed, the project engineer or architect, and the name of the public agency (include the public agency's address, phone number and contact person). To be considered for acceptance as prime contractor for this project, a bidder must demonstrate a minimum of three consecutive years experience as a general contractor in successfully executing work of the types specified. A bidder may list additional years of experience in other types of work and as a subcontractor, but these years of experience must be in addition to the minimum number of years required as a general contractor on work similar to this project and must be listed after the minimum specified experience as a general contractor.
- 2. Evidence of a satisfactory record of performance during the last three (3) years;
- 3. Evidence of sufficient financial, material, equipment, facility and expertise, necessary to meet all contractual responsibilities;
- 4. Evidence that the key subcontractors, installers and supervisory personnel proposed for this contract are qualified for the type of work specified;
- 5. Evidence of a satisfactory record of integrity. A bidder may be determined to lack integrity if the District determines the bidder demonstrates a lack of business ethics such as violation of state environmental laws or false certifications made to an agency.

The District may find a bidder non-responsive based on the lack of integrity of any entity having influence or control over the bidder (such as a key employee of the bidder that has the authority to significantly influence the bidder's performance of the Contract or a parent company, predecessor or successor entity). Copies of any letters of recommendation or appreciation from other public agencies of previous improvement projects successfully completed by the bidder would be accepted but are not required.

#### 17. REQUIRED CERTIFICATIONS/LICENSES.

- (A) <u>Nondiscrimination</u>. Each Bidder must certify that the Bidder has not and will not discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a minority, women, or emerging small business enterprise certified under ORS 200.055.
- (B) Resident Bidder. Each Bidder must identify whether the Bidder is a resident Bidder, as defined in ORS 279A.110 (4), ORS 279C.375.
- (C) <u>Construction Contractors/Landscape Contractors Board</u>. The District will not receive or consider bids unless the Bidder is licensed with the Construction Contractors Board or the State Landscape Contractors Board, as applicable. Only "General Contractor All Structures" or "Specialty Contractor All Structures" classifications are allowed on District public works projects.
- (D) <u>Public Works Bond</u>. The contractor and every subcontractor must have a Public Works Bond pursuant to ORS 279C.936 filed with the Construction Contractors Board before starting work on the Project, unless exempt under ORS 279C.836(7) or(8).

#### 18. PREVAILING WAGES

- (A) <u>Prevailing Wages Apply</u>: ORS 279C.800 through ORS 279C.870 applies to this Project. Workers shall be paid not less than the specified minimum hourly rate of wage in accordance with ORS 279C.830. The prevailing wage rates are set forth in the State of Oregon Bureau of Labor and Industries ("BOLI") publication entitled *Prevailing Wage Rates for Public Works Projects in Oregon*, January 1, 2010 and any subsequent amendments is incorporated by reference herein. THE LATEST VERSION IS PUBLISHED ON BOLI WEBSITE www.boli.state.or.us.
- (B) <u>Payment of Prevailing Wages.</u> No bid will be received or considered by the District unless the bid contains a statement by the bidder that "Contractor agrees to be bound by and will comply with the provisions of ORS 279C.840 or 40 U.S.C. 27a." See (A) above of these instructions for prevailing wage requirements,

#### 19. EQUAL EMPLOYMENT COMPLIANCE REQUIREMENT

By submitting this bid, the bidder certifies conformance to the applicable Federal Acts, Executive Orders and Oregon Statutes and Regulations concerning Affirmative Action toward equal employment opportunities. All information and reports that are required by the Federal or Oregon Governments having responsibilities for the enforcement of such laws shall be supplied to the District upon request, for purposes of investigation to ascertain compliance with such acts, regulations and orders.

#### 20. LIST OF SUBCONTRACTORS

Within two (2) working hours of the date and time of the deadline when bids/proposals are due (closing), the bidders are to submit on the document provided, a list of all first-tier subcontractors, including address, subcontract dollar value amount and type of labor or material proposed to be used on this project. This applies to subcontractors whose contract value is equal or greater than 5% of the total bid or \$15,000, which ever is larger or \$350,000 regardless of the percentage of the total bid. Within TEN (10) CALENDAR DAYS after receipt of Notice of Award, the successful low bidder will submit on a copy of a document provided, a list of all additional subcontractors and more complete information on the first-tier subcontractors, including Builders' Board registration number, proof of a filed Public Works Bond and insurance information, proposed to be used on this project. Prior to the signing of the Contract, the District will notify the bidder in writing if the Owner has substantial objection to any person or organization on such list and may, at the bidder's option, withdraw the proposal. If the bidder submits an acceptable substitute with an increase in the bid price occasioned by such substitution, the Owner may accept the increased bid price or may disqualify the bidder. No additional subcontractor may be added to this list after the submission without the written approval of the District.

It shall be the responsibility of the General Contractor to assure that all subcontractors are duly registered and have filed a Public Works Bond with the Oregon State Builder's Board and carry adequate liability and Oregon Worker's Compensation, as required.

#### 21. CRIMINAL BACKGROUND CHECK, DRUG TESTING, TOBACCO AND ALCOHOL POLICIES

The District is committed to maintaining a drug-free workplace and strictly complies with the Drug Free Work Place Act of 1988 and the Drug-Free Schools and Communities Act amendments of 1989. No alcohol, drugs, firearms or weapons are allowed on any District property. In accordance with District policy, smoking and the use of all tobacco products are prohibited on all District property.

In order to comply with ORS 279C.505 (2) and to enable the District to determine that a bidder will comply with the District's above noted policies, bidders shall submit a complete copy of their Employee Criminal Background Check, Drug/Alcohol Testing Programs with their proposals. Describe the Criminal Background Check performed of employees who will work at school sites with students. Please define the criteria for qualification/disqualification of employment of an employee with the above policies.

#### 22. OREGON PRODUCTS / SPECIFIED MATERIALS

It is distinctly understood that in the selection of equipment and supplies listed herein, preference shall be given to articles manufactured or produced within the State of Oregon, price and quality being equal and time required for delivery being satisfactory to the Board of Directors.

The use of brand names in specifying materials is for purposes of description and fixing quality only. Refer to GENERAL REQUIREMENTS, Page 3, Section 0160-01, for procedures on approval of substitutions.

#### 23. DATA SECURITY

The vendor needs to provide a Statement of Data Security. This statement will document procedures and protocols used by the vendor to secure and safeguard confidential District information. Vendor will also certify the information provided from the District will not be released or shared in any manner without the written permission of the District. Vendor will also specify the information lifecycle including how and when confidential District information will be destroyed or archived following use. Statement of Data Security must be approved by the District.

#### 24. HOLD HARMLESS

The Contractor shall hold harmless, indemnify, and defend the District, its officers, agents, and employees for all claims, suits or actions of any nature arising out of any act, error, or omission of the Contractor, its officers, subcontractor, agents or employees whether actual or alleged, and resulting in bodily injury, property damage, or personal injury, during or resulting from the work described under this contract except liability arising out of the sole negligence of the District.

#### 25. ANTITRUST CLAIMS

The vendor hereby assigns to the North Clackamas School District fully, finally, and in their entirety, any and all federal and/or state antitrust claims that the vendor now has or may hereafter acquire as a result of or in connection with any and all goods and services in the contract. Further, the vendor shall cause similar wording in favor of the District to be made a part of any and all contracts entered into with subcontractors or suppliers as a result of the primary contract. Claims shall include price-fixing, monopolization, and any other violation of state or federal antitrust law.

#### 26. TRANSFER OR ASSIGNMENT

Neither this contract nor any interest therein shall be transferred to any other party or parties, and in case of such transfer, the District may refuse to carry out this contract, either with the transferor or the transferee. All rights of action for any breach of this contract by a successful bidder are reserved to the District. No officer of said District, nor any person employed in its service, is, or shall be, permitted any share or part of this contract or any benefit, which may arise from this point on. The successful bidder further agrees to make payment promptly as due, to all persons supplying labor or material for the implementation of the work provided for herein. The successful bidder shall not permit any lien or claim to be filed or prosecuted against the District for or on account of any labor or material furnished aforesaid.

#### 27. VARIATIONS IN QUANTITIES:

The quantities and location of asbestos-containing materials (ACM) indicated on the drawings and the extent of work included in this section is only best estimates that are limited by the physical constraints imposed by occupancy of the buildings. Accordingly, minor variations of plus or minus 10 percent of the estimated quantities of ACM within the limits of containment for each abatement stage are considered as having no impact on contract price and time of this contract. Locations of ACM different than indicated on drawings, but within the limits of containment, are considered as having no impact on contract price and time of this contract. Where additional asbestos abatement work is required beyond the above variations, the contract price and time will be adjusted under provisions of the applicable contract. Additional or reduced abatement work beyond the variations stated will be a basis for adjustment of the contract price.

#### 28. PROJECT SCHEDULE:

(1)Bid Pkg. #1

Alder Creek Middle School Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances by July 7, 2010

Working Hours: 7:00a.m. to 4:30 p.m.

(2)Bid Pkg. #2

Riverside Elementary Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances for base bid and alternate work by June 30,

2010

Working Hours: 7:00 a.m. to 4:30 p.m.

Concord Elementary Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances for the Cafeteria and Office work by June 30. 2010. Base bid window removal to Start July 8, 2010 and completed July 15, 2010. Bid Alternate #1 Classroom window removal to start July 16, 2010 and completed by July 23, 2010. Bid Alternate #2 Gym window removal to start July 24, 2010 and completed by July 25, 2010.

Working Hours: 7:00 a.m. to 4:30 p.m.

(3)Bid Pkg. #3

New Urban/Sojourner Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances for all above ground abatement by July 1, 2010. Visual inspections and TEM clearances for the tunnel abatement by July 9, 2010 Working Hours: 7:00 a.m. to 4:30 p.m.

Oak Grove Elementary Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances for the Cafeteria by June 30, 2010. The start of Window and glazing putty removal is to be determined (TBD) the estimated start date is July 26, 2010 and work to be completed in conjunction with new windows installation. The bidding contractor is to assume 4 working days or sooner to complete the work. Working Hours: 7:00 a.m. to 4:30 p.m.

View Acres Elementary Start Work: June 21, 2010

Completion: Visual inspections and TEM clearances by July 5, 2010

Working Hours: 7:00 a.m. to 4:30 p.m.

#### 29. RESERVATIONS

The Board of Directors of North Clackamas School District #12 herein expressly reserves the following rights:

- (1) To reject any or all bids as permitted by Oregon Statute or Administrative Rule.
- (2) To consider the competency and responsibility of bidders and of their proposed subcontractors in making the award.
- (3) To award a contract for any one of the items described under the general specifications or upon any number of the items described therein or upon all of the items described therein, as we determine is in the best interest of the District.

- (4) In the event that two or more bids shall be for the same amount for the same item, to award the contract for such item by drawing lots between such bidders or to divide the quantity of such items equally between all such bidders.
- (5) In the event any bidder or bidders to whom the contract is awarded shall default in executing said formal contract or in furnishing a satisfactory Performance and/or Payment Bond within the time and in the manner hereinafter specified, to re-award the contract to another bidder or bidders, as provided by statute.
- (6) In the event only one bid is received, the Director of Business Operations may, at his election, return the bid unopened.
- (7) To require a signed statement from the bidder, on the product bid, to furnish any materials herein requested that does fully meet all of the specifications published in this document and the attached bid quantity listing for that material, substance or product.

**END OF INSTRUCTION TO BIDDERS** 

## **SAMPLE FORMS & DOCUMENTS**

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#### NORTH CLACKAMAS SCHOOL DISTRICT NO. 12 ASBESTOS ABATEMENT OF SIX SCHOOLS Bid #990-09-2800

Provide lump sum prices for the work as indicated below and specified. Submittal of this proposal form shall serve as representation that the presenter has read and understands the terms of the project including drawings, bid package the governing regulations, and site conditions under which the work will be executed and that the presenter has visited the site. All bids shall be in accordance with this bid package, North Clackamas School District contract and general conditions, abatement and air-monitoring specifications and applicable federal, state, and local EPA, OSHA, DEQ, and AHERA regulations.

BID PKG 1. Alder Creek middle School Total Base Bio	d \$		DOLLARS
BID PKG 2. Total Base Bid \$			DOLLARS
Breakout:  A. Riverside Elementary School \$	D	OLLARS	
B. Concord Elementary School \$	D0	OLLARS	
BID PKG 3. Total Base Bid \$	···		DOLLARS.
Breakout: A. New Urban HS / Sojourner Elementary Schools	\$		DOLLARS
B. Oak Grove Elementary School	\$		DOLLARS
C. View Acres Elementary School	\$		DOLLARS
ALTERNATES: Per the Contract Documents associ	iated with this project:		
BID PKG #2			
Alternate #1 Riverside Elementary School (addition	al window removal)	\$	DOLLARS
Alternate #1 Concord Elementary School (additional	al classroom window removal)	\$	DOLLARS
Alternate #2 Concord Elementary School (additional	al gym window removal)	\$	DOLLARS
DIDDED NAME:			

#### ASBESTOS ABATEMENT OF FIVE SCHOOLS

#### UNIT PRICES: Per the Contract Documents associated with this project:

Provide the unit prices for each item listed below. Unit prices will be used to calculate added or deducted costs from the contract sum or cost of change orders for Owner-requested un-specified additional work during the duration of the project. Change orders shall be calculated by multiplying unit price by approximate quantity indicated. Specific material unit prices shall include labor, material and markup. Unit price shall reflect all types of working conditions, establishment of a contained negative pressure regulated area, removal methods and environments such as ladder work, tunnels and difficult areas to reach.

Unit Price 1:	Cost per square foot to remove wallboard with asbestos-containing joint compound in a pre-established			
	contained regulated area.	Dollars \$	/SF	
Unit Price 2:	Cost per square foot to remove wallboard with asbestos-containing joint compound between 1 and 100			
	square feet.	Dollars \$	/SF	
Unit Price 3:	Cost per square foot to establish a regulated area and remove wallboard with asbestos-containing joint			
	compound between 101 and 1000 square feet.	Dollars \$	/SF	
Unit Price 4:	Cost per penetration to remove wallboard with asbestos-containing joint compound in multiple locations			
	using a direct HEPA vacuum at the point of penetration, drop	cloth and wet meth	ods for small	
	penetrations (<15 square inches) needed by the general contractor.	Dollars \$	<u>/EA</u>	
Unit Price 5:	Cost per square foot for removal of asbestos-containing floor tile w	vith asbestos-contair	ning mastic on	
	concrete substrate.	Dollars \$	/SF	
Unit Price 6:	Cost per square foot for removal of asbestos-containing floor tile with asbestos-containing mastic on			
	wood substrate.	Dollars \$	/SF	
Unit Price 7:	Cost per square foot for removal of asbestos-containing floor tile with asbestos-containing mastic on			
	concrete substrate with carpet.	Dollars \$	/SF	
Unit Price 8:	Cost per square foot for removal of asbestos-containing floor tile w	vith asbestos-contain	ing mastic on	
	wood substrate under plywood and carpet.	Dollars \$	/SF	
Unit Price 9:	Cost per glove bag to remove a single or multiple asbestos-containir	ng mudded hard fittii	nas or up to 3	
	linear feet of pipe insulation.	Dollars \$	/GB	
Unit Price 10.	Cost per linear foot to remove asbestos-containing pipe insulation betw	een 2 and 8 inches i	n diameter.	
	cook por imour look to remove descence containing pipe medicine setti	Dollars \$	/LF	
BIDDER NAME	:·			

Unit Price 11:	Cost per linear foot to wrap and cut pipe with asbestos-containing insulation between 2 and 8 inches in			
	diameter.	Dollars \$	/LF	
Unit Price 12:	Cost per each to remove sinks asbestos-containing undercoating.	Dollars \$	/EA	
Unit Price 13:	Cost per square foot to remove non-asbestos chalk or tack boards with asbestos-containing mastic and			
	scrape the remaining mastic off the wall.	Dollars \$	<u>/EA</u>	
Unit Price 14:	Cost per hour for an asbestos abatement supervisor to perform addition			
	course of this project.	Dollars \$	/HR	
Unit Price 15:	Cost per hour for an asbestos abatement worker to perform additional work as requested during the			
	course of this project.	Dollars \$	/HR	
Unit Price 16:	Cost per mobilization to return to the site for additional asbestos abatement. Dollars \$ /MOB			
Unit Price 17:	Cost per linear foot to remove asbestos-containing window putty or caull	k. D <u>ollars \$</u>	/LF	
Unit Price 18:	Cost per square foot for removal multiple layered flooring with mix	ed non-asbestos and	l asbestos-	
	containing floor tile with mastic sandwiched between up to two layers	of wood substrate an	d fasteners	
		Dollars \$	/SF	
Unit Price 19:	Cost per square foot to remove asbestos-containing wall plaster between	n 1 and 100 square fee Dollars\$	et. /SF	
		Dollars 5	/5/	

BIDDER NAME:

TO: NORTH CLACKAMAS SCHOOL DISTRICT 12/
The undersigned Contractor agrees to furnish, in strict compliance with the attached specifications, all labor, materials, equipment, apparatus appliances, tools, transportation and other facilities and services necessary to perform such part of the work described therein as may be awarded to the undersigned Contractor, and to perform said work in strict compliance therewith, for the amounts set forth in the proposal sheets attached hereto.
Herewith attached is a (Check proper box.)  ( ) Certified Check ( ) Cashier's Check ( ) Bidder's Bond
BIDDER'S EMPLOYER'S FEDERAL IDENTIFICATION NUMBER:
Are you as a Contractor, or any of your Sub-Contractors, currently in violation of ORS 279.350? Do you or any of your sub-contractors have monetary interest in any firm that is currently in violation, or does anyone currently in violation have monetary interest in your organization that would make you ineligible to receive Public Works Contracts?YesNo
EQUAL EMPLOYMENT COMPLIANCE REQUIREMENT: By submitting this proposal, the undersigned certifies conformance to the applicable Federal Acts, Executive Orders, and Oregon Statutes and Regulations concerning Affirmative Action toward equal employment opportunities. All information and reports required by the Federal or Oregon State Governments, having responsibility for the enforcement of such laws, shall be supplied to the District upon request for purposes of investigation to ascertain compliance with such acts, regulations, and orders.
ADDENDA: Receipt is hereby acknowledged of Addenda, through
Date/X
Builders Board Number Expiration Date
Insurance - equal to or greater than required.
Liability & Property DamageYesNo Company
Vehicle LiabilityYesNo Company
Workers' CompensationYesNo Company
Are you domiciled in the State of Oregon? YesNo Are you registered to do business in the State of Oregon? YesNo
If you are not headquartered in Oregon, do you or your firm receive, or are you or your firm eligible for, any preference in the award of contracts with your sate or with government bodies in your state?YesNo
If so, site the law or regulation (legal citation preferred):
Percent of Preference% State Preference Received
Do you have an employee drug testing program in place?YesNo Documentation of a testing program or proof of no employees <u>must</u> be submitted to Purchasing by the two apparent low bidders within 16 working hours after bid opening.

Providing incorrect information may be grounds for bid rejection or contract cancellation.

SIGNATURE FOR INDIVIDUAL (signed by individual)	
Address	X
City, State	
	(Print or Type Name)
ZipTelephone	Company
SIGNATURE FOR PARTNERSHIP (signature of one Part	ner required)
Names of Partners: (please print)	Name of Partnership:
	Address
	City, State
	ZipTelephone
	X
	(Print or Type Name)
SIGNATURE OF CORPORATION (signatures as indicated	d)
Name of Corporation:	
Address:	·
City, State & Zip:	
Telephone Number:	
Signed by:	X
Print or Type Name:	
Official Capacity (Title):	
Attest: (Secretary of Corp.)	X

(SEAL)

#### INSTRUCTIONS FOR FIRST-TIER SUBCONTRACTOR DISCLOSURE

Bidders are required to disclose information about certain first-tier subcontractors that will be furnishing labor or materials when the contract value for a Public Improvement in greater than \$100,000 (ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor is greater than or equal to: (1) 5% of the project bid, but at least \$15,000, or (2) \$350,000 regardless of the percentage, you must disclose the following information about that subcontract within two (2) hours of bid closing:

- a) The subcontractor's name
- b) The subcontractor's category of work
- c) The subcontract dollar value

If you will not be using any subcontractors that are subject to the above disclosure requirements, you are required to indicate "NONE" on the accompanying form. This must be submitted separately from your bid. Use of the attached label is recommended.

THE DISTRICT MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE (OAR 137.049.0360).

To determine disclosure requirements, the District recommends that you disclose subcontract information for any subcontractor as follows:

- 1) Determine the lowest possible contract price. That price will be the base bid amount less all alternate deductive bid amounts (exclusive of any options that can only be exercised after contract award).
- 2) Provide the required disclosure information for any first-tier subcontractor whose potential contract services (i.e., subcontractor's base bid amount plus all alternate additive bid amounts, exclusive of any options that can only be exercised after contract award) are greater than or equal to: (1) 5% of that lowest contract price, but at least \$15,000, or (2) \$350,000 regardless of the percentage. Total all possible work for each subcontractor in making this determination (e.g., if a subcontractor will provide \$15,000 worth of services on the base bid and \$40,000 on an additive alternate, then the potential amount of subcontractor's services is \$55,000. Assuming that \$55,000 exceeds 5% of the lowest contract price, provide the disclosure for both the \$15,000 services and the \$40,000 services).

THIS FORM IS DUE BY 4:00 P.M., Wednesday, April 14, 2010 FOR ASBESTOS ABATEMENT OF SIX SCHOOLS, Bid #990-10-2800.

#### NORTH CLACKAMAS SCHOOL DISTRICT NO. 12

PROJECT:

ASBESTOS ABATEMENT OF SIX SCHOOLS

BID #:

990-10-2800

**PROPOSED LIST OF SUB-CONTRACTORS:** This listing is required for <u>ALL</u> general construction projects and for any project of \$100,000 or more. Copy as needed. This form must be received within two working hours of bid submittal and again as specified in the Instructions to Bidders.

	FIRST-TIER	CATEGORY	DOLLAR
	SUBCONTRACTOR	OF WORK	VALUE
1)			
2)			
3)			
4)			
5)		· · · · · · · · · · · · · · · · · · ·	
6)			
7)			
8)			
9)			
10)			
11)			
12)			
13)			
14)			
15)			
16)			
17)			
18)			
19)			
20)			

CONTRACTOR NAME		

#### **BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we	е,
as principal(s) of	, a corporation duly organized
	, having its principal place of business at
, in the City of	, and the State of
, and authorized to	do business in the State of Oregon, as surety, are held
and firmly bound unto the NORTH CLACKAMAS	S SCHOOL DISTRICT NO. 12, Milwaukie, Oregon, in the
full and penal sum of: (\$	
	DOLLARS,
for the payment of which, well and truly made,	we bind ourselves, our heirs, executors, administrators,
successors and assigns, jointly and severally, firm	nly by these presents. The condition of this bond is such
that, whereas the principal herein is herewith sub	mitting his or its proposal for,
said bid and proposal, by reference thereto, being	made a part hereof.
NOW, THEREFORE, if the said proposal and b	id submitted by the said principal be accepted, and the
contract be awarded to said principal, and if the sa	aid principal shall enter into and execute the said contract
and shall furnish bond as required by NORTH	CLACKAMAS SCHOOL DISTRICT NO. 12, Milwaukie,
Oregon, within the time fixed by said Owner, then	n this obligation shall be void; otherwise, to remain in full
force and effect.	
Signed and sealed thisday of	200
	Company/Corporation
(CEAL)	Principal Signature
(SEAL)	
COUNTERSIGNED:	Surety
Ву;	
Residing Agent	Attorney-in-Fact

#### BIDDER RESPONSIBILITY FORM

North Clackamas School District requires each Contractor to provide a completed BIDDERS RESPONSIBILITY FORM to assist in our evaluation to determine the "Lowest Responsible Bidder" as required by ORS 279C.375.

The two apparent low Bidders shall complete and submit within 16 working hours of bid close, the Bidder Responsibility Form found in Related Forms (sample copy) and submittal copy in Submittal Packet, signed by the Bidder that states the qualifications of the firm for accomplishing the specified work for this North Clackamas School District Project.

The Bidder Responsibility Form addresses the following standards of responsibility:

- 1. Evidence of previous similar projects of similar scope undertaken by the bidder and completed for local government agencies within the last three (3) years. Previous project information should include examples of scope of work similar to the North Clackamas School project, the name of the project, the bidder's role on the project (general contractor or subcontractor), the date completed, the project engineer or architect, and the name of the public agency (include the public agency's address, phone number and contact person). To be considered for acceptance as prime contractor for this project, a bidder must demonstrate a minimum of three consecutive years' experience as a general contractor in successfully executing work of the types specified. A bidder may list additional years of experience in other types of work and as a subcontractor, but these years of experience must be in addition to the minimum number of years required as a general contractor on work similar to this project and must be listed after the minimum specified experience as a general contractor.
- 2. Evidence of a satisfactory record of performance during the last three (3) years.
- 3. Evidence of sufficient financial, material, equipment, facility and expertise, necessary to meet all contractual responsibilities.
- 4. Evidence that the key subcontractors, installers and supervisory personnel proposed for this contract are qualified for the type of work specified.
- 5. Evidence of a satisfactory record of integrity. A bidder may be determined to lack integrity if the District determines the bidder demonstrates a lack of business ethics such as violation of state environmental laws or false certifications made to an agency. The District may find a bidder non-responsive based on the lack of integrity of any entity having influence or control over the bidder (such as a key employee of the bidder that has the authority to significantly influence the bidder's performance of the Contract or a parent company, predecessor or successor entity). Copies of any letters of recommendation or appreciation from other public agencies of previous improvement projects successfully completed by the bidder would be accepted but are not required.

#### BIDDER RESPONSIBILITY FORM

All inf	formation shall be typed or pri	nted legibly	
		s form is part of the inquiry c ecified in the Instruction to Bi	oncerning bidder responsibility, an idders, Item 16.
Part A			
Submi	tted by:	nature	Date
		iature	
2.	How many years under did List different names, if any	y, and dates of operation:	ander its present business name?
۷.		organization been in business u	maer its present ousmess name?
	How many years under dif	ferent name(s)?	
	List different names, if any	, and dates of operation:	
Part B	— Complete the appropriate Po	ortion Below:	
1.	Bidder is an INDIVIDUAL	<i>:</i> :	
	Name of individual		
	Doing Business as	(First Name, Middle Initial,	Last Name)

	Bidder is a CORPORATION:
	Name of Corporation as registered with the state of Oregon:
	Date of Incorporation:State of Incorporation:
	Name of President
]	Name of Secretary
]	Name of Treasurer
]	Name of Manager
J	Bidder is a LIMITED PARTNERSHIP:
	Name of Limited Partnership as registered with the state of Oregon:
	Name of persons or parties composing the Limited Partnership (Indicate whether an individual o corporation):
-	
I H	Bidder is a GENERAL PARTNERSHIP:  Name of General Partnership  As registered with the state of Oregon:  Name of persons or parties composing the General Partnership (Indicate whether an individual ocorporation):
I A	Bidder is a GENERAL PARTNERSHIP:  Name of General Partnership  As registered with the state of Oregon:  Name of persons or parties composing the General Partnership (Indicate whether an individual ocorporation):
1 / C	Bidder is a GENERAL PARTNERSHIP:  Name of General Partnership  As registered with the state of Oregon:  Name of persons or parties composing the General Partnership (Indicate whether an individual ocorporation):
1 / 1 c	Bidder is a GENERAL PARTNERSHIP:  Name of General Partnership  As registered with the state of Oregon:  Name of persons or parties composing the General Partnership (Indicate whether an individual ocorporation):

# Part C What percent of the work do you normally perform with your own forces? 1. List Trades directly employed by you: List the Construction Equipment you own or lease long-term: 2. 3. Have you ever failed to complete any work awarded to you? \_\_\_ If so, indicate when, where, and why. Have you ever defaulted on a contract? \_\_\_\_\_ If so, indicate when, where and why. 4a. Answer yes or no What result: Lawsuit?, Judgment?, Arbitration?, Settled?, Other? (Circle the one that most applies) 4b. If other, explain: Are there currently any unpaid judgments against the business or any of its principals? 4c. If so, describe: Has any Officer or Partner of your organization ever been an Officer or Partner of another 5. Organization that failed to complete a construction contract? Answer yes or no Answer yes or no circumstances below:

6.	List major construction projects your organization currently has under contract as the general contractor:
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Contract Date:
	% Complete / Schedule Complete:
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Contract Date:
	% Complete / Schedule Complete:
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Contract Date:
	% Complete / Schedule Complete:
	Add additional sheets listing projects as required.
7.	List major projects, similar to the one being bid, that your organization completed in the particle.  () years as the general contractor
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Date Awarded:
	% completed with own forces:
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Date Awarded:
	% completed with own forces:
	Project name:
	Owner / Contact Name & Phone #:
	Architect/Engineer:
	Contract Amount / Date Awarded:
	% completed with own forces:

Add additional sheets listing projects as required.

# DIVISION C, PAGE 7 SAMPLE BIDDER RESPONSIBILITY FORM

8.	List the construction experience of the principal individuals in your Organization; which ones will be assigned to this project (including the percentage of their time to be assigned to this project):
	Individual's Name:
	Construction experience - years:
	Present position & years with organization:
	Percentage of individual's time to be assigned to project:
	Individual's Name:
	Construction experience - years:
	Present position & years with organization:
	Percentage of individual's time to be assigned to project:
	Individual's Name:
	Construction experience - years:
	Present position & years with organization:
	Percentage of individual's time to be assigned to project:
8a.	Have any of the principal individuals in your Organization been convicted under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, or receiving stolen property?  Answer yes or no  If so, describe circumstances below:
8b.	Have any of the principal individuals in your Organization been the subject to a civil judgment for fraud?  Answer yes or no  If so, describe circumstances below:
9.	Bank References:
10.	Trade References:

# DIVISION C, PAGE 8 SAMPLE BIDDER RESPONSIBILITY FORM

bond	ing capacity.
What	portion remains on this Bonding Capacity at the time of submittal of the Bid?
a curi	idder agrees to furnish, upon request by the District, within five-days after the Bid Opening, rent Statement of Financial Conditions, including Contractor's latest regular dated financial nent or balance sheet which must contain the following items:
•	Current assets: (cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits, and materials and prepaid expenses), net fixed assets and other assets.
	Current liabilities: (Accounts payable, notes payable, accrued interest on notes, provisions for income taxes, advances received from owners, accrued salaries accrued payroll taxes), other liabilities, and capital (capital stock, authorized and outstanding shares per values, earned surplus).
Date o	of statement or balance sheet:
Name	of firm preparing statement:
	Ву:
	Bidder's Initials:



# NORTH CLACKAMAS SCHOOL DISTRICT PERFORMANCE CONTRACT

This AGREEMENT, made this\_\_\_day of \_\_\_\_\_ at Milwaukie, Oregon by and between North Clackamas School

# ASBESTOS ABATEMENT OF SIX SCHOOLS Bid #990-10-2800 /Project # 2800-990-01-10

District	No. 12, hereinafter called the "Owner", ar	nd hereinafter called the "Contractor."	
WITN	ESSETH THAT:		
	ideration of the mutual covenants and cos follows:	onditions hereinafter set forth, the Owner and Contractor here	eby
1.	of all necessary materials not furnished labor, tools, equipment and transportation	I furnish and pay the cost, including all applicable taxes and fe by the Owner and shall furnish and pay for all superintenden on and perform all work required for the construction of all we schedule and the specification and requirement divisions attach be paid as required under ORS 279C.840	ice, ork
2.		follow all specifications, including those applicable to prevail involved in this contract, shall hold the Owner harmless.	ing
3.		the performance of the Contract in accordance with the ifications the total sum ofDOLLAR sum of the Combined Bid.	RS
4.	scheduled by Mr. XXXXXXX, Project M	covered by this Contract following a pre-construction meeting Manager and The Notice to Proceed and shall complete the same ecifications. The Notice to Proceed and shall complete the same ecifications.	ne
5.	The terms and conditions of the Bid do clarifications shall prevail.	cuments, Addendum and Schedules with agreed exceptions a	and
6.	The Bid documents, the Addendum and incorporated in this contract.	Schedules, with agreed exceptions and clarifications attached	are
	NESS WHEREOF, The Owner executes that and year in this contract first above written	his contract and the Contractor does sign and seal the same as n.	of
		Director of Business Operations, North Clackamas School District No. 12	
		Contractor	
		Title	

#### PERFORMANCE BOND (PAYMENT BOND-SIMILAR FORMAT)

KNOW ALL MEN BY THESE PRESENTS:
THAT,
a corporation duly organized and existing under and by virtue of the laws of the State of
as principal, and,
a corporation organized and existing under and by virtue of the laws of the State of,
and duly authorized to transact a surety business in the State of Oregon, as surety are jointly
and severally bound unto NORTH CLACKAMAS SCHOOL DISTRICT NO. 12, Milwaukie, Oregon,
in the penal sum of (\$)
DOLLARS for the payment of which we
jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns
firmly by these presents.
WHEREAS, the said principal herein has made and entered into a certain contract with NORTH
CLACKAMAS SCHOOL DISTRICT NO. 12, Milwaukie, Oregon, a copy of which contract is
hereto annexed and made a part hereof and under which contract the principal agrees to furnish
certain materials and to perform certain work consisting of

NOW, THEREFORE, if the principal herein shall faithfully and truly observe and comply with the forms of the contract and shall well and truly perform all matters and things by him undertaken to be performed under said contract upon the terms proposed therein and shall promptly make payments to all persons supplying labor or material for any prosecution of the work provided for in such contract and shall not permit any lien or claim to be filed or prosecution against NORTH CLACKAMAS SCHOOL DISTRICT NO. 12, Milwaukie, Oregon, or account of any labor or material furnished and shall promptly pay all contributions or amounts due the State Unemployment Compensation Trust Fund incurred in the performance of said contract, and shall promptly, as due, make payments to any person, co-partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention incidental to sickness

or injury to the employees of such principal, pursuant to the laws of the State and any contract entered into pursuant thereto or collected or deducted from the wages of said employees pursuant to any law, contract or agreement for the purpose of providing or paying for such services, and shall do all things required of said principal by the laws of the State, then this obligation is to be void: otherwise, to remain in full force and effect.

This bond is given and received under the authority of the State of Oregon, the provisions of which are hereby incorporated into this bond and made a part thereof.

IN WITNESS WHEREOF, the said princip	pal and the sai	d surety have caused these presents to
be executed by their respective duly auth	orized legal re	presentatives and their corporate seals
to be hereunto affixed on this	day of	, 200
		PRINCIPAL
(SEAL)		Ву:
		Attest:
		SURETY
(SEAL)		Ву:
		Countersigned:
		Ву:

# **BOLI INFO AND FORMS**

INELIGIBLE CONTRACTORS – JANUARY 1, 2010 STATUTORY PUBLIC WORKS BOND WH-38 CERTIFIED PAYROLL FORM

# BOLI WAGE RATES EFFECTIVE: January 1, 2010 AND ANY SUBSEQUENT ADDENDA ARE APPLICABLE THIS BID

In accordance with ORS 279C.830, the minimum hourly rates of wage as determined by the Commissioner of the Bureau of Labor, are by reference hereby made a part of the Specifications.

#### LIST OF CONTRACTORS INELIGIBLE TO RECEIVE PUBLIC WORKS CONTRACTS PUBLICATION DATE: January 1, 2010

#### To: All Oregon Contracting Agencies

Pursuant to ORS 279C.860, contractors on this list are ineligible to receive public works contracts subject to the Prevailing Wage Rate Law. These contractors and subcontractors, <u>as well as</u> any firm, corporation, partnership or association in which the contractor or subcontractor has a financial interest are ineligible to receive public works contracts until removed from this list.

If you have questions regarding the list or for the most current information regarding persons ineligible to receive prevailing wage contracts, please contact the Prevailing Wage Rate Coordinator in (Portland) at (971) 673-0839.

1.	CONTRACTOR NAME ACMS Cabinets, Inc. 1510 SW Friendly Court. McMinnville, OR 97128	DATE PLACED August 12, 2008	REMOVAL DATE August 11, 2011
2.	Donald G. Annotti 5094 36 <sup>th</sup> Avenue SE Salem, OR 97317 PO Box 12606 Salem, OR 97309	July 13, 2009	July 12, 2010
3.	Daniel J. Bateman dba Builders Hardware Service PO Box 1677 Albany, OR 97321	January 11, 2008	January 10, 2011
4.	Christy C. Beaver dba Beaver Flagging 2239 Dakota Street Eugene, OR 97404	November 25, 2009	November 24, 2019
5.	Christy C. Beaver 2570 River Road Eugene, OR 97404	November 25, 2009	November 24, 2019
6.	Sam Boulis and Janet Boulis 15460 Brianne Court Lake Oswego, OR 97035	January 22, 2009	January 21, 2012
7.	Cameron Creations Steven Cameron Nancy Cameron PO Box 2 Lowell, OR 97452	May 25, 2000	Not to be Removed
8.	Collins and Collins Construction Co. dba Collins and Collins Construction 2957 SW Peridot Avenue PO Box 420 Redmond, OR 97756	May 27, 2009	May 26, 2012

#### LIST OF CONTRACTORS INELIGIBLE TO RECEIVE PUBLIC WORKS CONTRACTS PUBLICATION DATE: January 1, 2010

9.	CONTRACTOR NAME Corp, Inc. 5094 36 <sup>th</sup> Avenue SE Salem, OR 97317 PO Box 12606 Salem, OR 97309	DATE PLACED July 13, 2009	REMOVAL DATE July 12, 2010
10.	Clifford J. Fullman PO Box 67248 Portland, OR 97268	January 12, 2007	January 11, 2010
11.	Howard E. Johnson & Sons Construction Co. PO Box 1142 Warrenton, OR 97146-1142	August 26, 2009	August 25, 2012
12.	JBH Installations, Inc. 40209 Donomore Court Temecula, CA 92591	January 11, 2008	January 10, 2011
13.	KTM, Inc. 28532 Crow Road Eugene, OR 97402	March 3, 2008	March 2, 2011
14.	David Larson PO Box 1142 Warrenton, OR 97146-1142	August 26, 2009	August 25, 2012
15.	Larson Construction Co., Inc. PO Box 2797 Gearhart, OR 97138-2797	August 26, 2009	August 25, 2012
16.	James Ray Lincoln aka Jimmy Ray Lincoln dba and fdba James Lincoln Drywall 730 Russel Drive Hammond, OR 97121	October 2, 2007	October 1, 2010
17.	Jennifer A. Lupton fdba JAL Contracting PO Box 7529 Bend, OR 97708-7529 21085 Lost Valley Court Bend, OR 97702-2801	November 25, 2009	November 24, 2012
18.	Jennifer A. Lupton PO Box 7529 Bend, OR 97708-7529 21085 Lost Valley Court Bend, OR 97702-2801	November 25, 2009	November 24, 2012
19.	Robert Dean Moore 439 SW 30 <sup>th</sup> Court Troutdale, OR 97060	May 27, 2009	May 26, 2012

#### LIST OF CONTRACTORS INELIGIBLE TO RECEIVE PUBLIC WORKS CONTRACTS PUBLICATION DATE: January 1, 2010

20.	CONTRACTOR NAME Omega West Painting, Inc. PO Box 6683 Portland, OR 97228	DATE PLACED January 22, 2009	REMOVAL DATE January 21, 2012
21.	Rob's Custom Interiors, Inc. 439 SW 30 <sup>th</sup> Court Troutdale, OR 97060	May 27, 2009	May 26, 2012
22.	Anthony Taylor 1510 SW Friendly Court. McMinnville, OR 97128	August 12, 2008	August 11, 2011
23.	Pamela Testerman 28532 Crow Road. Eugene, OR 97402	March 3, 2008	March 2, 2011
24.	<b>Bradley L. Thomas</b> 465 NE 181 <sup>st</sup> , #503 Portland, OR 97230	May 27, 2009	May 26, 2012
25.	Westside Painting, Inc. PO Box 6986 Portland, OR 97228	July 1, 2009	June 30, 2012

BRAD AVAKIAN, COMMISSIONER OREGON BUREAU OF LABOR AND INDUSTRIES

# OF OF STATE OF STATE

#### STATE OF OREGON

### STATUTORY PUBLIC WORKS BOND

CB # (if applicable):
, as principal, and
, a corporation qualified and authorized to do not unto the State of Oregon for the use and benefit of the Oregon d dollars (\$30,000) lawful money of the United States of America n Laws 2005, chapter 360, for which payment well and truly to be sors and assigns, jointly and severally, firmly by this agreement.
york on public works project(s) subject to the provisions of ORS is, therefore, required to obtain and file a statutory public works as required pursuant to the provisions of section 2, chapter 360,
s are that if said principal with regard to all work done by the (s), shall pay all claims ordered by BOLI against the principal to ages determined to be due, in accordance with ORS chapter 279C, 839, then this obligation shall be void; otherwise to remain in full
ordered by BOLI to workers performing labor upon public works on Laws 2005, chapter 360.
ne surety for the aggregate of any and all claims which may arise bond.
In the principal and surety and shall continuously remain in effect ed by Oregon Laws 2005, chapter 360, unless the surety sooner the surety be relieved of further liability for work performed on the to the principal, the Construction Contractors Board, and BOLI payment of claims ordered by BOLI relating to work performed of this bond.
eement. The surety fully authorizes its representatives in the State
, 20
Principal by:
Name
Signature
Title
Address
City State Zip

PAYROLL/CERTIFIED STATEMENT FORM WH-38 FOR USE IN COMPLYING WITH ORS 279C.845\*

BUREAU OF LABOR AND INDUSTRIES WAGE AND HOUR DIVISION

									(11)	NAME OF BENEFIT PARTY, PLAN, FUND, OR PROGRAM											
	tion Number:					FORS ONLY			(10)	HOURLY FRINGE BENEFITS PAID TO BENEFIT PARTY, PLAN, FUND, OR	PROGRAM										
	CCB Registration Number:					THIS SECTION FOR SUBCONTRACTORS ONLY		Ľ	(6)	NET WAGES PAID											
						FION FOR SL	ne (DBA):	Prime Contractor Phone: ( ) Prime Contractor's CCB Registration Number: Date You Began Work on the Project	(8)	DED											
		Type of Work:				THIS SEC	Subcontract Amount: Prime Contractor Business Name (DBA):	Prime Contractor Phone: ( ) Prime Contractor's CCB Registration   Date You Began Work on the Project	(2)	A EAR							\				
		·	Project Location:	Project County:			Subcontract Amount: Prime Contractor Bus	Prime Contractor Phone: Prime Contractor's CCB F Date You Began Work on	(9)	HOURLY FRINGE BENEFIT AMOUNTS PAID AS	EMPLOYEE						<b>4</b>				
ÓN			Project	Project			Subcon Prime (	Prime ( Prime ( Date Yo	(5)	HOURLY BASE RATE											
PAYROLL NO	Phone: (				Ended:				(4)	TOTAL HOURS	T										
		Project Number:			Date Pay Period Ended:	ΓX			ATE		CH DAY										
		Proje			1	lά.			AY AND DATE		NORKED EACH DAY										
CTOR $\square$						NTRACT		ë:	(3) DAY		HOURS WO										
SUBCONTRACTOR						RIME CO		ised for E				PO	ST	ОТ	ST	P	ST	P	ST	Ь	ST
	A):				jan:	THIS SECTION FOR PRIME CONTRACTOR	gency Name:	lications First Advert	(2)	CLASSIFICATION (INCLUDE GROUP # AND APPRENTICESHIP STEP IF APPLICABLE)											
PRIME CONTRACTOR	Business Name (DBA):	Project Name:	Street Address:	Mailing Address:	Date Pay Period Began	E	Public Contracting Agency Name:	Date Contract Specifications First Advertised for Bid: Contract Amount.	(1)	NAME, ADDRESS AND EMPLOYEE'S IDENTIFICATION NUMBER											

<sup>\*</sup>Although this form has not been officially approved by the U.S. Department of Labor, it is designed to meet the requirements of both the state PWR law and the federal Davis-Bacon Act.

# CERTIFIED STATEMENT

Date:	In addition to completing sections (1) - (3), if your project is subject to the federal Davis-Bacon Act requirements, complete the following section as well:
', (NAME OF SIGNATORY PARTY) do hereby state: (1) That I pay or supervise the payment of the persons employed by:	(4) That: (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS OR PROGRAMS
on the	<ul> <li>In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4(c) below.</li> </ul>
(MONTH) (YEAR) I weekly wages earned, that no directly to or on behalf of said	<ul> <li>(a) The control of the</li></ul>
from the full weekly wages earned by any person, and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as specified in ORS 652.610, and as defined in Regulations, Part	basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in Section 4(c) below.  (c) EXCEPTIONS:
o (23 Ork Subtue A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 276c), and described below:	EXCEPTION (CRAFT) EXPLANATION
(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for workers contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each worker conform with work performed.	
(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a state apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a state, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.	REMARKS:
I HAVE READ THIS CERTIFIED STATEMENT, KNOW THE CONTENTS THEREOF AND IT IS TRUE TO MY KNOWLEDGE:	NAME AND TITLE SIGNATURE
(NAME AND TITLE)	THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.
(SIGNATURE AND DATE)	

WH-38 (Rev. 11-09)

FILE THIS FORM WITH THE PUBLIC AGENCY ASSOCIATED WITH THE PROJECT NOTE TO CONTRACTORS: YOU MUST ATTACH COPIES OF THIS FORM TO EACH OF YOUR PAYROLL SUBMISSIONS ON THIS PROJECT. INSTRUCTIONS AND ADDITIONAL FORMS ARE AVAILABLE ON OUR WEBSITE: WWW.OREGON.GOV/BOLI.



#### BUREAU OF LABOR AND INDUSTRIES, PREVAILING WAGE RATE UNIT

### INSTRUCTIONS FOR COMPLETING THE PREVAILING WAGE RATE PAYROLL/CERTIFIED STATEMENT FORM (WH-38)

The Payroll/Certified Statement form (WH-38) may be used by contractors for reporting their payroll as required by ORS 279C.845 on public works projects subject to the Prevailing Wage Rate (PWR) Law. Although this form has not been officially approved by the U.S. Department of Labor (US DOL), it is designed to meet the requirements of the federal Davis-Bacon Act. For projects associated with the U.S. Department of Housing and Urban Development (HUD), contact the public agency (owner) associated with the project for assistance with payroll reporting.

Contractors are not required to use the WH-38 form in reporting their payroll; however, the contractor must provide all of the information contained in the form, including the certified statement on page two. The certified statement must be signed by the contractor, certifying the accuracy of the information reported on the payroll, including representations pertaining to the provision of fringe benefits to employees by third parties, and must be submitted with each weekly payroll report. Detailed instructions concerning the preparation of the form follow:

Complete the top third of the form. Be sure to enter the date the contract was first advertised for bid. If you are not sure of this date, contact the public agency (owner) associated with the project. The "Payroll No." is a US DOL requirement and represents the week number for the reporting period.

Column 1 – NAME AND ADDRESS: The employee's full name must be shown on each payroll submitted. The employee's address must also be shown on the first payroll submitted. The address need not be shown on subsequent payrolls submitted unless the address changes. The US DOL requires an employee identification number for each individual employee, on each payroll submitted. This number may be, but does not have to be, the last four digits of the employee's social security number.

<u>Column 2 – CLASSIFICATION</u>: For assistance in determining the correct classification, use the Bureau of Labor and Industries' publication "Definitions of Covered Occupations for Public Works Contracts in Oregon." On the WH-38, list the classification that is most descriptive of the work actually performed by the employee. Give the group number for those classifications that include such information. Indicate which workers are apprentices, if any, and give their current percentage, classification, and group number when applicable. If an employee works in more than one classification, use the highest rate for all hours worked, or use separate line entries to show hours worked and hourly rates for each classification.

<u>Column 3 – DAY AND DATE</u>: Enter the day of the week (M, T, W, Th, F, S, and Sn) in the top row of boxes, and the corresponding date below.

HOURS WORKED EACH DAY: Enter the total number of straight time hours worked in the row marked "ST." Generally, hours worked over 8 in a day or work performed on Saturdays, Sundays, and legal holidays should be entered as overtime ("OT") hours worked. Contractors who have adopted and followed a written work schedule of four consecutive ten-hour days (Monday through Thursday or Tuesday through Friday) may enter hours worked over 10 in a day as overtime hours. For more information on overtime requirements, see the Contractor Responsibilities section of the Bureau of Labor and Industries' publication "Prevailing Wage Rate Laws" handbook.

<u>Column 4 – TOTAL HOURS</u>: Enter separately the total number of straight time and overtime hours worked by the employee (in each classification, if applicable) on the PWR project during the week. The total number of straight time hours worked should be entered in the lower box ("ST"); the total number of overtime hours worked should be entered in the top box ("OT").

<u>Column 5 – HOURLY BASE RATE</u>: Enter the hourly base rate (plus zone pay, if any) and the hourly overtime rate (plus zone pay, if any) paid to the employee in the appropriate straight time and overtime boxes. (Payment of not less than one and one half times the base rate of pay, including zone pay but not

including fringe benefits, is required to be paid for overtime hours pursuant to ORS 279C.540). Generally, use the appropriate prevailing wage rates in effect at the time the contract was first advertised for bid by the public agency. If this date is not known, or if the project was not advertised for bid, contact the public agency (owner) associated with the project for assistance with applicable rates.

Column 6 – HOURLY FRINGE BENEFIT AMOUNT PAID AS WAGES TO THE EMPLOYEE: Enter hourly fringe benefit amounts paid directly to the employee as wages. (For overtime hours worked, it is not necessary to pay time and one half for the fringe benefit portion of the prevailing wage rate.)

<u>Column 7 – GROSS AMOUNT EARNED</u>: Enter the gross amount earned for work on the PWR project during the week. If part of the employee's wages for the pay period were earned on projects other than the project described on the WH-38, or if the employee is paid less often than on a weekly basis, enter in column 7 first the gross amount earned on the PWR project for the week, then the total gross amount earned for the pay period. For example: \$567.84 / \$1,267.27.

Column 8 – ITEMIZED DEDUCTIONS, FICA, FED, STATE, ETC.: Enter deductions withheld from wages for the pay period. All deductions must be in accordance with the provisions of ORS 652.610 (and as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. Stat. 967, 76 Stat. 357; 40 U.S.C 276c) on projects subject to Davis-Bacon Act). For projects subject to the Davis-Bacon Act, itemize the deductions.

<u>Column 9 – NET WAGES PAID</u>: Enter the total amount of net wages actually paid to the employee for the pay period. This figure can be calculated by subtracting the total deductions reported in <u>Column 8</u> from the gross amount of wages for the pay period reported in the bottom portion of <u>Column 7</u>.

<u>Column 10 – HOURLY FRINGE BENEFITS PAID TO BENEFITS PARTY, PLAN, FUND OR PROGRAM</u>: Enter the hourly amount of fringe benefits paid to each individually approved party, plan, fund, or program, for each employee. List these amounts separately on the lines provided. Any contractor who is making payments to approved parties, plans, funds or programs in <u>amounts less than the required hourly fringe benefit</u> is obligated to pay the difference directly to the employee as wages in lieu of fringe benefits, and to show that amount in <u>Column 6</u> of this form. For information on how to calculate hourly fringe benefit credits, see Appendix A in the Bureau of Labor and Industries' publication "Prevailing Wage Rate Laws" handbook.

<u>Column 11 – NAME OF BENEFIT PARTY, PLAN, FUND OR PROGRAM</u>: Enter the name of the party, plan, fund, or program that corresponds to the amount paid as an hourly fringe benefit in <u>Column 10</u>.

#### **CALCULATION CHECK**

In order to determine whether the wages and fringe benefits paid are sufficient to meet prevailing wage rate requirements, the following check may be performed:

- 1. For each classification listed in column 2, compute the sum of:
  - a) the hourly base rate of pay shown in Column 5,
  - b) the hourly fringe benefit amount paid as wages to employee shown in Column 6, and
  - c) the hourly fringe benefits paid to benefit party, plan, fund or program shown in Column 10.
- 2. This sum must equal or exceed the total of the hourly base rate (including zone pay) and the hourly fringe benefit rate for that classification as listed in the appropriate issue of the Bureau of Labor and Industries publications <a href="Prevailing Wage Rates for Public Works Contracts">Prevailing Wage Rates for Public Works Contracts</a> Subject to BOTH the State PWR and <a href="Federal Davis-Bacon Act">Federal Davis-Bacon Act</a>, if applicable.

IF YOU HAVE QUESTIONS REGARDING COMPLETION OF THIS FORM, CONTACT THE PREVAILING WAGE RATE UNIT OF THE BUREAU OF LABOR AND INDUSTRIES AT (971) 673-0838.

NOTE: PAYROLL/CERTIFIED STATEMENTS ARE ONLY REQUIRED TO BE SUBMITTED TO THE PUBLIC AGENCY ASSOCIATED WITH THE PROJECT.

CERTIFIED PAYROLL AND OTHER FORMS ARE AVAILABLE ON OUR WEBSITE: WWW.OREGON.GOV/BOLI

#### 1. **DEFINITIONS**

As used in the Contract Documents, unless the context requires otherwise:

- A. "Bond" means a performance bond and/or a payment bond in form and with corporate surety satisfactory to the District in an amount equal to the full contract sum, conditioned upon the faithful performance of the Contract and all provisions thereof.
- B. "Contract" or "Contract Documents" include the Agreement, the Instructions to Bidder, the Proposal Forms, the Bid Forms, First Tier Subcontractor Forms, Bidders Responsibility Form, Performance and Payment Bonds, the Sample Contract, the Prevailing Wage Rates, the General Conditions of the Contract, the General Requirements of the Contract, the Detailed Specifications (Division 1), the plans/drawings, the Addenda, if any, incorporated in the documents before their execution, and all agreements of work, whether by change order or otherwise, modifying or supplementing any of the documents.
- C. "Contractor" means the person or persons with whom a contract is entered into by the District for the performance of the work.
- D. "Directed", "required", "permitted", "selected", "ordered", "designated", "prescribed", or words of like import, mean the direction, requirement, permission, selection, order, designation, or prescription of the Board of Directors of North Clackamas School District #12, Milwaukie, Oregon.
- E. "Director of Business Operations" means Timothy L. Witcher II or his duly appointed designee and/or successor.
- F. "District", "School District", or "Owner" means North Clackamas School District #12, Milwaukie, Oregon.
- G. "Engineer" means an engineer employed by the District for the design and/or supervision of the work.
- H. "Assistant Superintendent for Operations" means Ron Stewart or his duly appointed designee and/or successor.
- I. "Chief Financial Officer" means Jim Langstraat or his duly appointed designee and/or successor.
- J. "Person" means either a natural or an artificial person which includes individuals, partnerships, corporations, and other associations.
- K. "Prevailing Rate of Wage" means the rate of hourly wage and overtime paid in the City of Milwaukie, County of Clackamas, to the majority of workmen in the same trade or occupation as published semi-annually by the Oregon State Bureau of Labor, except as follows:
  - (1) If there is not a majority in the same trade or occupation paid at the same rate, the average rate of hourly wage and overtime paid in the City of Milwaukie, County of Clackamas, to workmen in the same trade or occupation shall be considered to be the prevailing rate.
  - (2) When the Contractor or any subcontractor is a party to a statewide agreement in effect with any labor organization as to the Contractor or such subcontractor, the rate of wages as established in the agreement shall be considered to be the prevailing rate in the City of Milwaukie, County of Clackamas.
  - (3) When Federal funding is involved, the provisions of ORS.350 and the Davis-Bacon Act as supplemented by Department of Labor regulations will be applicable. Weekly payroll reports will be required as per Davis-Bacon Act and current prevailing wage rates as determined by the Federal Department of Labor for Oregon will be applicable.

- L. "Specification" means the directions, requirements, explanations, terms and provisions pertaining to the various features of the work, the manner and method of bidding for the work, the manner and method of performance of the work, and the manner and method of payment, all as they appear in the Contract Documents.
- M. "Subcontractor" means a contractor to whom the contractor has subcontracted a portion of the work, and includes materials suppliers who furnish fabricated items or materials to be incorporated into the work which are not of standard design but rather are fabricated or otherwise specially processed to a particular design required for the performance of some portion of the work. The subcontract may be directly with the contractor or with another subcontractor.

#### 2. OREGON PRODUCTS

- A. In all public contracts, the public contracting agency shall prefer goods or services that have been manufactured or produced in this State if price, fitness, availability and quality are otherwise equal pursuant to ORS 279A.120.
- B. Paragraph A above does not apply in any case where the provisions of that paragraph interfere or conflict with any federal statute or resolution.

#### 3. CONTRACTUAL RELATIONS WITH MATERIAL SUPPLIERS AND LABOR

- A. The Contractor shall:
  - (1) Make payment promptly, as due, to all persons supplying to the Contractor labor, services, material, supplies or provisions for the prosecution of the work provided for in the current contract. If a contractor or first-tier subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this contract within 30 days after receipt of payment from the District or the contractor, the contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due and ending upon final payment, see ORS 279C.580 for exceptions. The rate of interest charged to the contractor or first tier subcontractor shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that include Oregon on the date that is 30 days after the date when payment was received from the District or from the contractor, not to exceed 30%. If the contractor or subcontractor fails, neglects or refused to make payment to a person who furnished labor or materials in connection with this contract, the person may file a complaint with the Construction Contractors Board, unless ORS 279C.580 applies. See ORS 279C.515.
  - (2) Pay all contributions or amounts due the State Industrial Accident Fund from the Contractor or subcontractor incurred in the performance of the contract.
  - (3) Not permit any lien or claim to be filed or prosecuted against the District on account of any labor or material furnished.
  - (4) Pay to the State Tax Commission all sums withheld from employees pursuant to ORS 316.167.
  - (5) Demonstrate that an employee drug testing program is in place per ORS 279C.505 (2).
- B. The Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums which the Contractor agrees to pay for such services and all moneys and sums which the Contractor collected or deducted from the wages of his employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

- C. Minimum hourly rates of wage (not applicable to workmen or other persons regularly employed on monthly or per diem salary.)
  - (1) The hourly rate of wage to be paid to workmen upon the work shall not be less than the prevailing rate of wage for an hour's work in the same trade or occupation in the locality where such labor is performed.
  - (2) The minimum hourly rate of wage, not less than the prevailing rate of wage, which may be paid to workmen in each trade or occupation employed in the performance of the contract, either by the Contractor or subcontractor or other person doing or contracting to do the whole or any part of the work contemplated by the contract shall be as specified in the Minimum Hourly Rates of Wage currently on file with the State of Oregon Bureau of Labor. Such workmen shall be paid not less than such specified minimum hourly rate of wage.
  - (3) If at any time during the performance of the work the minimum hourly rate of wage specified on said scale of Minimum Hourly Rates of Wage is below the prevailing rate of wage in the City of Milwaukie, said prevailing rate of wage shall be paid for all labor performed during such time as the same exceeds said specified minimum hourly rate of wage. If any dispute arises as to what is the prevailing rate of wage for the same trade or occupation in the City of Milwaukie and if that dispute cannot be settled by the parties involved, the dispute shall be referred to the Commissioner of the Bureau of Labor, who shall then determine the prevailing rate of wage for the same trade or occupation in the City of Milwaukie.
- D. No person, except foremen, watchmen, and timekeepers paid on monthly rate, shall be employed for or be required or permitted to labor for more than 10 hours in any one day or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, in which event the laborer so employed for excessive hours shall receive at least time and a half pay for all overtime in excess of 40 hours a week, and for work performed on Saturday and on any legal holiday specified in ORS 187.010, except Veterans Day. However, when specifically agreed to under a written labor-management negotiated labor agreement, a laborer may be paid at least time and a half pay for work performed on Veterans Day or on any legal holiday specified in ORS 187.020.

#### E. The Contractor shall:

- (1) Cause a circular clearly printed with black face pica type and containing a copy of ORS 279C.545 to be posted in a prominent place alongside the door of the timekeeper's office or in a similar place which is readily available and freely visible to any and all men employed on the work.
- (2) Maintain such circular continuously posted from the inception to the completion of the contract.
- F. The Contractor, and every subcontractor or other person doing work or contracting to do the whole or any part of the work contemplated by the Contract, shall comply with all conditions and requirements of:
  - (1) Every law, regulation, order and decree promulgated by governmental authority and in effect at any time during the performance of the work to the extent applicable to the employment, discharge, wages, hours, working conditions, or other terms or conditions of employment of labor employed in connection with the work or to employment and payment practices with respect thereto.
  - (2) Every agreement between any labor organization and the Contractor or subcontractor or other person doing or contracting to do the whole or any part of the work, as the case may be, in effect at any time during the performance of the work to the extent applicable to the employment, discharge, wages, hours, working conditions, or other terms or conditions of employment of labor employed in connection with the work, or to employment and payment practices with respect thereto.

(3) Contractors personnel are to abide by all rules and regulations of the Owner, especially those relating to conduct, smoking, consumption of alcoholic beverages and safety.

#### 4. PAYMENT OF CLAIMS BY DISTRICT

- A. If the Contractor fails, neglects or refuses to make prompt payment of any claim for labor, services, material, supplies or provisions furnished to the Contractor or a subcontractor by any person in connection with the Contract as such claim becomes due, the proper officer or officers representing the District may pay such claim to the person furnishing the labor, services, material, supplies or provisions, and charge the amount of the payment against the funds due or to become due the Contractor by reason of the Contract.
- B. The payment of any claim in the manner herein authorized shall not relieve the Contractor or the Contractor's surety from liability with respect to any unpaid claims.

#### 5. PROTECTION TO PERSONS AND PROPERTY

- A. During the execution of the work the Contractor shall provide and maintain all guards, railings, lights, warnings, and other protective devices which are required by law or which are reasonably necessary for the protection of persons and property from injury or damage.
- B. The Contractor shall protect and indemnify the District from every claim or demand which may be made by reason of:
  - (1) Any injury to person or property sustained by the Contractor or by any subcontractor or other person employed directly or indirectly by the Contractor upon or in connection with the work, however caused.
  - (2) Any injury to person or property sustained by any person caused by an act, neglect, default or omission of the Contractor or any subcontractor or other person employed directly or indirectly by the Contractor upon or in connection with the work.
- C. The Contractor, at the Contractor's own expense and risk, shall defend any and all actions, suits, or other legal proceeding that may be brought or instituted against the District on any such claim or demand and pay or satisfy any order, judgment or decree that may be rendered against the District in any such action, suit or legal proceeding.
- D. The Contractor shall assume full control of the site of the Contractor's operations and, until the completion of the work and its acceptance by the District, shall be responsible for the premises and for the work and shall bear the risk of loss for all damage thereto, however caused, except loss covered by fire insurance carried by the District.
- E. The Contractor shall exercise every possible care and precaution to protect the structure, its contents and site from damage from the weather or other causes, and shall bear the risk of loss for all damage thereto related however remotely to the Contractor's operations except loss covered by fire insurance carried by the District.
- F. Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to Owner.
- G. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, Contractor, without special instruction or authorization from Project Manager or Owner, is obligated to act to prevent threatened damage, injury or loss. Contractor shall give the Project Manager prompt written notice of any significant changes in the Work or deviations from the contract Documents caused thereby.

#### 6. INSURANCE

A. At all times during the performance of the work the Contractor, at the Contractor's expense and risk, shall carry liability insurance including completed operations, covering all operations of the Contractor and subcontractors in connection with the work, including motor- vehicle operation, in form and in a company or companies approved by the District and with limits of coverage not less than those hereinafter set forth, and no work shall be performed until a certificate evidencing such insurance has been delivered to and approved by the District. Said insurance shall be non-cancelable except upon THIRTY (30) DAYS advance written notice to the District and shall name the District as an additional insured and as a loss payee as its interest may appear. The policy limits for damages for bodily injury, including death, and for property damage shall be not less than the following:

#### ALL INSURANCE TO BE "ASBESTOS SPECIFIC"

- (1) \$1,000,000 aggregate limit per occurrence for Bodily Injuries, including damages for care and loss of services, arising out of bodily injury or death.
- (2) \$1,000,000 aggregate limit per occurrence for damages as a result of Personal Injury to include false arrest, false imprisonment, wrongful entry, wrongful eviction, wrong detention or malicious prosecution, libel or slander, assault and battery committed for the purpose of preventing or eliminating danger to person or property, and allegations of sexual or physical abuse.
- (3) \$500,000 aggregate limit for Property Damage, including damages for loss of use, arising out of injury to or destruction of property in any one occurrence. Said coverage shall cover motor vehicles operation as well as all operations of the contractor and sub-contractors in connection with any work on our premises.
- B. Said Contractor shall also deliver to the District a certificate evidencing sufficient Oregon Workers' Compensation coverage, as required by law, protecting the District from any claims arising, as a result of work performed on our behalf, by Contractor's or Sub-Contractor's employees.
- C. The District hereby agrees to carry fire insurance covering the work for the protection of the Contractor and subcontractors subject to a \$50,000 retention, which shall be the sole and primary responsibility of the Contractor and subcontractors of the work.

The Contractor will provide primary coverage and/or assume responsibility as primary self-insured against loss of all tools, materials, and equipment, whether owned, leased, or rented, stored on or off the premises, used in performance of this construction project. The Contractor and subcontractors shall arrange their insurance so that the District will not be charged with any part of the cost of any insurance which duplicates fire insurance provided by the District as aforesaid.

#### 7. SCHEDULE OF VALUES - GENERAL CONSTRUCTION CONTRACTS OF \$50,000 OR MORE

After the contract has been awarded, and before the first application for payment is presented, the Contractor shall submit to the District a schedule of values as to the various parts of the work, including quantities and amounts, aggregating the total sum of the contract. No application for payment prior to the completion and acceptance of the entire work will be considered until such schedule of values has been presented to and approved by the Engineer, Assistant Superintendent for Operations and the Chief Financial Officer.

#### 8. METHOD OF PAYMENT

- A. For general construction contracts of \$50,000 or more applications for payment shall be made in writing on forms furnished by the District and must be approved by the Engineer, Assistant Superintendent for Operations and the Chief Financial Officer. For general construction contracts below \$50,000, a contractor's invoice in triplicate will be sufficient.
- B. All materials furnished and work performed must be accepted by the Engineer or the Assistant Superintendent for Operations before applications for payment will be approved.

- C. Before applications for payment will be approved on projects over \$50,000.00, the <u>original</u> certified payroll information must be submitted to the Purchasing Department of North Clackamas School District as follows:
  - (1) Once within 15 days of the date the Contractor first began working on the project.
  - (2) Once before the final inspection of the project by the District.
  - (3) In addition, for projects exceeding 30 days, wage certificates are to be prepared weekly and submitted by the fifth business day of each month.
  - (4) If the Davis-Bacon Act is applicable, weekly payroll submissions will be required on proper Federal forms.

The payroll information must be kept by the contractor and/or subcontractor for a minimum of three years. Said filing shall be on a standard form as prescribed by the State Labor Commissioner and shall certify the hourly rate of wage paid each classification of workmen employed by such Contractor or subcontractor upon the work and further certifying that no workmen employed by such Contractor or subcontractor upon the work has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract which statement and certificate shall be verified by the oath of the Contractor or the Contractor's surety that the affiant has read such statement and certificate and knows the contents thereof and that the same is true to his knowledge. Said form will be provided by the District. ORS 279C.800 – 279C.870

- D. A civil penalty of up to \$5,000 for any violation of the Prevailing Wage Rate Law, or Oregon Administrative Rules there under, is authorized by Oregon Law. Proof of payment shall be submitted to the District with the request for the first progress payment. This requirement is not relevant when the Davis-Bacon Act is applicable.
- E. For those general construction contracts that are \$50,000 or more the Contractor shall also file with each application for payment a detailed statement setting forth the various items which represent the total amount of the work completed to the date as of which application for payment is made. No application for payment will be considered unless accompanied with such statement.
- F. Progress payments will be made upon proper application based upon work satisfactorily installed and material accepted and stored on the site up to the TWENTY- FIFTH (25th) DAY of each month, less such amounts as may have been paid previously, less such other amounts as may be deductible or as may be owing and due to the District for any cause, and less FIVE (5%) PERCENT of the total contract price as indicated on the approved Certificate for Payment form in accordance with ORS 279C.570.
- G. Payment of the balance of the total amount earned by the Contractor in accordance with the terms of the Contract will be made upon proper application THIRTY (30) DAYS after completion of the work and its acceptance by the District, less such amounts, if any, as may be deductible or as may be owing to the District for any cause as outlined in ORS 279C.575.
- H. Meetings of the Board of Directors normally occur on the first and third Thursdays of each month. Applications for payment to receive attention at any meeting of the Board of Directors in any month must be delivered to the Assistant Superintendent for Operations not later than the EIGHTH (8th) DAY preceding the meeting. Payments which are approved will be included in our next bi-monthly payment schedule.

I. If in the Engineer's or Assistant Superintendent for Operations opinion, the work covered by any application for payment is incomplete or defective, the Engineer or Assistant Superintendent for Operations may withhold approval of such application for payment or reduce the amount thereof until the work covered thereby is completed or corrected to the Engineer's or Assistant Superintendent for Operation's satisfaction.

#### 9. EFFECT OF ACCEPTANCE OF PAYMENT UPON FINAL CERTIFICATE

Acceptance of payment by the Contractor on final certificate shall constitute a waiver of all claims against the District under or arising out of the Contract.

#### 10. NONASSIGNABILITY

Neither the Contract nor any interest of the Contractor therein can be transferred to any other person or persons without the written consent of the District, and any such attempted transfer shall be utterly void and may be treated by the District as a willful failure or refusal on the part of the Contractor to perform the Contract according to its terms and conditions.

#### 11. SUBCONTRACTING

- A. All subcontracting shall be subject to the approval of the District. A First-Tier Subcontractor list must be submitted within two (2) working hours of bid closing. (See: INSTRUCTION TO BIDDERS, Item 20.) No list of subcontractors approved by the District may be changed or departed from except as consented to by the District in writing. Prior to District approval of any subcontractor change all pertinent information must be submitted to the Purchasing Department, including Builders Board License Number, insurance, and etc. Whenever the District consents to the substitution of one subcontractor for another, if any reduction in cost to the Contractor results there from the amount thereof shall be passed on to the District as a reduction in the amount to be paid to the Contractor for the performance of the work.
- B. The Contractor shall be wholly responsible for the performance of all subcontractors and for their acts and omissions, and those of persons either directly or indirectly employed by them, to the same extent as for the acts and omissions of persons directly employed by the Contractor, and the fact that subcontractors are subject to the approval of the District shall not affect the Contractor's responsibility in this regard.
- C. The Contractor shall bind every subcontractor to all terms and conditions anywhere contained in the contract documents as far as applicable to the work of such subcontractor so that the subcontractor assumes toward the Contractor and toward the work all the obligations and responsibilities that the Contractor assumes toward the District as to the performance of the subcontractor's portion of the work.
- D. Nothing contained in the contract documents shall be construed to create any contract between the District and any subcontractor.

#### 12. TERMINATION FOR DEFAULT OF CONTRACTOR OR SUBCONTRACTOR

A. Time and the strict and literal performance on the part of the Contractor of every term and condition of the contract and of the work as specified in the contract documents are of the essence. Upon the willful failure or refusal on the part of the Contractor (including willful failure or refusal of any subcontractor not immediately corrected by the Contractor) to perform any such term or condition, the District at its election, without prejudice to any other right or remedy, may perform the same or cause the same to be performed by others, and the cost thereof shall be reimbursed forthwith by the Contractor, or may charge the amount thereof against any funds due or to become due the Contractor by reason of the contract and/or may terminate the right of the Contractor to perform further work and take over the work and such of the Contractor's materials, tools, apparatus, appliances and equipment as are reasonably necessary for use upon or in connection with the unfinished portion of the work, to be held and used by it or by another contractor or other contractors to whom it may award the balance of the work without the payment of any rental for the use thereof and without interference by the Contractor or by any person claiming by, through or under the Contractor, until the work has been fully completed and has been accepted by the District.

- B. If, before completion of the work, the Contractor dies or becomes mentally or physically incapacitated to carry out the work or if a petition is filed by or against the Contractor under the National Bankruptcy Act, as amended, to adjudicate the Contractor as bankrupt or for relief under any of the debtor-relief provisions of the Act, and an order of adjudication or other order approving such petition is entered, or if the Contractor makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of the Contractor's insolvency, then, simultaneously with the happening of any of said events, the right of the Contractor to perform further work shall terminate automatically without notice and without further act of the parties or order of any court, and the possession of the work and of the premises and of such of the Contractor's materials, tools, apparatus, appliances and equipment as are reasonably necessary for use upon or in connection with the unfinished portion of the work shall pass to the District, to be held and used by it or by another contractor or other contractors to whom it may award the balance of the work without the payment of any rental for the use thereof and without interference by the Contractor or by any person claiming by, through or under the Contractor, until the work has been fully completed and has been accepted by the District.
- C. In the event the Contractor's right to perform further work is terminated as aforesaid, the Contractor shall not be entitled to receive any further payment until the work has been completed and has been accepted by the District. If at that time the aggregate of the District's expenses pertaining to the completion of the work including a fair apportionment of its general administrative expenses plus a reasonable allowance of compensation for management service, is less than the unpaid balance of what world have been earned by the Contractor under the terms of the contract, the District shall pay the amount of the excess to the Contractor as soon as the District determines the amount thereof; and, if more, the Contractor shall pay to the District the amount of the deficiency as soon as the District determines the amount thereof.

#### 13. ROYALTIES AND PATENTS

The Contractor shall pay all royalties and other charges for the use of any patented article, device, method, process or invention in the performance of the work. The Contractor shall fully indemnify the District and hold it harmless from any and all loss, damage, cost and expense in connection with any alleged infringement or patent rights in the performance of the work. The Contractor shall defend all claims, actions, suits or other legal proceeding with reference thereto and satisfy the requirements of any adverse judgment, decree or order resulting there from.

#### 14. RELATED WORK BY OWNER AND/OR OTHERS

- A. The Owner may undertake remodeling and maintenance work in various buildings under separate contract. The Asbestos Abatement Contractor shall coordinate with the General Contractor and the Owner to schedule work to accommodate Owner's separate contracts.
- B. The Owner has retained **PBS Engineering & Environmental Consultants** to take and analyze air samples before, during and after the work, observe the work of the Contractor and monitor the Contractor's compliance with the Specification requirements.

#### 15. AUDIT OF BOOKS AND RECORDS

The District, through its representatives, shall have access at all reasonable time to the books and records of the Contractor and subcontractors so far as they relate to the contract and the performance of the work.

#### 16. ORDERS FOR ADDITIONS, DEDUCTIONS, OR CHANGES

- A. The District at all times shall have the right to order additions to, and/or deductions from and/or changes in the work. Each such order shall be issued in writing over the signature of the Chief Financial Officer and shall be strictly observed and complied with by the Contractor and all subcontractors involved.
- B. The Contractor and each subcontractor involved shall maintain separate accounts as to all work performed under each order issued by the District involving additions to and/or changes in the work, and preserve all records and documents pertaining thereto until an adjustment of the contract sum is agreed upon in writing between the Contractor and the District, or otherwise is determined.

- C. Subject to the provisions of Paragraph D below, the contract sum shall be increased or decreased with respect to each order for addition to and/or deductions from and/or changes in the work by such amount as may be agreed to in writing by the Contractor and by the District, or, in the absence of such agreement, by the amount by which the Contractor's necessary and reasonable costs of performing the contract are increased or decreased as a direct result of such order.
- D. The Contractor shall not make any claim for extra compensation, and no extra compensation will be paid to the Contractor unless:
  - (1) The particular work for which extra compensation is claimed is ordered in writing (see paragraph A above) by the District as an addition to or change in the work; and
  - (2) No later than FORTY-EIGHT (48) HOURS after receipt of said order, and prior to incurring any expense there under, the Contractor delivers to the Assistant Superintendent for Operations written notice that extra compensation will be claimed by reason thereof, or the payment of extra compensation with respect thereto is agreed to by the District in writing; and
  - (3) The Contractor's necessary and reasonable costs of performing the contract are increased by executing the work in the manner required by said order; and
  - (4) The requirements of paragraph B above are complied with.

#### 17. DEPARTURES FROM TERM OF CONTRACT

No direction or approval given by the District or any representative of the District which deviates in any respect from the drawings, specifications or other contract documents shall be valid or recognized unless and until the same is reduced to writing and issued in the form of a written order over the signature of the Chief Financial Officer, it is understood that any deviation that results in no additional cost may be approved by the Chief Financial Officer, so as to become a contract document as herein before defined. An approval endorsed upon a shop drawing shall not constitute a written order within the meaning hereof or become one of the contract documents.

#### 18. STOP-WORK ORDERS - CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

- A. The District at all times shall have the right to stop the whole or any part of the work. Each such order shall be issued in writing over the signature of the Assistant Superintendent for Operations or the Chief Financial Officer and shall be strictly observed and complied with by the Contractor and all subcontractors involved.
- B. If at any time the entire work remaining to be performed is stopped by order of any court or by the District, through no fault of the Contractor or of any person for whom the Contractor is responsible, and if such stop-work order remains in effect for a period of ONE HUNDRED TWENTY (120) DAYS, then at any time thereafter while such stop-work order is in effect the Contractor by written notice to the District may terminate the Contract.

#### 19. DELAYS AND EXTENSION OF TIME

If at any time during the performance of the work the Contractor or any subcontractor employed by the Contractor be delayed by any act of omission or order of the District or the Engineer (including omission or delay in furnishing instructions necessary for the prosecution of the work) or by any separate contractor employed by unavoidable casualty, act of God or the public enemy, civil commotion, labor dispute, unusual delay in transportation, or other cause beyond the Contractor's reasonable control, then in either of such events, the Contractor's time for completion of the work shall be extended to the extent, if any, reasonably required by reason of such delay; provided, that no delay from any cause will be recognized for any period of time prior to receipt of written notice by the District will be required by reason thereof and, in the case of delay occasioned by some omission by the District of the Engineer, for any period of time prior to the FIFTEENTH (15th) DAY after receipt by the District of written demand for what is omitted.

#### 20. SPECIFICATIONS AND DRAWINGS

- A. The District shall provide without charge all copies of specifications and drawings, except shop drawings, required to execute the work, up to a maximum of ten sets.
- B. Neither the Contractor nor any subcontractor or other person having access to the specifications and drawings shall make any unauthorized use thereof either during or after completion of the work.

#### 21. BUILDING CODES AND REGULATIONS

The Contractor shall comply with all applicable regulations and requirements of governmental bodies with regulatory jurisdiction over the work. Where Code requirements exceed the requirements of the Specifications and Drawings, the installation in conflict shall be made to comply with the Code requirements and at no additional cost to the Owner.

#### 22. EXEMPTION FROM EXCISE TAXES

When requested by the Contractor or a subcontractor, and to the extent applicable, the District will comply with such regulations as the Secretary of the Treasury or his delegate shall prescribe to obtain exemption from the application of federal excise tax.

#### 23. MATERIALS AND WORKMANSHIP

- A. Unless otherwise specified, all materials and equipment shall be new and in production at time of bidding, and both materials and workmanship shall be of best quality of the type involved. Unless otherwise specified, manufacturer's directions for all manufactured articles shall be followed meticulously.
- B. No one shall be employed in connection with the work that is unskilled in the work he is given to do. Should the Assistant Superintendent for Operations or the Chief Financial Officer deem anyone on the work incompetent or unfit for his duties, the Contractor or subcontractor employing him upon notification thereof shall dismiss him immediately and shall not again employ him on any work for the District.
- C. The Contractor agrees to complete all work in full accordance with accepted industry standards. Services performed, product application and equipment installed shall be in full compliance with the manufacturer's instructions.

#### 24. SAMPLES AND TESTS

- A. The Contractor shall furnish without charge samples as directed by the Assistant Superintendent for Operations, whether or not a sample of the particular item is specifically called for in the specifications, and shall not incorporate any item into the work after receipt of request from the Assistant Superintendent for Operations for a sample until a sample is approved in writing by either the Assistant Superintendent for Operations or the Chief Financial Officer.
- B. The District shall have the right, through engineers, physicists or chemists selected by it, to make such test of concrete and other materials, appliances and equipment delivered to the job site or incorporated into the work as the Assistant Superintendent for Operations may deem appropriate. All such tests and analysis shall be paid for by the District, except when the item tested fails to comply with the specifications or otherwise proves to be defective, in which event the entire costs of testing the same shall be borne by the Contractor or subcontractor involved and may be deducted from the contract sum.

#### 25. SUBSTITUTIONS

The Contractor shall not use materials, appliances or equipment which shall deviate from those specified, without the Assistant Superintendent for Operations' written approval.

#### 26. SIGNS, ADVERTISEMENTS, ETC.

The Assistant Superintendent for Operations' instructions relative to signs, advertisements, etc., at the job site shall be strictly observed and complied with by the Contractor and all subcontractors involved.

#### 27. OPERATIONS AND STORAGE OF MATERIALS

The Contractor shall confine all operations and the storage of materials at the job site to the limits indicated by law and permits and as further directed by the Assistant Superintendent for Operations. Neither the Contractor nor any subcontractor nor any servant of the Contractor or of any subcontractor shall make any use of an existing District structure or any facility therein unless specifically authorized by the Assistant Superintendent for Operations.

All materials/equipment must be delivered in original containers as packaged by the manufacturer, with the label intact. Empty containers must be stored at a designated area, and must remain on premises until satisfactory completion of all work or permission is received from Owner to dispose of packaging.

#### 28. NON-INTERFERENCE WITH SCHOOLS

If the work is to be performed during scheduled school activities, the entire work shall be executed in such manner as will not interfere with the continued free and comfortable use of the structure, walks and grounds for school purposes.

#### 29. INTERRUPTION OF SERVICE

If the work is to be performed during scheduled school activities there shall be no interruption of electric, gas, water, steam or other service without prior notice to the District, and then only at a definite time and for a definite duration approved by the Assistant Superintendent for Operations or his representative.

#### 30. SUPERVISION

The Contractor at all times during the execution of the work shall have a competent superintendent or foreman on the job who shall be accessible at all times and have full authority to receive and execute orders or directions from the District.

#### 31. INSPECTIONS

- A. The District's representatives shall be allowed access to all parts of the work at all times wherever it is in preparation or progress and shall be furnished every reasonable facility for ascertaining whether or not the work as performed is in accordance with the requirements and intent of the Contract Documents.
- B. If any work is covered up without the approval of the Engineer or Assistant Superintendent for Operations, it shall be uncovered for examination, and after examination the Contractor shall perform all rework involved in correcting defective work and/or in restoring the same to the condition called for by the Contract Documents. In such case, the cost of uncovering the work and of all rework involved shall be borne by the Contractor.
- C. The District shall have the right at any and all times to re-examine any part or parts of the work previously passed upon inspection. If at any time the District desires to re-examine a part of the work previously passed upon inspection and thereafter covered up, the District may order the same to be uncovered for re- examination. Such order shall be issued in writing over the signature of an authorized representative of the District, and shall be strictly observed and complied with by the Contractor and all subcontractors involved.

After re-examination, the Contractor shall perform all rework involved in correcting defective work and/or in restoring the same to the condition called for by the Contract Documents. If the work thus exposed and re-examined complies in all respects with the requirements of the Contract Documents, the order to uncover the same shall be deemed to be an order for an addition to or change in the work subject to the provisions of Paragraph 16 of this section, General Conditions. If such work does not comply in all respects with the requirements of the Contract Documents, the cost of uncovering the same and of all rework involved shall be borne by the Contractor.

D. Within TEN (10) days after notice of completion, the District shall inspect the work and deliver to the Contractor a written statement of defects, if any, to be corrected prior to acceptance of the work. The Contractor shall correct such defects immediately.

#### 32. REMOVAL OF EQUIPMENT, ETC.

The Contractor and subcontractor shall clear the site and surrounding areas of their equipment, apparatus, appliances, tools, unused material, etc., as rapidly as such items cease to be needed for the production of the work.

#### 33. SEPARATE CONTRACTS

The District shall have the right to let separate contracts for other work to be performed at or adjacent to the site of the Contractor's operations, in which event the Contractor shall cooperate in all reasonable ways to facilitate the operations of other contractors and shall avoid unnecessary interference therewith. Also, the District reserves the right to perform work with its own crews at or adjacent to the site of the Contractor's operations and receive full cooperation.

#### 34. INTENT OF CONTRACT

The Contract Documents shall be considered as a whole, and whatever is specified in any one of the documents shall have the same effect as if specified in all. Minor details of both labor and material that are necessary to complete each branch of the work shall be provided by the Contractor whether or not specifically mentioned in the specifications or on the drawings. Unless otherwise specified in the Contract Documents, it is the intent and meaning of the Contract that the Contractor shall take the site in the condition existing at the time of bidding for the work and provide and pay for all labor, materials, equipment, apparatus, appliances, tools, transportation, and other facilities and services necessary to complete the work to the fullest extent inferable from the Contract Documents. It shall be conclusively presumed that all conditions to be encountered in executing the work were known to and accepted by the Contractor at the time of bidding for the accepted work, except conditions concealed and not discoverable from information reasonably available to the Contractor.

#### 35. INCONSISTENCIES

Inconsistencies, if any, shall be resolved as follows:

- A. The specifications and drawings control over Code requirements where the requirements of the former exceed the latter.
- B. The specifications control over the drawings.
- C. The Detailed Specifications control over the General Conditions of the Contract and the Special Conditions of the Contract.
- D. The Special Conditions of the Contract control over the General Conditions of the Contract.
- E. Between different drawings depicting the same work, that which is drawn to the largest scale shall control.
- F. Schedules appearing in the specifications or on the drawings control over notes on the drawings.

#### 36. TIME LIMIT/LIQUIDATED DAMAGES

The Contractor shall commence the work covered by this contract after receiving the Notice To Proceed and shall complete the same as shown in the INSTRUCTIONS TO BIDDERS, Item 2. Contractor agrees if he has not completed the work by the required date, liquidated damages at the rate of \$500.00 per calendar day shall be assessed to the Contractor by the Owner until the work has been satisfactorily completed and accepted by the Owner. These time limits prevail unless superseded by the Proposal Form.

It is the intent of this bid proposal that the Contractor shall base the bid on a schedule of work that does not require the payment of overtime wages to complete the project within the time limit stated in the above paragraph.

#### 37. FINAL WORK

Contractor shall return to job within FIFTEEN (15) DAYS, but not less than FIVE (5) DAYS, after final inspection, for the purpose of checking the installations for proper operations. Final payment shall not be paid until same has been completed to the satisfaction of the School District. Notify the District's inspector of the work upon completion.

# 38. SEQUENCE OF WORK - WORK PROGRESSION OR SCHEDULE GENERAL CONSTRUCTION CONTRACTS OVER \$50,000

The Contractor, immediately after being awarded the Contract, shall prepare and submit for approval an estimated progress schedule for the work. The progress schedule shall be related to the entire project to the extent required by the Contract Documents. This schedule shall indicate the dates for the starting and completion of the various stages of the construction and shall be revised as required by the conditions of the work, subject to the District's approval.

# 39. DRAWINGS AND SPECIFICATIONS AT THE SITE GENERAL CONSTRUCTION CONTRACTS OVER \$50,000

The Contractor shall maintain at the site two copies of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other Modifications, in good order and marked to record all changes made during construction. One shall be principally used by the Asbestos Abatement Contractor and the other shall be available to the District and the Industrial Hygienist Technician. Both copies shall be available to the Owner's Project Representative and authorized visitors. The Drawings, marked to record all changes made during construction, shall be delivered to the Owner upon completion of the work.

#### 40. LONG DISTANCE PHONE CALLS

The Contractor shall submit a toll-free telephone number or authorization for the District to call collect with respect to the contract awarded if Contractor is located outside the local calling area for North Clackamas School District #12.

#### 41. FEDERAL, STATE, AND LOCAL STATUTES OR REGULATIONS

All structures, contract work, materials and/or equipment shall conform to applicable requirements of Federal, State or Local Statutes or Regulations. This includes, but is not limited to OSHA, fire regulations, noise abatement requirements, and DEQ requirements. All electrical equipment shall bear a UL or other approved label, and all rules pertaining to hazardous material shall be adhered to.

#### 42. M.S.D.S. HAZARDARDOUS MATERIALS COMMUNICATION

Contractor shall comply with all applicable federal and local regulations regarding hazardous materials handling, storage and disposal procedures. Any products used by contractor that are brought on to the site for construction purposes must be labeled in conformance with Federal and OSHA requirements, and with OAR Chapter 437, Division 155. M.S.D.S. (Material Safety Data Sheet) MUST be supplied on products, as used. Hazardous Materials shall be accompanied with appropriate Material Safety Data Sheet (MSDS) information. MSDS's shall be submitted to the Owner in accordance with the specifications. Contractor shall bear all costs associated with handling or clean-up of spills, releases, or environmental concern created from hazardous materials brought, stored, or used on-site. The Contractor is encouraged to minimize hazardous waste materials requiring special disposal. No dumping of hazardous materials in storm drainage or sanitary sewers is permitted without proper permits.

#### 43. ANTITRUST CLAIMS

The vendor hereby assigns to the North Clackamas School District fully, finally, and in their entirety, any and all federal and or state antitrust claims which the vendor now has or may hereafter acquire as a result of or in connection with any and all goods and services in the contract. Further, the vendor shall cause similar wording in favor of the District to be made a part of any and all contracts entered into with subcontractors or suppliers as a result of the primary contract. Claims shall include price-fixing, monopolization, and any other violation of state or federal antitrust law.

#### 44. BUILDERS BOARD

Every contractor/sub-contractor engaged in any construction activity involving improvements to real estate must be registered with the Oregon State Construction Contractors Board. Only "General Contractor - All Structures" or "Specialty Contractor - All Structures" classifications are allowed on District public works.

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#### 0101-01 WORK UNDER THIS CONTRACT

The work under this contract consists of asbestos abatement and related procedures identified by the owner. Contractor shall furnish as part of this contract all insurance required by the Owner and all materials, labor, tools and equipment required to complete the work according to the plans and specifications.

- Removal of all asbestos containing materials in accordance with the description of the project outlined on the drawings and these specifications and all Federal, State and Local EPA, OSHA, DEQ and AHERA regulations
- b. The Contract Sum shall not be affected by changes due to increases in equipment, transportation, labor or material costs, disposal costs and fees, or other similar events.

#### 0102-01 VISIT THE SITE

- a. Make on-site visit and become familiar with the existing conditions and installation affecting the work. No additional allowance shall be granted because of lack of knowledge of such conditions. Verify all measurements at the facility. For visitation appointment, contact the Project Manager (24) twenty-four hours prior to desired visitation.
- b. Obvious omissions or differences from drawings or specifications, shall be called to the Owner's attention at least TEN (10) DAYS prior to the bid date. Failure to do so shall be construed as the willingness of the Contractor to supply all necessary material and labor required for the proper completion of the work in a manner approved by the Owner.
- c. The original mechanical/electrical drawings drawn for the site are available for reviewing at the Facilities Operations Capital Projects Department.

#### 0103-01 GUARANTEE AND WARRANTY

- a. A date of substantial completion will be established by mutual consent and agreed to, in writing. Said date thus establishes the beginning of all warranty dates and other requirements.
- b. Prior to final payment, the Contractor shall furnish a written and signed guarantee and warranty for a minimum period of ONE (1) YEAR from date of formal acceptance on all labor, material, components and assemblies. If additional time is extended from any source on any labor, material, component or assembly or as prescribed by law or elsewhere in the bid documents, said extension shall also be provided to the District. If any of the work is found to be defective, the Contractor shall promptly correct, repair or replace without additional expense to the Owner, defective materials, supplies, tools or equipment as a result of defective workmanship or materials. The contractor shall do such repairs or replacement within 48 hours of notification.

#### 0104-01 PERMITS & FEES

a. After execution of the contract and at least ten (10) days prior to starting any work, the Contractor shall obtain and pay for any and all permits, fees, and licenses required by local, county or state authorities and necessary to execute and complete the work of each project. Contractor shall notify the following agency prior to beginning work.

> Oregon Department of Environmental Quality (DEQ) N.W. Regional Office P.O. Box 1760 Portland, Oregon 97207 503.229.5263 or 503.229.5085

#### 0105-01 WORK LAYOUT AND COORDINATION

a. Field Measurements: Verify existing conditions, and new work measurements at the job site prior to beginning the work.

#### 0106-01 CUTTING AND PATCHING

a. Do cutting of building or attached construction necessary for the completion of work. Patch cuts to match existing construction. Refinish surfaces to match adjacent finish. Where patch is major, refinish entire surface where damage occurs "border to border".

#### 0107-01 PROTECTION

- a. Protect existing surfaces, equipment and materials against damage or loss.
- b. Protect areas immediately adjacent to where work is under contract. Be responsible for damage that may be caused by such work to adjacent areas, equipment or structures.

#### 0140-01 GENERAL CLEANING AND CUSTODIAL SERVICES

- Housekeeping requirements and recommendations of Oregon Safety Code "Basic Industrial Safety", shall be followed.
- b. Housekeeping standards of the Associated General Contractors of America's "Manual of Accident Prevention" shall be followed.
- c. Remove debris as work progresses on a daily basis. Maintain the premises in a neat and clean condition. Clean up shall include all areas soiled as a result of the work. Contractor shall pay for required waste containers. Contractor may <u>not</u> use Owner's containers except as approved by the Assistant Superintendent for Operations.

# 0140-02 CLEANING WORK FOR COMPLETION - CONTRACT AREA SHALL BE CLEANED PRIOR TO FINAL INSPECTION

- a. HEPA vacuum all interior surfaces except glass. Vacuum duct interiors from grille or register to first obstruction in duct. Vacuum utility trenches and mechanical lofts.
- b. Clean heating and cooling ducts, blowers, fixtures, equipment, piping and grilles. Replace disposable air filters.
- c. Wash interior and exterior glass and mirrors.
- d. Wash hardware, plumbing fixtures, plastic laminate surfaces and painted woodwork, remove labels.
- e. Remove stains, paint, spots, marks, tarnish, and foreign matter to the surface on which it occurs; normal scuff marks made by footwear on VA tile shall not be required to be removed.
- f. Hose down exterior slabs and paving soiled as a result of the work.

#### 0150-01 REQUIRED DOCUMENTS-PROJECT CLOSEOUT

- a. Without relieving Contractor from stipulated requirements noted elsewhere in Contract Documents, Contractor shall deliver to Owner below listed required documents accompanied by a signed letter of transmittal.
- b. Guarantees to be executed in writing and in favor of the Owner.
- Verify additional requirements for type and quantity of required documents with other portions
  of Contract Documents.

- d. List of required documents below: Also see Division H, Specifications, 02 82 13 Asbestos Abatement, Section 1.04 Submittals and Notices.
  - 1. Job-site Daily Log
  - 2. Copies of Certificates for all personnel who worked on the job.
  - 3. Copies of HEPA filtered equipment maintenance logs.
  - 4. Copies of signed disposal documents.
  - 5. Manufacturer's catalog sheets, brochures, diagrams, schedules and performance charts on manufactured products.

#### 0150-02 ADDITIONAL DOCUMENTS

- a. Other guarantees and documents which may be required or which are normally offered by equipment and furnishings manufacturers shall be furnished to the Owner.
- b. Refer to General Conditions, Item 39 of these specifications.

#### 0150-03 DOCUMENT SUBMITTAL PROCEDURES

- a. All required documents are to be in the office of the Owner before final payment is issued.
- b. Provide three sets of all documents.
- c. Form for submittal shall be this:
  - 1. Bind all documents, except record drawings and specifications, in a new loose leaf binder. Deliver record drawings in closed drawing storage tubes.
  - 2. Index each binder by providing index page indicating every classification of items and each item within classification. Provide tab at each classification.
  - 3. Provide transparent protective covers for all guarantees, bonds and certificates.

#### 0160-01 SUBSTITUTIONS (OR EQUAL)

The use of brand names in specifying materials is for purposes of description and fixing quality only.

The materials, products, and equipment described in the Bidding Documents established a standard of required function, dimension, appearance, and quality to be met by any proposed substitution. No substitution will be considered unless written request for approval has been submitted by the bidder and has been received by the Assistant Superintendent for Operations no later than 3:00 P.M., TEN (10) CALENDAR DAYS prior to date of bid opening. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data, and any other information necessary for an evaluation. All information will be provided at bidders' sole expense.

A statement setting forth any changes in other materials, equipment, or work that incorporation of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the proposer. Use of the C.S.I. format is recommended.

Approval will be by written Addenda.

The Assistant Superintendent for Operations' decision of approval or disapproval of a proposed substitution shall be final.

#### 0160-02 ALTERNATIVE PROPOSALS

Contractors, subcontractors, or material suppliers may submit alternative proposals in whole or in part, for use of substitute materials, processes, and installations which are proposed to satisfy the scope of these Specifications and Drawings and were not pre-approved under the process in Section 0160-01, Substitutions. Verify form of submittal with The Assistant Superintendent for Operations before submitting and carefully define the exact limits of the proposal. Alternative Proposals shall be submitted in a sealed envelope identified as follows:

NORTH CLACKAMAS SCHOOL DISTRICT NO. 12 Attention: Su Jeremiah, Purchasing Department 6566 SE Lake Road, Milwaukie, Oregon 97222 ALTERNATIVE PROPOSAL FOR (Bid Number, Name of Item and Material)

Alternative proposals are to be submitted in the same manner and following the same procedure as a bid. See INSTRUCTIONS TO BIDDERS, Item 11.

Alternative proposals will be opened and examined at the bid opening after the opening of the regular bid proposals. At District's option, and with the prime Contractors' approval if applicable, the Alternative proposal may be accepted if the owner, in its sole discretion, determines the Alternative proposal to be responsive to the Invitation to Bid as within the scope and intent of the Specifications and Drawings. Inclusion into a general contract will be by change order, including proper price adjustments. If the alternative is the primary contract, a change order does not apply.

**END OF GENERAL REQUIREMENTS** 

### **DIVISION H - SPECIFICATIONS**

#### **ASBESTOS ABATEMENT OF SIX SCHOOLS**

Prepared By:



Engineering + Environmental

4412 SW Corbett Avenue Portland, Oregon 97239

**Environmental Consultant**: **Steve Dilling**, Project Manager Phone: 503.248.1939 Direct: 503.417.7576 Fax: 503.248.0223

Cell: 503.209.1503 E-mail:steve dilling@pbsenv.com

BID PACKAGE #1 Alder Creek Middle School BID PACKAGE #2
Riverside Elementary
Concord Elementary

BID PACKAGE #3 New Urban / Sojourner Oak Grove Elementary View Acres Elementary

	Concord Elementary	Oak Grove Elementary View Acres Elementary
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1.01	Scope	
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1.03	Documents Incorporated by Reference	
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2.01	Materials	
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3.01	Full Isolation Work Area Preparation	
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#### **DRAWINGS**

C1 Cover

HM1.0 View Acres Elementary School Abatement Plan

HM2.0 Alder Creek Middle School Abatement Plan

HM3.0 Riverside Elementary School Abatement Plan

HM4.0 Concord Elementary School Abatement Plan

HM5.0 New Urban H.S / Sojourner Elementary School Abatement Plan

HM6.0 Oak Grove Elementary School Abatement Plan

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# SECTION 02 82 00 ASBESTOS REMEDIATION 02 82 13 - ASBESTOS ABATEMENT

#### **PART 1 - GENERAL**

#### 1.01 SCOPE

- A. This section covers the removal, patching, encapsulation, or enclosure of materials that contain or are suspected to contain asbestos.
- B. Contractor shall provide all labor, materials, equipment, services, and insurance required to complete asbestos abatement procedures as indicated in these Specifications.

#### 1.02 DEFINITIONS

- A. Abatement: Procedures to control fiber release from asbestos-containing building materials. Includes encapsulation, enclosure, removal, repair and related activities.
- B. Aggressive Sampling: A method of air sampling that assures that the asbestos fibers remain airborne during the sampling time. All surfaces inside the work area will be agitated by the liberal use of compressed air. Fans will then be placed so as to keep all suspended fibers airborne, and run throughout the sampling period.
- C. AHERA: Asbestos Hazard Emergency Response Act, 40 CFR Part 763.
- D. Air Lock: A system for permitting ingress or egress without permitting air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways at least 3 feet apart.
- E. Air Monitoring: The process of measuring the asbestos fiber content of a specific volume of air in a stated period of time.
- F. Amended Water: Water containing a surfactant additive.
- G. Asbestos-containing Material (ACM): Any material containing more than one percent asbestos as defined under NESHAPS CFR 40, Part 61, OAR Chapter 340, Division 248, OR-OSHA 437, 1926.1101, and OSHA 29 CFR Part 1926.1101.
- H. Authorized Visitor: The Owner or designated representative, or a representative of any regulatory or other agency having jurisdiction over the project, and having required training, medical, fit test, etc.
- I. Certified Industrial Hygienist (CIH): An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.
- J. Class I Asbestos Work: Activities involving the removal of TSI and surfacing ACM and PACM.
- K. Class II Asbestos Work: Activities involving the removal of ACM, which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestoscontaining wallboard, floor tile and sheeting, roofing and siding shingles, and mastics.
- L. Clean Room: An uncontaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of workers' street clothes and clean protective equipment.

- M. Critical Barrier: Solid barrier constructed from minimum of 2 inch by 4 inch studs, 16 inch o.c.; half-inch plywood or drywall sealed airtight and covered on both sides (where applicable) with two layers of 6-mil plastic.
- N. Curtained Doorway: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway in a pleated fashion and securing one vertical side of each sheet on alternating sides of consecutive sheets. Two curtained doorways spaced a minimum of 3-feet apart to form an air lock.
- O. Disposal: Procedures necessary to transport and deposit the asbestos-contaminated material in an approved waste disposal site in compliance with EPA and other applicable regulations.
- P. Enclosure: Procedures necessary to completely seal all asbestos-containing material behind airtight, impermeable, permanent barriers, including PVC jackets.
- Q. Encapsulant (Sealant): A liquid material which can be applied to asbestos-containing material and which controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant), or by penetrating into the material and binding its components together (penetrating encapsulant).
- R. Other Environmental Consultant: Environmental consultant specializing in asbestos abatement--PBS Engineering + Environmental, 4412 SW Corbett Avenue, Portland, Oregon, 97239, 503.248.1939--or any subcontractor designated by PBS.
- S. Equipment Room: A contaminated area or room, which is part of the worker decontamination enclosure system, with provisions for storage of contaminated clothing and equipment.
- T. Fitting: With regard to pipe insulation, a fitting is any elbow, offset, reducer, tee, etc.
- U. Fixed Object: Fixtures which are attached to the building or are too heavy or bulky to remove from the work area.
- V. Glove Bag: A manufactured device consisting of a transparent plastic bag with inward projecting sleeves, an internal tool pouch, provisions for fastening and sealing at the top and sides, and a receptacle in the bottom to hold asbestos waste. The glove bag is installed so as to surround the material to be removed and contain all fibers released during the process. Glove bags are used to remove insulation from small sections of pipe and fittings.
- W. HEPA Filter: a High Efficiency Particulate Air (absolute) filter capable of trapping and retaining 99.97 percent of asbestos fibers greater than 0.3 microns in length.
- X. HEPA Vacuum Equipment: High Efficiency Particulate Air (absolute) filtered vacuuming equipment with a filter system capable of collecting and retaining asbestos fibers. Filters of 99.97 percent efficiency for retaining fibers of 0.3 microns in length or larger shall be installed for filtering discharge air.
- Y. Independent Testing Laboratory: A laboratory financially independent from and hired by the Owner or Contractor, which is either AlHA-accredited for asbestos with demonstrated proficiency via the AlHA PAT program, or has analysts proficient in the AlHA AAR program for air sample analysis.
- Z. Industrial Hygienist: An employee of the Independent Testing Laboratory who is experienced and trained in asbestos sampling and analysis as specified.

- AA. Isolated Work Area: A totally contained area of the facility where abatement activities are performed.
- BB. Movable Object: Furnishings which are not attached to the building structure and can be removed from the work area.
- CC. Negative-air Glove Bag: A manufactured device consisting of a transparent plastic bag with inward projecting sleeves, an internal tool pouch, provisions for fastening and sealing it at the top and sides, and a receptacle in the bottom to hold asbestos waste. The glove bag is installed so as to surround the material to be removed and contain all fibers released through the process, with provisions for allowing continuous airflow through the bag while maintaining negative pressure inside.
- DD. Owner: Representatives designated by the Owner, or designated employees of the Owner.
- EE. PACM: "Presumed asbestos-containing materials".
- FF. Pressure Differential Fan System: An air-purifying fan system located within or outside the isolated work area, which draws air out of the work area through a HEPA filter, thus keeping the static air pressure in the work area lower than in adjacent areas, and preventing escape of contaminated air from work area to adjacent areas.
- GG. Public Area: Any area outside the isolated work area. When work area isolation measures are removed, the work area becomes a public area.
- HH. Removal: All operations where ACM and/or PACM is taken out or stripped from structures or substrates, and includes demolition activities.
- II. Shower Room: A room between the clean room and the equipment room in the worker decontamination enclosure system, which is equipped with hot and cold running water controllable at the faucet and soap and shampoo, and which is suitably arranged for complete showering during decontamination. The shower room must be separated from the clean room and equipment room by air locks.
- JJ. Special Fitting: With regard to pipe insulation, a special fitting is any valve, union, strainer, thermometer, flange, etc.
- KK. Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.
- LL. Tack Coat: A coat of penetrating encapsulant applied to all surfaces from which asbestos-containing materials have been removed.
- MM. Thermal System Insulation (TSI): ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.
- NN. Vacuum Loader Removal: Wetting and pneumatic conveying of loose material through a vacuum hose to a sealed collection tank specially equipped to prevent escape of fibers.
- OO. Wet Cleaning: The process of eliminating asbestos from building surfaces and objects by using cloths, mops or other cleaning tools, which have been dampened with water.
- PP. Worker Decontamination Enclosure System: A showering facility for workers, typically consisting of a clean room, a shower room, and an equipment room. Each of these rooms is separated from the others by air locks. The equipment room is separated from the work area by a curtained doorway. The clean room is separated from the public area by a curtained doorway.

QQ. Worksite Entry Logbook: A logbook kept in the clean room which must be signed by everyone entering or leaving the work area. All pages of the logbook must be the same as the sample page bound into these Specifications.

#### 1.03 DOCUMENTS INCORPORATED BY REFERENCE

- A. The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the most stringent requirements shall apply.
  - 1. U.S. Environmental Protection Agency National Emissions Standards for Hazardous Air Pollutants (NESHAPS). (Code of Federal Regulations Title 40, Part 61, Subparts A and B.)
  - 2. U.S. Environmental Protection Agency Office of Toxic Substances Guidance Document, "Guidance for Controlling Friable Asbestos-Containing Materials in Buildings." EPA Report Number 560/5-85-024 ("Purple Book").
  - 3. U.S. Department of Labor Occupational Safety and Health Administration (OSHA):
    - a. Title 29 Code of Federal Regulations Section 1910.1001--General Industry Standard For Asbestos.
    - b. Title 29 Code of Federal Regulations Section 1910.134--General Industry Standard For Respiratory Protection.
    - c. Title 29 Code of Federal Regulations Section 1910 *et al.*--Occupational Exposure to Asbestos; Final Rule.
    - d. Title 29 Code of Federal Regulations 1926.1101--Construction Standard for Asbestos.
    - e. Title 29 Code of Federal Regulations Section 1910.2--Access to Employee Exposure and Medical Records.
    - f. Title 29 Code of Federal Regulations Section 1910.1200--Hazard Communication.
  - 4. National Institute for Occupational Safety and Health (NIOSH), 30 CFR, Part II, Respirators.
  - 5. American National Standards Institute (ANSI) NY; ANSI Standard Z 88.2-1980 "American National Standards Practice for Respiratory Protection", latest edition.
  - 6. Oregon Administrative Rules Chapter 340, Division 248, Department of Environmental Quality; Chapter 340, Division 33, Licensing and Certification Requirements.
  - 7. Oregon Administrative Rules Chapter 437, Divisions 2 and 3.
  - 8. Oregon Revised Statutes (ORS), Chapters 279, Certified Asbestos Contractors and Prevailing Wage; 656, Workers Compensation; and 701, Construction Contractors Board Registration.
  - 9. Uniform Building Code (U.B.C.), latest edition, regulations as applicable.

- 10. All related electrical work shall be performed in accordance with the National Electrical Code.
- 11. All local ordinances, regulations, or rules pertaining to asbestos, including its storage, transportation, and disposal.

#### 1.04 SUBMITTALS AND NOTICES

- A. Contractors shall submit three bound, indexed copies of each submittal package as indicated below.
- B. Contractors shall submit to the Environmental Consultant the following information prior to beginning work on the project.
  - CONTRACTOR'S LICENSE. Submit proof that the Asbestos Abatement Contractor is currently and for the duration of the project licensed in the state of Oregon to perform asbestos abatement, per ORS Chapter 701, and OAR Chapter 340, Division 248.
  - 2. ASBESTOS SUPERVISOR. Submit the name and resume of experience of the assigned on-site foreman. At a minimum, the foreman shall have successfully completed the DEQ Asbestos Supervisor course as approved by the state of Oregon. Other criteria such as references and similar projects will also be reviewed. At the Owner's request, the Contractor shall arrange an oral interview with the assigned on-site foreman. The Owner and the Environmental Consultant reserve the right to reject the foreman from the work at any time during the project. The Contractor shall then assign another on-site foreman for Owner and Environmental Consultant approval as described above. The foreman shall speak English fluently.
  - 3. INSURANCE CERTIFICATE. Submit a copy of the certificate of asbestos-specific liability insurance policy, as specified.
  - 4. WORKER CERTIFICATION. Submit written proof indicating that all employees impacting asbestos-containing materials are Oregon State-certified asbestos workers. Proof shall include a signature from the Contractor's Principal indicating that all employees assigned to this project have completed such a program, and photocopies of certificates.
  - 5. RESPIRATOR PROGRAM. Submit written proof indicating respirator program is in compliance with all parts of OSHA Asbestos Regulations CFR Title 29, Part 1910.134 and 1926.1101, OR-OSHA Chapter 437, 1910.134 and 1926.1101.
  - 6. MEDICAL PROGRAM. Submit written proof medical exam program is in compliance with OSHA Asbestos Regulations CFR Title 29, Section 1926.1101 and OR-OSHA Chapter 437, 1926.1101.
  - 7. EMERGENCY PLANS. Submit a written emergency control and cleanup plan to be followed by the Contractor in the event of an accidental breach in containment, power failure, and accidental disturbance of ACMs in non-isolated areas.
  - 8. NOTIFICATION. Submit copy of written notification to the Department of Environmental Quality (DEQ), of the proposed asbestos work.

- 9. DISPOSAL PLAN. Submit written proof that all required permits and arrangements for transport and disposal of asbestos-containing or contaminated materials, supplies, and the like at a site approved by EPA and other responsible agencies have been obtained.
- 10. WORK PLAN. Submit a written "work plan" satisfactory to the Owner describing the schedule for asbestos abatement, decontamination procedures, and plans for construction and location of decontamination enclosure systems, pressure differential exhaust fans, etc. in compliance with these Specifications and applicable regulations, including calculations for determining required number of negative-air filtration units. The plan shall schedule the systematic flow of work throughout the facility per Specifications on a day-by-day basis, outlining room-by-room, or area-by-area procedures and planned alternative control measures. The Contractor shall keep close coordination of his work with the Owner. Include a list of subcontractors and their designated work responsibilities.
- 11. AIR MONITORING. Submit information pertaining to the proposed air monitoring program for this project if appropriate. This information shall include the name(s) of the certified industrial hygienist appointed, the name of the on-site industrial hygiene technician working under his supervision, types of equipment, and sampling schedule, sampling procedures, calibration recordkeeping, and testing laboratory proposed.
- 12. PRODUCT INFORMATION. Submit complete product information for any materials and products for which the Contractor requests approval for use on this job (other than those specified).
- 13. EMERGENCY PHONE NUMBER. Submit a local phone number at which the Contractor or on-site foreman can be reached on a 24-hour basis during the course of the work.
- C. Contractor shall not begin work until submittals are reviewed and accepted by Owner and the Environmental Consultant. Allow a five day review period.
- D. During the work the Contractor shall submit to the Owner on a periodic basis as agreed to by the Owner, Environmental Consultant, and Contractor:
  - 1. Waste shipment and disposal documentation
  - 2. Air monitoring data
  - 3. Notification updates
- E. Contractor shall submit to the Environmental Consultant in writing all information required above regarding any new asbestos workers hired by or subcontracted to the Contractor before these new asbestos abatement workers begin work.
- F. Prior to removal of decontamination systems and isolation barriers, the Contractor shall obtain specific written permission from the Environmental Consultant.
- G. CLOSEOUT SUBMITTALS Prior to making final application for payment the Contractor shall:
  - 1. Complete all work under this contract.

- 2. Submit to the Environmental Consultant all required submittals including all Waste Shipment Records completely filled out and signed.
- 3. Submit to the Owner all payroll reports for work on this contract and other information as described elsewhere in the Specifications, if appropriate under the contract.
- 4. Submit to the Environmental Consultant "as-abated" drawings along with a signed affidavit stating that all asbestos-containing materials have been removed as indicated on the drawings.
- H. See other sections of these Specifications and EPA, OSHA and other standards referenced therein, for further information and requirements not included above.

#### 1.05 BUILDING PROTECTION

- A. Building Security and Protection
  - 1. The Contractor shall post adequate warning signs at all potential entrances to work areas as required by EPA and OSHA.
  - Any damage to existing building, services, and/or equipment shall be remedied by the Contractor at his expense.
  - 3. Contractor shall clean external surfaces of contaminated containers and equipment thoroughly by wet sponging and HEPA vacuum.
  - 4. Contractor shall maintain access and use of existing fire lanes.

#### 1.06 PERSONNEL PERSONAL PROTECTION

#### A. Training

- 1. Prior to commencement of work, Contractor shall ensure all workers have been trained as specified.
- 2. The Contractor shall provide and post, in the clean room(s) and the equipment room(s), the decontamination, respirator, and work procedures to be followed by the workers.
- 3. For demolition of non-asbestos containing walls and ceilings in areas containing friable asbestos materials, the Contractor has the option to train qualified demolition workers. Such training shall be the sole responsibility of the Contractor and shall consist of a minimum of eight hours, unless applicable regulatory agencies accept a lesser amount of classroom time. Topics shall include background of asbestos, health effects, personnel protection, use of worker decontamination and other topics. Training shall be acceptable to OR-OSHA, Department of Environmental Quality and other applicable agencies.
- B. Personnel Personal Protective Equipment for Asbestos Removal
  - 1. Work clothes shall consist of disposable full-body coveralls and head and foot covers ("Tyvek" or approved), boots, or sneakers. Eye, hearing, fall protection, and hard hats should be available as appropriate.

- 2. At a minimum, respiratory protection shall be approved by NIOSH/MSHA (National Institute for Occupational Safety and Health/Mine Safety and Health Administration), United States Department of Labor, and United States Department of Health, Education and Welfare, Centers for Disease Control, and be as listed below. Respiratory protection shall provide workers with a maximum calculated fiber level inside the mask of 0.01 f/cc.
  - a. Glove Bag or Modified Glove Bag: Full-face mask, powered air-purifying respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 100.
  - b. Demolition of walls and ceilings that may impact friable asbestos-containing material: Half-face mask, negative-pressure respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 10.
  - c. Pre-abatement work in close proximity to friable asbestos-containing materials: Half-face mask, negative-pressure respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 10.
  - d. Abatement in Isolated Areas: Full-face mask, powered air-purifying respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 100.
  - e. HEPA vacuuming and wet cleaning of surfaces: Half-face mask, negative-pressure respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 10.
  - f. Vinyl asbestos floor tile removal: Half-face mask, negative-pressure respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 10.
  - g. Handling of double-bagged asbestos-contaminated waste: Half-face mask, negative-pressure respirator with disposable HEPA filter cartridges (magenta/purple color code). Protection factor: 10.
- 3. Additional respiratory protection shall be as required by CFR 29 1910.134 and 1926.1101, OR-OSHA Chapter 437, 1910.134 and 1926.1101.
- 4. As part of the Contractor's Respiratory Protection Program, all workers shall be provided with a selection of brands and sizes of respirators to choose from. At a minimum, all workers shall be qualitatively fit-tested at the time of respirator selection per OR-OSHA Worker's Compensation Department Rule 22-069 (4)(e)(5)(i), and semiannually thereafter.
- 5. Contractor shall supply replacement filter cartridges, as required. Cartridges that have become wet or clogged shall be replaced immediately.

#### C. Worker Decontamination Enclosure System

 The Contractor shall construct a personnel decontamination facility immediately outside of the isolated work area consisting of three chambers and two air locks as follows:

- a. The equipment room shall consist of an air lock to the shower room, and a curtained doorway to the work area.
- b. The shower room shall have two air locks, one to the equipment room and one to the clean room. All showers shall have hot and cold water controllable at the taps and shall be installed in this room. The Contractor shall supply and maintain soap, shampoo and towels at all times in the shower area. Shower wastewater shall be filtered to remove all fibers larger than 5 microns or as required by local regulations, before disposal in the municipal sewer system, or shall be collected and disposed of as asbestos-contaminated material. Obtain any permits as required by local municipalities as to water discharge and comply with all regulations. Water filters shall be disposed of as asbestos-contaminated material.
- c. The clean room shall consist of an air lock to the shower room and a curtained doorway to the adjacent building area. The clean room shall contain a first-aid kit, storage for workers' and visitors' clothing and shoes, a place to sit down, and the Worksite Entry Logbook. Work, respirator and decontamination procedures, regulations and Prevailing Wage Rates shall be conspicuously posted. There shall be a supply of clean protective clothing, respirators and cartridges in the clean room at all times.
- Contractor shall not begin asbestos abatement work unless this system is functional, in good repair, and has been found acceptable for specification compliance by the Environmental Consultant.

#### D. Personnel Protection Procedures in Isolated Work Areas

- 1. Each worker shall, upon entering the jobsite: remove street clothes in the clean change room, put on and fit-test his respirator, put on clean protective clothing and sign in on the Worksite Entry Logbook before entering the equipment room or the work area.
- Workers shall, each time they leave the work area: remove gross contamination from clothing before leaving the work area; proceed to the equipment room and remove and dispose of disposable work clothes; remove and store shoes, boots and other equipment except respirators; still wearing the respirator proceed to the showers; clean the outside of the respirator with soap and water while showering; remove the respirator; thoroughly shampoo and wash themselves; remove filters, dispose of filters in the container provided for the purpose; and wash and rinse the inside of the respirator.
- 3. Following showering and drying off, each worker shall proceed directly to the clean change room and dress in clean clothes at the end of each day's work, or before eating, smoking, or drinking. Before reentering the work area from the clean change room, each worker shall put on his respirator with clean filters, dress in clean protective clothing, and sign in on the Worksite Entry Logbook.
- 4. Contaminated work footwear and other equipment shall be stored in the equipment room when not in use in the work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste or clean thoroughly inside and out using soap and water before removing from work area.

- 5. Workers shall not eat, drink or chew gum at the worksite except in the established clean room. Smoking or using other tobacco products is prohibited.
- 6. Workers shall be fully protected with respirators and protective clothing immediately prior to the first disturbance of asbestos-containing or contaminated material and until final cleanup is completed.

#### E. Access to Isolated Work Area by Others

- 1. Except for emergency personnel, the Contractor shall limit access to the work area to authorized visitors.
- 2. The Contractor shall provide protective clothing, respirators and equipment for all authorized visitors, as specified above.
- 3. All authorized visitors shall be subject to the personnel personal protection provisions specified above, and shall sign in and out on the Worksite Entry Logbook.

#### F. Personnel Protection During Work in Non-isolated Work Areas

- 1. Work clothes per 1.06 B.
- 2. Respiratory protection per 1.06 B.
- 3. Worker protection procedures will differ from 1.06 D, in that two layers of coveralls shall be worn after removal of street clothes. Worker decontamination through a Worker Decontamination Enclosure is required. The first layer of coveralls must be removed when exiting the glove bag work area. The worker shall immediately proceed to the Worker Decontamination Unit. The remaining requirements of 1.06 D still apply.
- 4. Contractor to submit to the Environmental Consultant for approval, an emergency control and cleanup plan to be followed in the event of asbestos contamination during glove bag use. Contractor shall ensure all workers are thoroughly familiar with approved plan.
- 5. Contractor shall promptly remove all bags as they are used to the bag-holding and decontamination enclosure system.

#### G. Emergency Precautions

- 1. The Contractor shall establish emergency and fire exits from the work area. Contractor shall ensure these exits are well marked and remain unobstructed.
- 2. The Contractor shall be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination.
- 3. Contractor shall notify the local fire department of the asbestos abatement project prior to beginning work area preparation.

#### 1.07 SAFETY

With regard to the work of this contract, the safety of the Contractor's employees, the Owner's employees, and the public is the sole responsibility of the Contractor.

#### 1.08 LIABILITY

The Contractor is an independent contractor and not an employee of the Owner or of the Environmental Consultant. The Owner and Environmental Consultant shall have no liability to the Contractor or any third persons for Contractor's failure to faithfully perform and follow the provisions of these Specifications and the requirements of the governing agencies. Notwithstanding the failure of the Owner or the Environmental Consultant to discover a violation by the Contractor of any of the provisions of these Specifications, or to require the Contractor to fully perform and follow any of them, such failure shall not constitute a waiver of any of the requirements of these Specifications which shall remain fully binding upon the Contractor.

#### 1.09 DELIVERY

Contractor shall deliver all materials to the worksite in the original packages, containers or bundles bearing the name of the manufacturer and the brand name.

#### 1.10 STORAGE

Contractor shall store all materials subject to damage off the ground, away from wet or damp surfaces, away from heat sources, and under cover sufficient to prevent damage, contamination or fire.

#### 1.11 PROTECTION

Damaged or deteriorating materials shall not be used and shall be removed from the premises by the Contractor. Materials that become contaminated with asbestos shall be disposed of in accordance with the applicable regulations by the Contractor.

#### 1.12 SUBCONTRACTORS

Any Subcontractors employed by the Contractor shall be bound to all the work and safety standards specified elsewhere in this Specification. Subcontractor's personnel shall be fully trained and supervised by the Contractor during performance of this work.

#### **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. Plastic Sheet: Plastic sheet shall be flame-retardant polyethylene material sized in lengths and widths to minimize the frequency of joints. The minimum thickness shall be 6-mil.
- B. Plastic Bags: Plastic bags shall be 6-mil polyethylene printed with warning labels per OSHA and EPA regulations.
- C. Tape: Tape shall be capable of sealing joints of adjacent sheets of plastic and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under dry and wet conditions, including use of amended water. Minimum of 2-inch wide tape must be used.
- D. Disposal Containers: Disposal containers shall be suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site. The containers shall be labeled in accordance with OSHA and EPA regulations. Containers must be both air- and watertight, and have hard top, bottom and sides.

- E. Warning Labels and Signs: Warning labels and signs shall be posted as required by OR-OSHA, ODOT and DEQ regulations.
- F. Amended Water: Clean potable water containing a surfactant additive. The surfactant additive shall be 50 percent polyoxyethylene ether and 50 percent polyethylene ester, or equivalent, and shall be mixed with water at a concentration of one ounce surfactant to 5 gallons of water, or as recommended by the manufacturer in the case of an equivalent.
- G. Encapsulants (Sealants): Encapsulants shall be of the bridging or penetrating variety and shall be listed as "satisfactory" by the EPA. Encapsulants shall provide a suitable substrate bonding agent for application of new material where appropriate. Penetrating Encapsulant: No. 207 Special Sealer #33775-27A as manufactured by Makus-Cincinnatus, Inc.; "Asbestop 30B-2" as manufactured by Asbesco Corp.; "Cable Coating 22-P" as manufactured by American Coatings Corp., or approved. Bridging Encapsulant: Decadex Firecheck, manufacturer's standard color "Magnolia", as manufactured by Pentagon Plastics, Inc.; "Cable Coating 2-B", manufacturer's standard color gray, as manufactured by American Coatings Corp.; or approved.
- H. Rewettable Lagging Cloth: 12-ounce glass fabric lagging cloth saturated with dried lagging adhesive. "Dip-Lag" as manufactured by Claremont Co. or approved.
- I. Enclosure: Protective plastic jacketing systems, framed gypsum board enclosures, suspended ceilings or other materials as specified elsewhere.
- J. Other Materials: Provide all other materials such as lumber, nails and hardware, which may be required to construct and dismantle the decontamination area and the barriers that isolate the work area, and as required to complete the work as specified.

#### 2.02 TOOLS AND EQUIPMENT

- A. Water Sprayer: The water sprayer shall be an airless or other low-pressure sprayer for amended water application.
- B. Air-Purifying Equipment: Air-purifying equipment shall consist of High-Efficiency Particulate Air (HEPA) filtration systems. No air movement system or air equipment shall discharge asbestos fibers outside the work area. Each unit shall be capable of variable volume from a minimum of 500 CFM to at least 1700 CFM under load and shall have at least two stages of pre-filtration ahead of the HEPA final filter. Each unit shall be equipped with an elapsed time indicator (hour meter), static pressure gauge with low flow alarm, be overload protected, and each unit shall be equipped with heat and smoke sensors which will visually and audibly warn workers and shut unit fan down within 30 seconds. The units shall be: Micro-Trap Portable Air Filtration System manufactured by Asbestos Control Technology, Inc., "HOG 2000" Negative-air Protection System manufactured by Control Resource Systems, or approved.
- C. Pressure Differential Monitoring Equipment: A combination sensing, alarm and recording device shall be in operation at all times during use of the HEPA air-purifying equipment. The unit shall be a "Neg-A-Master," manufactured by Control Resource Systems, Inc., or an approved.
- D. Water-Purifying Equipment: Capable of removing all fibers longer than 5 microns or as required by local regulations from water used in abatement work and decontamination showers. Control Resource Systems, Inc. "AQUA-HOG" or approved.

- E. Airless Sprayer: An airless sprayer, suitable for application of penetrating encapsulant material, shall be used.
- F. Vacuum Equipment: all vacuum equipment utilized in the work area shall be High-Efficiency Particulate Air (HEPA) equipment, and suitable for wet/dry usage.
- G. Scaffolding: Scaffolding, as required to accomplish the specified work, shall meet all applicable safety regulations. All special scaffolding shall have drawings and calculations stamped and signed by a civil or structural engineer registered in the state of Oregon.
- H. Transportation Equipment: Transportation equipment, as required, shall be suitable for loading, temporary storage, transit, and unloading of contaminated waste without exposure to persons or property. Equipment shall have a hard top, bottom and sides. If equipment is rented, notify rental agency in advance, in writing, of intended use of equipment.
- I. Electrical: Electrical tools, equipment and lighting shall meet all applicable codes and regulations. Ground fault protection as required by OSHA, shall be in effect at all times. Contractor shall take all additional precautions and measures necessary to insure a safe working environment during wet removal.
- J. Glove Bags: Bags shall be clean poly bags, seamless at the bottom, with preprinted asbestos warning labels, 6-mil PVC with attached TYVEK arms and latex gloves. Bags shall be Profo' Bag manufactured by Asbestos Control Technology, Inc., or Asbest'O'Saf/SAC by Control Resource Systems, Inc., or approved.
- K. Remote Filter Housing: Stainless steel housing with pre-filters and HEPA filter sealed to cabinet flanges by Century Equipment "Advance Guard II" or approved equal.
- L. Other Tools and Equipment: Provide other suitable tools for the removal, enclosure, encapsulation, patching, and disposal activities including but not limited to: hand-held scrapers, wire brushes, sponges, and rounded-edge shovels.

#### PART 3 - EXECUTION

#### 3.01 FULL ISOLATION WORK AREA PREPARATION

- A. Contractor shall perform the following isolation procedures in the order in which they are presented. Any alternative control measures considered for Class I work shall be performed in accordance with 29 CFR 1926.1101.
  - Coordinate all electrical, safety and other service connections, requirements and equipment with the Owner. Use a journeyman electrician at a minimum. It is the Contractor's responsibility to verify operation of systems that will be shut off during abatement. If any system is found to be defective or not operating satisfactorily, the Contractor shall notify the Owner or Environmental Consultant in writing prior to shutoff.
  - 2. Install critical barriers as follows. Seal off all openings, including but not limited to doorways, windows, and other penetrations of the work area, with solid critical barriers, except openings left for HEPA air-purification system, which shall be properly HEPA- filtered. Where doors exist, sealing may be done by closing door, sealing with tape on both sides, then covering both sides with two layers of plastic sheeting.

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- Pre-clean movable objects, such as furniture and equipment to be removed (and 3. carpeting), within the proposed work areas using HEPA-filtered vacuum equipment and/or wet cleaning methods as appropriate, and remove such objects from work areas to a temporary location, or consolidate such objects away from removal work and enclose with critical barriers.
- Pre-clean fixed objects within the proposed work areas, using HEPA-filtered vacuum 4. equipment and/or wet cleaning methods as appropriate, and enclose with critical barriers. Equipment which must continue operating shall be enclosed and ventilated to avoid damage.
- Set up the worker decontamination enclosure system (decon). Once this system is 5. installed and abatement commences, it shall be utilized in the specified manner for the ingress and egress of all personnel and equipment, except in emergency situations. All personnel shall sign the Worksite Entry Logbook each time they pass in or out of the decontamination enclosure.
- Install HEPA air-purifying equipment pressure differential fan system so as to ensure 6. lower static pressure in the isolated work area than in surrounding areas, a flow of air through all parts of the isolated work area towards the air-purifying equipment, and minimum air contamination levels at abatement worker breathing zones. Discharge from air-purifying equipment shall be ducted outside the building. Use one or more units of capacity as recommended by the manufacturer for the volume of the isolated work area, but in no case shall airflow be less than six air changes every 60 minutes with a minimum pressure differential of 0.02 inch wg between the work area and the decon clean room.
- Cover floor and wall surfaces with plastic sheeting sealed with tape. Cover floors first 7. so that plastic extends at least 12 inch up on walls, then cover walls with plastic sheeting to overlap floor plastic by a minimum of 24 inch, thus overlapping the horizontal floor material by a minimum of 12 inch. Install additional layer of plastic sheeting on floor and walls in similar manner. Contractor may use mechanical fastening techniques, such as tack strips, as necessary to secure wall plastic sheeting. Contractor shall repair any damage resulting from mechanical fasteners.
- Maintain emergency and fire exits from the work areas, or establish alternative exits 8. satisfactory to the local building or fire department officials. Ensure that all exits remain unobstructed and well marked.
- Adequate portable fire extinguishing equipment shall be maintained within work area 9. as defined by OSHA and/or local fire department officials.
- No asbestos abatement work shall occur unless the work area isolation has been found В. acceptable for Specification compliance by the Environmental Consultant.
- Isolated work area enclosure system maintenance. The Contractor shall be responsible for C. daily documentation of the following:
  - Prior to the first use and at the beginning of each shift during abatement work, 1. containments shall be given a complete visual inspection by the Contractor's shift foreman and industrial hygienist. This shall include inspection of the HEPA airpurification system and associated filters. A smoke tube test by the shift foreman shall then be made of the worker decontamination enclosure system and other critical areas to verify that the isolated area is under negative air pressure. Work shall not begin until all defects have been repaired.

2. Periodic inspections shall be made as required during each shift to assure continued proper functioning of the containment and HEPA system.

#### 3.02 NON-ISOLATED WORK AREA PREPARATION

- A. Contractor shall perform the following procedures in the order in which they are presented and describe procedures for glove bag work and other work in non-isolated work areas. Any alternative control measures considered for Class II work shall be performed in accordance with 29 CFR 1926.1101.
  - 1. Shut down HVAC systems. Coordinate with building users and the Owner prior to shutdown.
  - 2. Restrict access to work area and post warning signs. Do not perform glove bag work or any abatement work in an occupied area.
  - 3. Completely preclean entire work area using HEPA vacuum equipment or wet cleaning methods.
  - 4. Set up the worker decontamination enclosure system. Once this system is installed and abatement commences, it shall be utilized in the specified manner for the ingress and egress of all personnel, except in emergency situations. All personnel shall sign the Worksite Entry Logbook each time they pass in or out of the decontamination enclosure.
  - 5. At the direction of the Environmental Consultant, install HEPA exhaust fan in work area. Duct fan intake to immediate area of work in such a manner that any fibers released will be drawn away from the worker and into intake duct.
  - 6. Cover floor and other surfaces below work area with 6-mil plastic sheeting. Seal openings and install curtained doorways and air locks as directed by the Environmental Consultant.
  - 7. Have emergency cleanup equipment and supplies, including HEPA vacuum, amended water, disposal bags, mop, buckets, towels and sponges, on hand prior to start of abatement work.
- B. No asbestos abatement work shall occur unless the work area has been found acceptable for Specification compliance by the Environmental Consultant or industrial hygiene technician.

#### 3.03 REMOVAL OF ASBESTOS-CONTAINING MATERIALS IN FULL ISOLATION WORK AREAS

- Contractor shall isolate work area as specified.
- B. Contractor shall remove all asbestos-containing pipe insulation, surfacing material and other asbestos-containing materials as defined in the project-specific scope of work.
  - Contractor shall spray the asbestos material with amended water. A fine spray of this solution shall be applied to prevent fiber disturbance preceding the removal of the asbestos material. The asbestos shall be sufficiently saturated to prevent emission of airborne fibers in excess of specified fiber levels.

- 2. Contractor shall remove asbestos material while damp and pack in sealable plastic bags (6-mil minimum thickness). Move bags to bag load out facility or equipment room in the worker decontamination system. Wash outside surface and place inside a second plastic bag (6-mil minimum thickness) bearing DEQ warning label and name of waste generator and location from which waste was generated.
- 3. After completion of stripping work, Contractor shall clean all surfaces from which asbestos has been removed by brushing and/or wet sponging or cleaning by an equivalent method to remove all visible material. During this work the surfaces being cleaned shall be kept wet. Avoid using wire brushes if possible.
- 4. Contractor shall collect all water used in the removal and cleaning process and dispose of as contaminated waste or filter to remove all fibers more than five microns in length before disposal in the municipal sewer system, or as required by local regulations. Water filters shall be disposed of as asbestos-contaminated material.
- C. Removal of non-friable materials such as floor tiles shall be accomplished by such manner as to minimize breakage and to maintain non-friability. Do not drop, throw, saw or scrape non-friable materials during removal, handling or disposal. The use of spud bars to remove floor tiles is an acceptable practice.
- D. Contractor shall maintain a safe and uncluttered work area, worker decontamination system, and bag load out facility on a daily basis.

#### 3.04 REMOVAL OF ASBESTOS-CONTAINING MATERIALS IN NON-ISOLATED AREAS

- A. Contractor shall apply spray coat of amended water to material to be removed. Keep material damp during entire removal process.
- B. Glove bag work shall be as follows. All removal using the glove bag method shall be performed strictly according to regulations, manufacturer's printed instructions, and as demonstrated by the manufacturer's representative or as further specified in this section. Workers are not to smoke or wear hand or wrist jewelry while using glove bags.
  - Contractor shall coordinate the shutoff of all sources of heat to objects to be worked on. Do no work on objects above 150 degrees Fahrenheit.
  - 2. Contractor shall install port for hose of HEPA vacuum to create reduced pressure inside glove bag. Installing of fresh air intake and/or bridging to prevent collapse of bag are acceptable. Reduced pressure shall be maintained throughout entire abatement procedure.
  - 3. During the removal phase, Contractor shall utilize amended water to reduce potential for airborne fibers.
  - 4. After completion of insulation removal and cleaning, but prior to removal of glove bag, Contractor shall apply a single "tack" coat of penetrating encapsulant to surface of pipe and any remaining non-asbestos insulation, within the glove bag.
  - 5. After the pipe has been sealed, but prior to removal of glove bag, Contractor shall thoroughly wash the upper chamber of the glove bag and seal the contents of the bag in the lower chamber.

- 6. Contractor shall seal flap if used and, utilizing a HEPA vacuum, remove all contaminated air in the upper chamber.
- 7. Follow procedures set forth in Section 02 82 13.11 in case of a spill or if air analysis indicates a fiber count in excess of limits.
- 8. Contractor shall promptly double-bag the glove bag after removal is complete, place into a sealed container and remove to the bag holding enclosure.
- C. Wrap and Cut Method shall be as follows: At intervals determined by the Contractor, glove bag-remove 2 to 3 feet of asbestos-containing pipe insulation as specified. Seal remaining pipe, with asbestos-containing pipe insulation intact, in two separate layers of 6-mil plastic sheeting. Cut pipe wrap sections at ends, taking care to not damage adjacent wrapped or unwrapped insulated sections. Label double-wrapped pipe as specified for disposal. Obtain approval of landfill prior to utilizing this method. Dispose as contaminated waste in accordance with Specifications and approved landfill requirements.
- D. Removal of cement asbestos board and similar material shall be as follows: Material shall be removed one sheet or piece at a time. Material shall be kept continuously wet. Cut or remove fasteners one at a time while running HEPA vacuum at the point where work is being done so as to collect all dislodged particles and fibers.
  - 1. When all fasteners have been removed, carefully remove entire sheet or piece and wrap in 6-mil plastic sheeting while still wet. Do not drop, throw, break, saw or scrape cement asbestos board during removal, handling or disposal.
  - 2. Label, transport, and dispose of wrapped sheets as specified in the Disposal section.
  - 3. Clean entire substrate with HEPA vacuum or wet cleaning methods and leave ready for application of replacement material.

#### 3.05 CLEANUP IN FULL ISOLATION WORK AREAS

- A. At the conclusion of removal in the isolated work area, conduct cleanup in the sequence described below. Windows, doors, HVAC vents, etc. shall remain sealed and HEPA-filtered pressure differential fan systems shall remain in service.
  - 1. REMOVE MATERIAL AND EQUIPMENT. Contractor shall remove visible accumulations of material and debris (including filters removed from HVAC equipment and HEPA air-purification equipment). Contractor shall include all sealed containers and equipment used in the work area in the cleanup and remove them from work area, after decontamination of outer surfaces.
  - 2. FIRST CLEAN. Contractor shall clean all surfaces in the work area and any other contaminated areas with water and/or with HEPA-filtered vacuum equipment.
  - 3. WAIT 24 HOURS. After the first cleaning of the work area, wait 24 hours to allow for settlement of dust. During this settling period, no entry to the work area shall be allowed.
  - 4. SECOND CLEAN. Wet-clean or clean with HEPA-filtered vacuum equipment all surfaces in the work area. After completion of the second cleaning operation, perform a complete visual inspection of the work area to ensure that the work area is free of visible debris.

- 5. FINAL VISUAL INSPECTION. Prior to application of post- removal encapsulant, contact the Environmental Consultant for a visual observation of the work area. The work area shall be free of visible debris. Observation by the Consultant does not alleviate the Contractor of responsibility to provide work in compliance with Specifications. Contractor shall contact Environmental Consultant at least 24-hours prior to desired inspection time.
- 6. REMOVE PLASTIC SHEETING. After visual observation by the Consultant, Contractor shall apply a coat of approved encapsulant to all surfaces in the work area where asbestos has been removed and to disposable plastic sheeting as a post-removal encapsulant. Encapsulant application shall follow all applicable manufacturers' recommendations and shall provide a compatible bonding agent for application of new material.
- 7. FINAL CLEAN. After the encapsulation is complete, the Contractor shall remove all noncritical plastic and clean all floors, walls, fixtures and other surfaces within the work area with only critical barriers in place using wet methods or HEPA-filtered vacuum equipment. Plastic sheeting over carpets may remain in place.
- 8. CONTACT ENVIRONMENTAL CONSULTANT. Contact the Environmental Consultant for a visual observation of the work area. The work area shall be free of visible debris. Observation by the Consultant does not alleviate the Contractor of responsibility to provide work in compliance with Specifications. Contractor shall contact Environmental Consultant at least 24-hours prior to desired inspection time. Consultant shall conduct final air monitoring as specified after work area has been allowed sufficient time to dry.
- 9. CARPETS AND TEARDOWN. When the final observation by the Environmental Consultant and air sampling test results are satisfactory, steam-clean and HEPAvacuum carpet left in place during abatement. Contractor shall then remove the decontamination systems and remaining barriers.
- 10. DISPOSAL. Contractor shall properly dispose of all waste materials. All polyethylene material, tape, cleaning material, and contaminated clothing shall be double-bagged, sealed and labeled as described above for asbestos waste material.

#### 3.06 CLEANUP IN NON-ISOLATED WORK AREAS

- A. FIRST CLEAN. Contractor shall remove visible accumulations of asbestos material and debris. Clean all surfaces within the affected work area. Cleaning shall be with amended water and/or HEPA-filtered vacuum equipment. In a large open area, the affected work area shall include the immediate work area and an area that encompasses at least 6 feet in all directions or as defined by the Environmental Consultant. In small work areas, the affected work area shall include the entire room.
- B. AFFECTED AREA. The affected work area may be further defined in the scope of work by the Environmental Consultant. During the work, high fiber levels as indicated by air monitoring results may increase the area to be cleaned. The increase in affected area due to high fiber levels or other indications of fiber dispersal will be defined by the Owner and Environmental Consultant, and the Contractor shall bear all costs of additional cleaning.
- C. FINAL VISUAL INSPECTION. After completion of the cleaning operation, the Environmental Consultant shall perform a visual observation of the affected work area to ensure that the affected work area is free of visible dust and debris. Observation by the Consultant does not alleviate the Contractor of responsibility to provide work in compliance with Specifications.

- Contractor shall contact Environmental Consultant at least 24-hours prior to desired inspection time.
- D. ENCAPSULANT. After visual observation by the Environmental Consultant, Contractor shall spray-apply encapsulant to the material substrate, all temporary plastic sheeting and other temporary protective materials using an airless sprayer.
- E. CLEARANCE SAMPLING. Post-abatement air sampling shall be at the discretion of the Environmental Consultant and will be determined by the ongoing sample results.
- F. TEARDOWN. When the final observation by the Environmental Consultant and air sampling test results (if required) are satisfactory, the temporary plastic sheeting and other temporary protective materials shall be removed by the Contractor.
- G. DISPOSAL. Contractor shall properly dispose of all waste materials, all polyethylene material, tape, cleaning material, and contaminated clothing shall be double-bagged, sealed and labeled as described for asbestos waste material.

#### 3.07 DISPOSAL

A. Contractor shall affix warning labels having waterproof print and permanent adhesive, to the lid and sides of all containers. Warning labels shall be conspicuous and legible, and contain the following words:

# DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD AVOID BREATHING AIRBORNE ASBESTOS FIBERS

- B. The Contractor shall determine current waste handling, transportation, and disposal regulations for the work site and for each waste disposal landfill. The Contractor must comply with these regulations and all U.S. Department of Transportation, DEQ and EPA requirements. Double-bagged material in containers shall be delivered to the pre-designated disposal site for burial. Labels and all necessary signs shall be in accordance with DEQ and OSHA standards.
- C. Contractor shall remove decontaminated containers from site as soon as possible. Notify disposal site in advance of delivery of material to assure immediate burial of containers.
- D. If the bags are broken or damaged, or the container is contaminated, the Contractor shall clean and decontaminate the entire container for reuse.
- E. Contractor shall submit three copies of written proof of disposal at approved disposal site to the Environmental Consultant prior to completion of the abatement work specified in this Section. Use copies of the DEQ Waste Shipment Record ASN-4, completely filled out and signed, and accompanied by tickets and/or receipts from disposal site.

#### **END OF SECTION**

#### **SECTION 02 82 00 ASBESTOS REMEDIATION**

#### 02 82 13.11 - AIR MONITORING REQUIREMENTS

#### PART 1 - GENERAL

#### 1.01 AIR MONITORING BY CONTRACTOR

- A. An Independent Testing Laboratory shall be retained by the Contractor. All air-monitoring analysis shall be performed by an industrial hygienist. The hygienist must be experienced and trained in asbestos sampling and analysis. At a minimum, documentation of prior asbestos sampling and analysis experience, plus satisfactory completion of the NIOSH 582 course or equivalent formal asbestos education, will be required. The laboratory must meet the requirements specified in Section 02 82 13. Air sample collection may be performed by an industrial hygienist or the Contractor's foreman at the Contractor's option.
- B. Documentation shall be kept for each filter sample procured as to worker sampled, work area location, date and time taken, volume of air drawn through filter, pump identification number and calibration. Documentation shall indicate in what areas tests were taken and shall clearly indicate the specified maximum allowable fiber levels for each area tested. Report all data on copies of "Asbestos Air Sampling Data Form" bound in these Specifications or similar form. Fill in all information on every form. Submit chain-of-custody records along with all samples.
- C. The samples shall be collected on 25 mm filters and analyzed within 12 hours using the membrane filter method at 400-500x magnification with phase contrast illumination NIOSH Analytical Method No. 7400 for laboratory and field analysis. The analyst shall sign and submit permanent records of all samples analyzed directly to the Environmental Consultant. The Independent Testing Laboratory shall seal the unused portion of all filters in airtight containers so that individual samples can be reanalyzed at a later date, if necessary. The containers shall be clearly labeled with Project Name and Sample Number and shall become property of the Owner at work completion at the Owner's request.
- D. The Contractor's testing laboratory shall submit sample analysis results to the Environmental Consultant verbally within 18 hours from the time of collection and written within two weeks including chain-of-custody and equipment calibration records.

#### E. Contractor's Sampling During Abatement:

- Air monitoring shall be performed to provide samples during the period of asbestos abatement in each work area. Begin sampling when asbestos removal commences. Samples are to be taken where Class I or II work is being conducted during each 8hour work shift until abatement is complete in that work area or until a negative exposure assessment is established per 29 CFR 1926.1101.
- 2. The Contractor shall determine which worker(s) in each work area is probably experiencing the most severe exposure. This is the "Most Contaminated Worker(s)". Eight-hour TWA and 30-minute excursion samples shall be collected on this worker(s). This worker shall wear a personal sampling pump and the sample shall be drawn from the breathing zone of this worker. All other samples are area samples.
- 3. The number of air samples collected shall be determined by the Contractor, and may be altered during the project based on work activity and results.

- 4. The maximum allowable fiber levels shall be as determined by the Environmental Consultant based on the respiratory protection being utilized.
- F. Contractor shall notify the Department of Environmental Quality of air monitoring clearance results as supplied by Environmental Consultant. Notification shall be within 30 days after monitoring procedures were performed in accordance to OAR 340-32-465.

#### 1.02 AIR MONITORING BY OWNER

- A. The Owner will retain an experienced Industrial Hygienist/Environmental Consultant to collect and analyze asbestos air samples. Documentation of sample results will be forwarded to the Contractor as appropriate to regulatory requirements.
- B. Samples analyzed by phase contrast microscopy will use NIOSH Analytical Method No. 7400. Samples analyzed by transmission electron microscopy will use the AHERA methodology, 40 CFR Part 763, or Yamate Level Two.
- C. Owner's Air Sampling During and After Abatement:
  - Air Sampling Table is to be used as a guide. The Owner's Industrial Hygienist/Environmental Consultant may modify criteria. Modifications to the Maximum Allowable Fiber Count shall be made in writing by the Owner.

Type of Average Samples per 8-Hour Work Shift		Sample Volume (Liters [L])	Approximate Flow Rate (LPM)	Maximum Allowable Fiber Count (f/cc)
HEPA Fan Exhaust	0 or selected units	400-2000	2 to 10	0.01 f/cc
Outside of Work Area	0-5	400-2000	2 to 10	0.01 f/cc or <pre- abatement</pre- 
Clearance PCM	5/work area	800-3000	2 to 10	0.01 f/cc
Clearance TEM	5/work area	1200-1800	2 to 10	<70 s/mm² average

- 2. Air sampling for post-abatement work in isolated work areas will use the aggressive sampling method. Use of aggressive sampling in other areas shall be as directed by the Environmental Consultant. Aggressive sampling shall be conducted to assure that fibers remain airborne during sample collection.
- 3. Samples analyzed by phase contrast microscopy will use NIOSH Analytical Method No. 7400. Samples analyzed by Transmission electron microscopy for project over 160 square feet or 260 linear feet of an asbestos-containing material will use either the AHERA methodology, 40 CFR Part 763, or Yamate Level Two.
- The Owner reserves the right to monitor Contractor's performance via air samples on abatement workers and in the work area in addition to the Contractor's air monitoring.

#### 1.03 QUALITY ASSURANCE

A. If, at any time during the work, analysis of an air sample taken by the Contractor, Owner, or

Owner's Representative, indicates a fiber count in excess of the allowable maximums specified, the industrial hygienist who analyzed the air sample shall immediately notify:

- 1. The Contractor's Foreman
- The Environmental Consultant:
   PBS Engineering + Environmental
   (or as designated) 503.248.1939
- 3. Owner's Asbestos Project Manager
- 4. Other workers, employees, occupants, etc. in affected area(s).
- B. Immediately upon being notified of fiber count exceeding the specified maximum allowable levels, the Contractor shall perform the following steps in the order presented, at no additional cost to the Owner:
  - 1. Stop abatement work.
  - 2. Identify source of high fiber counts.
  - Immediately correct any containment breaches, pressure differential changes, or other potential cause, and other concerns with the Environmental Consultant, and the Owner if the Owner is available. The Environmental Consultant will determine the affected area and affected adjacent areas considered to be contaminated. The Environmental Consultant will determine the actions to be taken by the Contractor at no additional cost to the Owner.
    - Clean the affected area and the affected adjacent areas. Cleaning shall use wet methods and HEPA vacuuming.
    - b. Resample air until fiber counts are determined to be below one half of the specified maximum levels.
    - c. Secure and repair containment barriers, repair or add equipment.
    - d. Modify work procedures, and make other changes determined to be the possible cause of high fiber counts.
  - 4. Complete every part of the "Fiber Count Above Control Limit Data Form" bound into these Specifications.
  - 5. Carefully resume work under close air monitoring.
  - 6. The Contractor shall be responsible for costs of any testing, cleanup, repair, down time loss, etc. that is a result of the Contractor's negligence, poor maintenance of isolated areas or improper procedures.

#### PART 2 - PRODUCTS

Not applicable.

#### PART 3 - EXECUTION

Not applicable.

#### SECTION 02 82 00 ASBESTOS REMEDIATION

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  - 5. Carefully resume work under close air monitoring.
  - 6. The Contractor shall be responsible for costs of any testing, cleanup, repair, down time loss, etc. that is a result of the Contractor's negligence, poor maintenance of isolated areas or improper procedures.

#### PART 2 - PRODUCTS

Not applicable.

#### PART 3 - EXECUTION

Not applicable.

**END OF SECTION** 

# ASBESTOS ABATEMENT OF SIX SCHOOLS LOCATIONS

ALDER CREEK MIDDLE 13801 SE Webster Road Milwaukie, OR 97267

RIVERSIDE ELEMENTARY 16303 SE River Road Milwaukie, OR 97267

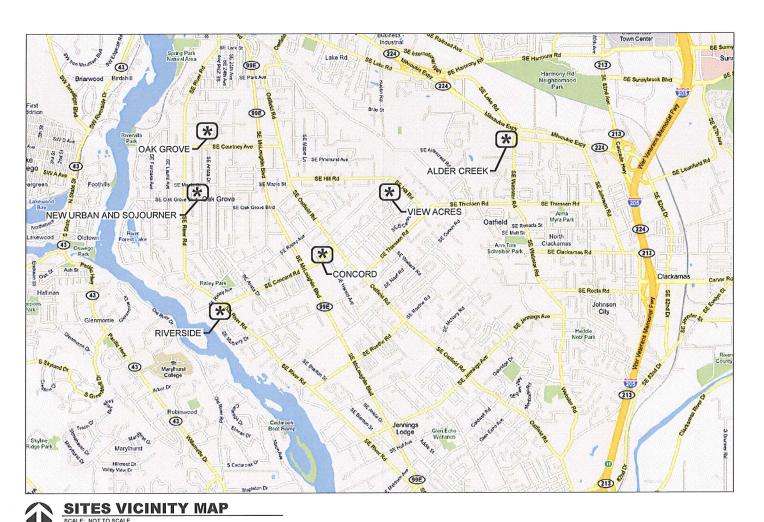
CONCORD ELEMENTARY 3811 SE Concord Road Milwaukie, OR 97267 VIEW ACRES ELEMENTARY 4828 SE View Acres Road Milwaukie, OR 97267

OAK GROVE ELEMENTARY 2150 SE Torbank Road Oak Grove, OR 97222

NEW URBAN HS/SOJOURNER ELEM. 14211 SE Johnson Road Milwaukie, OR 97267

# NORTH CLACKAMAS SCHOOL DISTRICT

ASBESTOS ABATEMENT OF SIX SCHOOLS BID # 990-10-2800



#### **BID PACKAGE NO. 1**

ALDER CREEK MIDDLE SCHOOL 13801 SE WEBSTER ROAD, MILWAUKIE, OREGON DRAWING SHEET NO. HM2.0

#### **BID PACKAGE NO. 2**

RIVERSIDE ELEMENTARY SCHOOL 16303 SE RIVER ROAD, MILWAUKIE, OREGON DRAWING SHEET NO. HM3.0

CONCORD ELEMENTARY SCHOOL 3811 SE CONCORD, MILWAUKIE, OREGON DRAWING SHEET NO. HM4.0

#### **BID PACKAGE NO. 3**

VIEW ACRES ELEMENTARY SCHOOL 4828 SE VIEW ACRES ROAD, MILWAUKIE, OREGON DRAWING SHEET NO. HM1.0

NEW URBAN HIGH SCHOOL AND SOJOURNER ELEMENTARY SCHOOL 1901 / 1905 SE OAK GROVE BOULEVARD, MILWAUKIE, OREGON DRAWING SHEET NO. HM5.0

OAK GROVE ELEMENTARY SCHOOL 2150 SE TORBANK ROAD, MILWAUKIE, OREGON

CONSTRUCTION MANAGER

E-MAIL: jevenson@jjhenri.com

RTH CLACKAMAS SCHOOL DISTRICT ASBESTOS ABATEMENT OF SIX SCHOOLS 12451 SE FULLER ROAD MILWAUKIE, OREGON NORTH

Engineering + Environmental 4412 SW Corbett Ave Portland, OR 97239 503.248.1939 Main 503.248.0223 Fax

HAZARDOUS MATERIAL

ABATEMENT PLAN

OJECT: 21078.017-.023 000

MARCH 2010

SHEET 1 OF 7

#### **INDEX TO DRAWINGS**

COVER SHEET
VIEW ACRES ELEMENTARY SCHOOL ABATEMENT PLAN

ALDER CREEK MIDDLE SCHOOL ABATEMENT PLAN

RIVERSIDE ELEMENTARY SCHOOL ABATEMENT PLAN CONCORD ELEMENTARY SCHOOL ABATEMENT PLAN

NEW URBAN H.S. / SOJOURNER ELEM. SCHOOL ABATEMENT PLAN HM5 0

OAK GROVE ELEMENTARY SCHOOL ABATEMENT PLAN

#### GENERAL INFORMATION:

PROPERTY OWNER:

NORTH CLACKAMAS SCHOOL DISTRICT 12451 SE FULLER ROAD MILWAUKIE, OREGON ATTENTION: GARY KRYSZAK

PBS ENGINEERING AND ENVIRONMENTAL 4412 SW CORBETT AVENUE PORTLAND, OR. 97239 ATTENTION: STEVE DILLING

PROJECT MANAGER PH: 503.417.7576 CELL: 503.209.1503 E-MAIL: steved@pbsenv.com

**ENVIRONMENTAL CONSULTANT:** 

J.J. HENRI CO. 19801 SW 72ND AVENUE SUITE 110 TUALATIN, OREGON 97062 ATTENTION: JOANNA EVENSON BOND PROGRAM MANAGER PH: 503.353.6079 EXT. 3 CELL: 503.703.1090

MANAGER OF CAPITAL PROJECTS

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. ONLY ACCESSIBLE AREAS AND MATERIALS ANTICIPATED TO BE IMPACTED BY THE RENOVATION WERE SURVEYED.
- 2. ABATEMENT CONTRACTOR IS TO FIELD VERIFY ALL MATERIALS, LOCATIONS, CONDITIONS,
- THIS DRAWING IDENTIFIES ONLY ASBESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 VIEW ACRES OFFICE RENOVATION PROJECT. KNOWN ASBESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE NOT IN THE SCOPE OF THIS ABATEMENT WORK, OR DEPICTED ON THIS DRAWING.
- QUANTITIES OF ASBESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN PRIOR CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT.

#### ABATEMENT NOTES

- THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK
- 2 COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR, SCHEDULE, ACCESS, ABATEMENT PHASING, LOCK OUT/ TAG OUT PROCEDURES, TEMPORARY FACILITIES, STAGING AREAS, SECURITY AND SAFETY PROTOCOLS.
- 3. ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES.
- 4. COORDINATE TRANSITION LOCATIONS BETWEEN ABATED AND NON-ABATED FLOORS WITH THE GENERAL CONTRACTOR.
- 5. ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASBESTOS-CONTAINING MATERIALS WHERE NECESSARY
- 6. ABATEMENT CONTRACTOR IS TO FIELD VERIFY WITH THE GENERAL CONTRACTOR ALL FIXTURES, CASEWORK, CABINETS AND SHELVING THAT REQUIRE REMOVAL TO ACCESS AND ABATE MATERIALS.
- ALL FLOORING AND ASSOCIATED MASTIC ABATEMENT WILL REQUIRE A MINIMUM 1 LAYER 6 MIL PLASTIC TO THE CEILING LINE. PLASTIC MUST BE ATTACHED IN A MANNER THAT DOES NOT DAMAGE THE SURFACE. ANY DAMAGE CAUSED BY INSTALLATION OR REMOVAL OF GUARDS MUST BE REPAIRED AT ABATEMENT CONTRACTOR'S EXPENSE AND ACCEPTED BY OWNER PRIOR TO COMPLETION OF CONTRACT.
- 8. ALL FLOOR TILE REMOVAL SHALL BE NOTIFIED AS A FRIABLE ASBESTOS-ABATEMENT PROJECT. REFERENCE THE ABATEMENT PROJECT SPECIFICATIONS FOR FRIABLE PREPARATION, NEGATIVE PRESSURE ENCLOSURE, DECONTAMINATION PROCEDURES AND ADDITIONAL INFORMATION.
- ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS
- 10. ASBESTOS DEBRIS AND CONTAMINATION EXISTS ABOVE THE LAY-IN CEILING IN THE CORRIDORS. DO NOT LIFT THES OR DISTURB THIS CEILING SYSTEM IN ANY WAY. CONTACT THE DISTRICT'S HAZARDOUS MATERIALS CONSULTANT IF ACCESS IS NEEDED.
- 11. ASBESTOS-CONTAINING JOINT COMPOUND IS APPLIED TO GYPSUM WALLS THROUGHOUT THIS BUILDING. THE GENERAL CONTRACTOR MAY REQUIRE AND LAYOUT ADDITIONAL ABATEMENT OTHER THAN SHOWN. UNIT COSTS WILL APPLY TO THIS ADDITIONAL ABATEMENT WORK.

#### ASBESTOS SAMPLE SYMBOLS

\$ 007 — DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES - MATERIAL SYMBOL

NOT	NEGATIVE	POSITIVE
ESTED		*
^	•	•

MECHANICAL INSULATION SURFACING MATERIAL

MISCELLANEOUS MATERIAL

#### INVENTORY OF ASBESTOS SAMPLES

REFERENCE	CODE	RESULT	SAMPLED
♦ 001	21078.017-001	(-/+)	GYPSUM WALLBOARD/JOINT COMPOUND
₿002	21078.017-002	(-/-)	DUCT SEALANT
♦ 003	21078.017-003	(-)	WALL AND CEILING PLASTER
004	21078.017-004	(+)	PACKING COMPOUND
₫ 005	21078.017-005	(-1-1-1-)	COVEBASE/MASTIC
<b>♦</b> 006	21078.017-006	(-/-/-)	COVEBASE/MASTIC
♦ 007	21078.017-007	(-/-/-)	GYPSUM WALLBOARD/JOINT COMPOUND
\$ 008	21078.017-008	(-/-)	PAINT
♦ 009	21078.017-009	(-/-/-)	COVEBASE/MASTIC
010	21078.017-010	(-/+/-)	GYPSUM WALLBOARD/JOINT COMPOUND
♦011	21078.017-011	(-1-1-)	COVEBASE/MASTIC
012	21078.017-012	(-/-)	PAINT
013	21078.017-013	(-/+/-)	GYPSUM WALLBOARD/JOINT COMPOUND

#### LEAD SAMPLE SYMBOLS

O007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES - MATERIAL SYMBOL

▲ LEAD DETECTED.

△ BELOW THE LIMIT OF DETECTION.

#### INVENTORY OF AA LEAD SAMPLES

SAMPLE	FIELD	LAB RESULT	MATERIAL
NUMBER	CODE	(ppm)	DESCRIPTION
▲ 1001	21078.017-1001	270 ppm	CLASSROOM 5; WALL, CMU BLOCK, WHITE
▲ 1002	21078.017-1002	210 ppm	OFFICE CORRIDOR; WALL, CMU BLOCK, WHITE
▲ 1003	21078.017-1003	370 ppm	CLASSROOM 5; WALL, SHEETROCK, WHITE
▲ 1004	21078.017-1004	670 ppm	OFFICE CORRIDOR; WINDOW FRAME, MAUVE

#### LEAD PAINT NOTES

REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT. UNLESS OTHERWISE INDICATED, ALL PAINTED SURFACES SHOULD BE CONSIDERED LEAD-CONTAINING.

#### ABATEMENT KEY NOTES

- 1 REMOVE ALL WALLS (INCLUDING STUDS) AND CEILING FROM THE PRINCIPLE'S OFFICES.
- (2) REMOVE ALL GYPSUM WALL WITH ASBESTOS-CONTAINING JOINT COMPOUND. STUDS ARE TO REMAIN IN PLACE.
- (3) REMOVE ALL ASBESTOS AND NON-ASBESTOS DEBRIS ON FLOOR OF ATTIC AND TOPS OF DUCTWORK. HEPA VACUUM, WET WIPE AND LOCK-DOWN ALL SURFACES IN THIS AREA.
- (4) REMOVE CABINET(S) RECYCLE OR DISPOSE OF NON-ASBESTOS CONSTRUCTION WASTE.
- (5) THE REMOVAL OF PHONE, IT, SECURITY, FIRE ALARM AND CLOCK PANELS/BOXES ON THIS WALL TO BE REMOVED BY THE GENERAL CONTRACTOR PRIOR TO THE START OF ABATEMENT.
- (6) REMOVAL OF ONLY 8 TO 12 INCHES OF THE GYPSUM WALLBOARD SYSTEM ABOVE THE DOOR HEADER IS NEEDED. LAYOUT TO BE PERFORMED BY THE GENERAL CONTRACTOR

#### LEGEND

ASBESTOS-CONTAINING JOINT COMPOUND ON GYPSUM WALLS TO BE REMOVED

STAFF

ASBESTOS-CONTAINING FLOOR TILE / MASTIC AND ASSOCIATED CARPET TO BE

 $>\!\!<$ ACCESS TO MECHANICAL ATTIC (PULL DOWN LADDER)

CPT CARPET TO BE REMOVED

#### ESTIMATED QUANTITIES TO BE REMOVED

- APPROXIMATELY 2,185 SQUARE FEET OF ASBESTOS-CONTAINING FLOOR TILE / MASTIC AND ASSOCIATED CARPET.
- APPROXIMATELY 1,316 SQUARE FEET OF WALLS WITH ASBESTOS-CONTAINING JOINT
- 3. APPROXIMATELY 1.010 SQUARE FEET OF NON-ASBESTOS WALL AND CEILING DEMOLITION
- 4. APPROXIMATELY 160 SQUARE FEET OF ASBESTOS DEBRIS.



**KEYPLAN** 

CLASSROOM 6

www.pbsenv.con

**PBS** 

Engineering +

Environmental



ASBESTOS ABATEMENT OF SIX SCHOOLS VIEW ACRES ELEMENTARY SCHOOLS 28 S.E. VIEW ACRES ROAD, MILWAUKIE, OREGON ORTH

> BID# 990-10-2800

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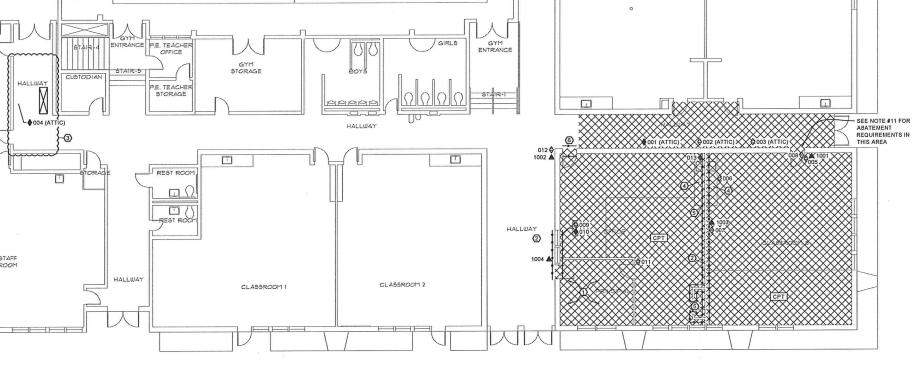
4828

HAZARDOUS MATERIAL ABATEMENT PLAN

ROJECT: 21078.017 0002 HECKED: MARCH 2010

**HM1.0** 

SHEET 2 OF 7



CLASSROOM 4

PARTIAL FLOOR PLAN



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- ABATEMENT CONTRACTOR IS TO FIELD VERIFY ALL MATERIALS, LOCATIONS, CONDITIONS, AND QUANTITIES.
- THIS DRAWING IDENTIFIES ONLY ASSESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 ALDER CREEK MIDDLE SCHOOL RENOVATION PROJECT. KNOWN ASBESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE NOT IN THE
- 4 QUANTITIES OF ASRESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF HOSE SPECIFIED SHALL NOT BE ARATED AND/OR REMOVED WITHOUT WRITTEN PRIOR CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT

#### ABATEMENT NOTES

- THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK.
- 2. COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR, SCHEDULE, ACCESS, ABATEMENT PHASING, LOCK OUT/ TAG OUT PROCEDURES, TEMPORARY FACILITIES, STAGING AREAS, SECURITY AND SAFETY PROTOCOLS.
- ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES.
- 4. COORDINATE TRANSITION LOCATIONS BETWEEN ABATED AND NON-ABATED FLOORS WITH
- ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASBESTOS-CONTAINING MATERIALS WHERE NECESSARY.
- 6. ABATEMENT CONTRACTOR IS TO FIELD VERIFY WITH THE GENERAL CONTRACTOR ALL FIXTURES, CASEWORK, CABINETS AND SHELVING THAT REQUIRE REMOVAL TO ACCESS AND ABATE MATERIALS.
- ALL FLOORING AND ASSOCIATED MASTIC ABATEMENT WILL REQUIRE A MINIMUM 1 LAYER
  6 MIL PLASTIC TO THE CEILING LINE, PLASTIC MUST BE ATTACHED IN A MANNER THAT
  DOES NOT DAMAGE THE SURFACE. ANY DAMAGE CAUSED BY INSTALLATION OR REMOVAL
  OF GUARDA MUST BE REPAIRED AT ABATEMENT CONTRACTOR'S EXPENSE AND
  ACCEPTED BY OWNER PRIOR TO COMPLETION OF CONTRACT.
- ALL FLOOR TILE REMOVAL SHALL BE NOTIFIED AS A FRIABLE ASBESTOS-ABATEMENT PROJECT. REFERENCE THE ABATEMENT PROJECT SPECIFICATIONS FOR FRIABLE PREPARATION. NEGATIVE PRESSURE ENCLOSURE, DECONTAINNATION PROCEDURES AND
- ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS COMPLETE.

#### **LEAD PAINT NOTES**

REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT. UNLESS OTHERWISE INDICATED, ALL PAINTED SUFFACES SHOULD BE CONSIDERED LEAD-CONTAINING.

#### ASBESTOS SAMPLE SYMBOLS

 DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES MATERIAL SYMBOL

DRAWING FIELD REFERENCE CODE

MECHANICAL INSULATION 0 0

INVENTORY OF ASBESTOS SAMPLES

SURFACING MATERIAL 0

#### MISCELLANEOUS MATERIAL

#### **KEY NOTES**

- TRANSITE CEMENT ASBESTOS BOARD HAS BEEN IDENTIFIED IN LOCKER ROOM AREAS SCHEDULED TO HAVE NEW LIGHT FIXTURES INSTALLED. IMPACTS REQUIRING ABATEMEN PENETRATIONS OR ANCHORAGE WILL BE LAID OUT BY THE GENERAL CONTRACTOR. UNIT COST PRINCIPAL WILL APPLY TO THIS WORK.
- REMNANT ASBESTOS-CONTAINING FLOOR TILE AND MASTIC AND PIPE INSULATION IS PRESENT IN AND UNDER UNIT VENTILATORS, ABATEMENT CONTRACTOR IS TO BUILD A MINI ENCLOSURE AROUND EACH UNIT VENTILATOR, REMOVE AND SET ASIDE WITHIN THE ROOM ON CAROBOARD, REMOVE ALL FLOOR TILE AND MASTIC, REMOVE ALL ACCESSIBLE PIPE INSULATION AND REPAIR EXPOSED END OF INSULATION AND WETTER TO LAGS CLOTH, RECEIVE INSTRUCTIONS ON HOW TO REMOVE THE UNIT VENTILATORS FROM THE GENERAL CONTRACTOR.
- (3) REMOVE ALL ACCESSIBLE ASBESTOS-CONTAINING CAULK BETWEEN DOOR FRAMES AND

#### ESTIMATED QUANTITIES TO BE REMOVED

- APPROXIMATELY 8,310 SQUARE FEET OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC.
- APPROXIMATELY 270 SQUARE FEET OF REMNANT ASBESTOS-CONTAINING FLOOR TILE AND MASTIC UNDER UNIT VENTILATORS.
- 3. APPROXIMATELY 200 SQUARE FEET OF ASBESTOS-CONTAINING SHEET FLOOR COVERING
- APPROXIMATELY 15 EACH MUDDED HARD FITTING PIPE INSULATION IN THE GYM ASSOCIATED WITH THE SOUTH CEILING MOUNTED UNIT VENTILATORS.
- APPROXIMATELY 27 UNIT VENTILATORS WITH 20 LINEAR FEET OF ASBESTOS PIPE INSULATION AND REPAIR OF 27 EXPOSED ENDS OF INSULATION.
- 6. APPROXIMATELY 40 LINEAR FEET OF CAULKING ON EXTERIOR DOORS.

#### **LEGEND**

CPT

DESIGNATED WORK AREA OF CEILING IMPACTS

CARPET

NUMBER OF ASBESTOS-CONTAINING MUDDED HARD FITTINGS ASSOCIATE WITH FIBERGLASS PIPE INSULATION TO BE REMOVED **(15)** 

 $\boxtimes$ ACCESS HATCH

TYPICAL UNIT VENTILATOR WITH DIMENSIONS OF 16" DEEP BY 67" WIDE TO BE REMOVED, SEE KEY NOTE NUMBER 2

ASBESTOS-CONTAINING FLOOR TILE / MASTIC AND ASSOCIATED CARPET TO BE

ASBESTOS-CONTAINING SHEET FLOOR COVERING TO BE REMOVED

ASBESTOS CAULK BETWEEN DOOR FRAMES AND SIDING TO BE REMOVED

-

-12 069 🖨

> (BAND ROOM E4 LOFT) FIGURE "B"

#### LEAD SAMPLE SYMBOLS

- DRAWNIG REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES - MATERIAL SYMBOL

LEAD DETECTED.

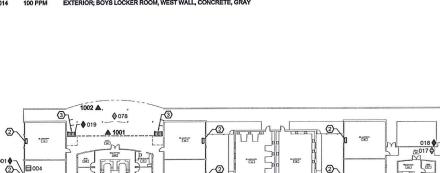
△ BELOW THE LIMIT OF DETECTION.

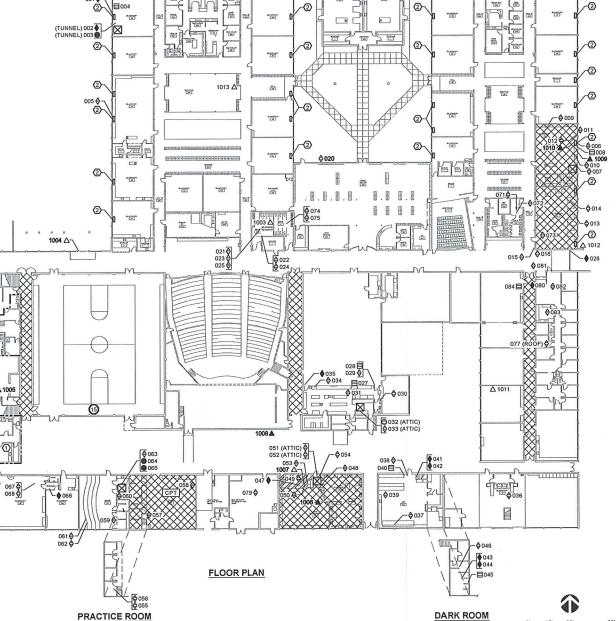
♦ 001	21078.018-001	(+/+/-)	VINYL FLOOR TILE/MASTIC (7)	♦ 043	21078.018-043	(+/-)	VINYL FLOOR TILE
002	21078.018-002	(+/-/-/+)	MATERIAL DEBRIS (7)	044	21078.018-044	(-/+/-)	GYPSUM WALLBOARD/JOINT COMPOUND
003	21078.018-003	(+)	MAG PIPE INSULATION (7)	<b>自</b> 045	21078.018-045	(-1-1-)	WALL AND CEILING PLASTER
<b>=</b> 004	21078.018-004	(-)	WALL AND CEILING PLASTER (7)	♦046	21078.018-046	(-1-1-)	COVEBASE/MASTIC
♦ 005	21078.018-005	(-)	ROCK WOOL (7)	047	21078.018-047	(-/+/-)	SHEET FLOOR COVERING
006	21078.018-006	(-/-)	MISCELLANEOUS INSULATION (7)	♦048	21078.018-048	(-/-)	COVEBASE/MASTIC
007	21078.018-007	(-/-)	COVEBASE/MASTIC (7)	♦ 049	21078.018-049	(-/-)	CEILING TILE
₿008	21078.018-008	(-1-1-)	WALL AND CEILING PLASTER (16)	♦ 050	21078.018-050	(-1-1-)	GYPSUM WALLBOARD/JOINT COMPOUND
♦ 009	21078.018-009	(-/-)	LAB COUNTER TOP (16)	♦ 051	21078.018-051	(-)	VIBRATION JOINT
010	21078.018-010	(-/-)	LAB SINK (16)	052	21078.018-052	(-/-)	DUCT INSULATION MASTIC
<b>♦</b> 011	21078.018-011	(-)	WINDOW GLAZING COMPOUND (3)	₫ 053	21078.018-053	(-/-)	LAMINATE/MASTIC
012	21078.018-012	(-/-)	WINDOW GLAZING COMPOUND (3)	054	21078.018-054	(-/-)	MASTIC
013	21078.018-013	(-)	WINDOW GLAZING COMPOUND (3)	055	21078.018-055	(-/-)	COVEBASE/MASTIC
014	21078.018-014	(-)	LAB SINK (16)	056	21078.018-056	(-1-)	VINYL FLOOR TILE/MASTIC
015	21078.018-015	(-1-1-)	MASTIC (14)	₫ 057	21078.018-057	(-1-1-)	GYPSUM AND PLASTER
016	21078.018-016	(-/-)	JOINT COMPOUND (14)	058	21078.018-058	(-1-1-1-)	WALL TILE/MASTIC
017	21078.018-017	(-1-1-1-)	GYPSUM WALLBOARD/JOINT COMPOUND	059	21078.018-059	(-)	VINYL FLOOR TILE/MASTIC
018	21078.018-018	(-/+)	CAULK (2)	₫ 060	21078.018-060	(-1-1-1-)	GYPSUM WALLBOARD/JOINT COMPOUND
019	21078.018-019	(-/+/-)	CAULK (2)	₫ 061	21078.018-061	(-)	CARPET MASTIC
020	21078.018-020	(-)	WINDOW GLAZING COMPOUND (3)	062	21078.018-062	(-)	MASTIC
021	21078.018-021	(-)	LAY-IN CEILING TILE	6 063	21078.018-063	(-1-1-)	DUCT INSULATION
022	21078.018-022	(-)	LAY-IN CEILING TILE	064	21078.018-064	(-/+)	HARD FITTINGS/FIBERGLASS
023	21078.018-023	(-/-)	CERAMIC TILE/GROUT	065	21078.018-065	(+)	HARD FITTINGS/FIBERGLASS
024	21078.018-024	(-/-)	CERAMIC TILE/GROUT	♦ 066	21078.018-066	(-/+)	VINYL FLOOR TILE/MASTIC
025	21078.018-025	(-/-)	GYPSUM WALLBOARD	₫ 067	21078.018-067	(-)	LAY-IN CEILING TILE
026	21078.018-026	(+)	CAULK	₫ 068	21078.018-068	(-)	LAY-IN CEILING TILE
<b>■</b> 027	21078.018-027	(-/-)	WALL AND CEILING PLASTER	069	21078.018-069	(-/-)	LAY-IN CEILING TILE
<b>=</b> 028	21078.018-028	(-1-1-)	WALL AND CEILING PLASTER	070	21078.018-070	(+)	CEMENT ASBESTOS BOARD
029	21078.018-029	(-1-1-1-)	CAULK	071	21078.018-071	(-)	LAY-IN CEILING TILE
030	21078.018-030	(-1-1-)	COVEBASE/MASTIC	072	21078.018-072	(-/-)	GLUED-ON CEILING TILES
031	21078.018-031	(-/-)	GLUED-ON CEILING TILES	₿073	21078.018-073	(-1-)	GLUED-ON CEILING TILES
<b>Ö</b> 032	21078,018-032	(-1-1-1-)	PIPE LAGGING	074	21078.018-074	(-1-)	GLUED-ON CEILING TILES/MASTIC
♦033	21078.018-033	(-/-)	DUCT INSULATION MASTIC	075	21078.018-075	(-)	LAY-IN CEILING TILE/MASTIC
034	21078.018-034	(-)	CAULK	076	21078.018-076	(-1-1-)	GYPSUM WALLBOARD/JOINT COMPOUND
035	21078.018-035	(-/+/-)	VINYL FLOOR TILE/MASTIC	₿077	21078.018-077	(-/-/-)	BUILT-UP ROOFING
036	21078.018-036	(-1-1-)	GYPSUM WALLBOARD/JOINT COMPOUND	078	21078.018-078	(-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	BUILT-UP ROOFING
037	21078.018-037	(-/-)	FLOOR TILE	₿079	21078.018-079	(-)	PAPER INSULATION
038	21078.018-038	(-1-1-)	COVEBASE/MASTIC	080	21078.018-080	(+/+)	VINYL FLOOR TILE/MASTIC
039	21078.018-039	(-)	CEILING TILE	₿081	21078.018-081	(-/-)	COVEBASE/MASTIC
<b>1</b> 040	21078.018-040	(-1-1-1-)	WALL AND CEILING PLASTER	₩082	21078.018-082	(-)	CEILING TILE
041	21078.018-041	(+/-)	STAIR TREAD	₩ 083	21078.018-083	(-/-)	GYPSUM AND PLASTER
042	21078.018-042	(+1-1-)	FACING .	■084	21078.018-084	(-)	WALL AND CEILING PLASTER
A 2-15	210,0.010-042	()				``	

DRAWING FIELD REFERENCE CODE

#### **INVENTORY OF AA LEAD SAMPLES**

SAMPLE NUMBER	FIELD	(ppm)	MATERIAL DESCRIPTION
▲ 1001	21078.018-1001	1100 PPM	EXTERIOR; NEAR MAIN OFFICE, SIDING, WOOD, TAN
<b>▲ 1002</b>	21078.018-1002	2800 PPM	EXTERIOR; BREEZEWAY NEAR MAIN OFFICE, POLE, METAL, BLUE
△ 1003	21078.018-1003	<47.0 PPM	INTERIOR BOYS BATHROOM; STALL PARTITION, METAL, BLACK
△ 1004	21078.018-1004	<73.0 PPM	EXTERIOR DOOR; HALLWAY, DOOR JAMB, METAL, BLUE
<b>▲</b> 1005	21078.018-1005	4000 PPM	BOYS TEAM ROOM; METAL LOCKER, METAL, RED
<b>▲ 1006</b>	21078.018-1008	85 PPM	ROOM E3: PLASTER WALL, PLASTER, BEIGE
△ 1007	21078.018-1007	<47 PPM	ROOM E3; GYPSUWJOINT COMPOUND, SHEETROCK WALL, BEIGE
<b>▲ 1008</b>	21078.018-1008	680 PPM	EXTERIOR SOUTH WALL; AUDITORIUM, CONCRETE, CONCRETE WALL, CREAK
<b>▲</b> 1009	21078.018-1009	77 PPM	ROOM E5: PLASTER WALL, PLASTER, CREAM
<b>▲</b> 1010	21078.018-1010	730 PPM	ROOM E5: UNIT VENTILATOR, METAL, CREAM
△ 1011	21078.018-1011	<43 PPM	F-WING OFFICE: PLASTER, BEIGE
△ 1012	21078.018-1012	<48 PPM	EXTERIOR; EAST ENTRANCE, WOOD TRIM, WOOD, GRAY
△ 1013	21078.018-1013	<43 PPM	COMMON AREA: SHEETROCK WALL, SHEETROCK, WHITE
▲ 1014	21078.018-1014	100 PPM	EXTERIOR; BOYS LOCKER ROOM, WEST WALL, CONCRETE, GRAY





(ART ROOM E2 LOFT) FIGURE "A"

SCALE: 1" = 30"

**PBS** Engineering +

Environmental 4412 SW Corbett Ave Portland, OR 97239 503.248.1939 Main 503.248.0223 Fax www.pbsenv.com



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HOOL DIS IN ABATEMENT OF SIX SCHOOLS R CREEK MIDDLE SCHOOL 
 Example 1
 S **CKAMAS** ALDER CREE SE WEBSTER F CLA **ASBESTOS** RTH 13801  $\overline{\mathbf{O}}$ Ž

> BID# 990-10-2800

HAZARDOUS MATERIAL ABATEMENT PLAN

21078.018 000 MARCH 2010

**HM2.0** 

SHEET 3 OF 7

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. ONLY ACCESSIBLE AREAS AND MATERIALS ANTICIPATED TO BE IMPACTED BY THE RENOVATION WERE SURVEYED.
- ABATEMENT CONTRACTOR IS TO FIELD VERIFY ALL MATERIALS, LOCATIONS, CONDITIONS, AND QUANTITIES.
- THIS DRAWING IDENTIFIES ONLY ASBESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 RIVERSIDE ELEMENTARY SCHOOL RENOVATION PROJECT. KNOWN ASBESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE NOT IN THE SCOPE OF THIS ABATEMENT WORK, OR DEPICTED ON THIS DRAWING.
- QUANTITIES OF ASBESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN PRIOR THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN PRIOR CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT.

#### **ABATEMENT NOTES**

- THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK.
- 2. COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR TO SCHEDULE. ACCESS. ABATEMENT PHASING, LOCK OUT/ TAG OUT PROCEDURES, TEMPORARY FACILITIES STAGING AREAS, SECURITY AND SAFETY PROTOCOLS.
- ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES.
- 4. COORDINATE TRANSITION LOCATIONS BETWEEN ABATED AND NON-ABATED FLOORS WITH THE GENERAL CONTRACTOR
- 5 ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASSESTOS-CONTAINING MATERIALS WHERE NECESSARY
- 6 ABATEMENT CONTRACTOR IS TO FIELD VERIFY WITH THE GENERAL CONTRACTOR ALL FIXTURES, CASEWORK, CABINETS AND SHELVING THAT REQUIRE REMOVAL TO ACCESS AND ABATE MATERIALS.
- 7 DO NOT REMOVE METAL OR WOOD BASEBOARD TO ABATE FLOOR TILE AND/OR MASTIC SAVE AND PROTECT IN PLACE, IF REMOVAL IS NECESSARY, REPLACE IN ITS ORIGINAL LOCATION AFTER ABATEMENT.
- 8. ALL FLOORING AND ASSOCIATED MASTIC ABATEMENT WILL REQUIRE A MINIMUM 1 LAYER B MIL PLASTIC TO THE CEILING LINE, PLASTIC MUST BE ATTACHED IN A MANNER THAT DOES NOT DAMAGE THE SURFACE. ANY DAMAGE CAUSED BY INSTALLATION OR REMOVAL OF PLASTIC MUST BE REPAIRED AT ABATEMENT CONTRACTOR'S EXPENSE AND ACCEPTED BY OWNER PRIOR TO COMPLETION OF CONTRACT.
- 9. ALL FLOOR TILE REMOVAL SHALL BE NOTIFIED AS A FRIABLE ASBESTOS-ABATEMENT PROJECT. REFERENCE THE ABATEMENT PROJECT SPECIFICATIONS FOR FRIABLE PREPARATION, NEGATIVE PRESSURE ENCLOSURE, DECONTAMINATION PROCEDURES AND
- ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS COMPLETE.
- 11. ABATEMENT CONTRACTOR IS TO INSPECT REMAINING WINDOWS FOR CAULKING NOT SHOWN TO BE ABATED. IF FOUND CONTACT THE ENVIRONMENTAL CONSULTANT FOR VERIFICATION, IF ABATEMENT IS NEEDED UNIT COSTS WILL APPLY TO THIS WORK.

#### LEAD PAINT NOTES

REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT. UNLESS OTHERWISE INDICATED, ALL PAINTED SURFACES SHOULD BE CONSIDERED LEAD-CONTAINING.

#### ASBESTOS SAMPLE SYMBOLS

-DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF - MATERIAL SYMBOI

MISCELLANEOUS MATERIAL

0

0 0 MECHANICAL INSULATION

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#### INVENTORY OF ASBESTOS SAMPLES

DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED	DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED
♦ 001	21078.020-001	(+)	MASTIC	目026	21078.020-026	(-)	WALL AND CEILING PLASTER
002	21078.020-002	(-/-)	VINYL FLOOR TILE/MASTIC	目027	21078.020-027	(-)	WALL AND CEILING PLASTER
003	21078.020-003	(-/-)	VINYL FLOOR TILE/MASTIC	<b>=</b> 028	21078.020-028	(-)	WALL AND CEILING PLASTER
004	21078.020-004	(-/-)	VINYL FLOOR TILE/MASTIC	目029	21078.020-029	(-/-)	WALL AND CEILING PLASTER
005	21078.020-005	(-)	MASTIC	<b>=</b> 030	21078.020-030	(-)	WALL AND CEILING PLASTER
₫ 006	21078.020-006	(-/-)	MASTIC	<b>目</b> 031	21078.020-031	(-)	WALL AND CEILING PLASTER
007	21078.020-007	(-/-)	MASTIC	♦032	21078.020-032	(-/-/-)	GYPSUM AND PLASTER
₿ 008	21078.020-008	(-)	WINDOW GLAZING COMPOUND	♦ 033	21078.020-033	(+/-/-/-)	VINYL FLOOR TILE/MASTIC
009	21078.020-009	(+)	WINDOW GLAZING COMPOUND	♦034	21078.020-034	()	VINYL FLOOR TILE/MASTIC
<b>♦</b> 010	21078.020-010	(-)	WINDOW GLAZING COMPOUND	♦ 035	21078.020-035	(-/-)	COVEBASE/MASTIC
011	21078.020-011	(+)	WINDOW GLAZING COMPOUND	♦ 036	21078.020-036	(-/-)	COVEBASE/MASTIC
012	21078.020-012	(-)	ASPHALT IMPREGNATED PAPER	♦ 037	21078.020-037	(-/-)	GYPSUM AND PLASTER
♦013	21078.020-013	(-1-1-)	SHEET FLOOR COVERING	<b>♦</b> 038	21078.020-038	(-/-)	GYPSUM AND PLASTER
♦014	21078.020-014	(-/-)	COVEBASE/MASTIC	♦ 039	21078.020-039	(-/-)	TILE BEDDING CEMENT
♦015	21078.020-015	(-)	COVEBASE/MASTIC	♦ 040	21078.020-040	(-/-)	TILE BEDDING CEMENT
016	21078.020-016	(-/+/-/-)	VINYL FLOOR TILE/MASTIC	<b>♦</b> 041	21078.020-041	(-)	TILE BEDDING CEMENT
₿017	21078.020-017	(-/-)	GLUED-ON CEILING TILES	<b>♦</b> 042	21078.020-042	(-)	CERAMIC TILE GROUT
♦018	21078.020-018	(-/-)	GLUED-ON CEILING TILES	<b>♦</b> 043	21078.020-043	(-)	CERAMIC TILE GROUT
♦019	21078.020-019	(-/-)	GLUED-ON CEILING TILES	♦044	21078.020-044	(-)	CERAMIC TILE GROUT
₿020	21078.020-020	(-)	WALL AND CEILING PLASTER	♦ 045	21078.020-045	(-)	WINDOW GLAZING COMPOUND
<b>目</b> 021	21078.020-021	(-)	WALL AND CEILING PLASTER	<b>046</b>	21078.020-046	(+/+)	CAULK
<b>目</b> 022	21078.020-022	(-)	WALL AND CEILING PLASTER	Q 047	21078.020-047	(NT)	CAULK
<b>目</b> 023	21078.020-023	(-)	WALL AND CEILING PLASTER	<b>♦</b> 048	21078.020-048	(NT)	CAULK
<b>目</b> 024	21078.020-024	(-)	WALL AND CEILING PLASTER	<b>0</b> 49	21078.020-049	(+)	CEMENT ASBESTOS BOARD
<b>=</b> 025	21078.020-025	(-)	WALL AND CEILING PLASTER	<b>♦</b> 050	21078.020-050	(-)	ASPHALT IMPREGNATED PAPER
				♦ 051	21078.020-051	(-)	FIRE DOOR

**LEGEND** BASE BID:

ASBESTOS-CONTAINING CAULKING BETWEEN BUILDING AND WINDOW FRAMES (SEE KEY NOTE 2)



ASBESTOS-CONTAINING FLOOR TILE BELOW A LAYER OF NON-ASBESTOS FLOOR TILE ( SEE KEY NOTE 1 )

ASBESTOS-CONTAINING CAULKING BETWEEN BUILDING AND WINDOW FRAMES (SEE KEY NOTE 2)

#### **KEY NOTES**

- MULTIPLE LAYERS OF FLOORING TO BE REMOVED:
   a. NON-ASBESTOS 12"x12" FLOOR TILE WITH NON-ASBESTOS MASTIC
   b. X" PLYWOOD
   c. ASBESTOS-CONTAINING FLOOR TILE

  - I. NON-ASBESTOS MASTIC
  - PARTICLE BOARD
  - NAILS AND SCREWS
- 2 ABATEMENT OF WINDOW CAULKING TO BE COORDINATED WITH THE GENERAL

ESTIMATED QUANTITIES TO BE REMOVED (BASE BID)

APPROXIMATELY 2,892 SQUARE FEET OF MULTIPLE-LAYER ASBESTOS-CONTAINING FLOOR TILE IN ROOMS 4, 5 AND 6. SEE KEY NOTE 1.

- CONTRACTOR AND SEQUENCED AS FOLLOWS:

  a. ABATEMENT CONTRACTOR TO ABATE ACCESSIBLE CAULKING BETWEEN WINDOW
- FRAME AND BUILDING b. GENERAL CONTRACTOR WILL REMOVE WINDOWS AND FRAMES.
- . GENERAL CONTINATION WILL REMOVE WINDOWS AND TRAINES.

  ABATEMENT CONTRACTOR TO RETURN TO SITE TO ABATE RESIDUAL CAULKING FROM FRAMES AND WINDOW OPENINGS. THIS WORK TO BE COMPLETED AT UNIT RATES FOR WORKERS, SUPERVISOR AND ADDITIONAL MOBILIZATION TO THE SITE.
- d. WINDOWS AND FRAMES WILL BE DISPOSED OF BY THE GENERAL CONTRACTOR

#### LEAD SAMPLE SYMBOLS

Q 0007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

▲ LEAD DETECTED.

♦014

mmm

△ BELOW THE LIMIT OF DETECTION

017

Jum Jumi

#### INVENTORY OF AA LEAD SAMPLES

WALE WALER	CODE	(ppm)	DESCRIPTION
1001	21078.020-1001	72 ppm	COVERED PLAY
1002	21078.020-1002	42,900 ppm	FRONT ENTRY D
1003	21078.020-1003	13,600 ppm	PANEL BELOW S
1004	21078.020-1004	15,200 ppm	WINDOW SILL; W
1005	21078.020-1005	808 ppm	WOOD TRIM ON I
1008	21078.020-1006	330 ppm	DOOR POST; BAS
1007	21078.020-1007	3,610 ppm	SOUTH DOORS;

Y STRUCTURE; BEIGE WOOD SIDING DOOR; BLUE PAINT SIDELIGHT AT FRONT DOOR; BEIGE WINDOW AT FRONT DOOR, WHITE INTERIOR OF WEST EXIT DOOR; BLUE ASEMENT SOUTH DOORS, BLUE I; CONCRETE/PLASTER WALL, WHITE

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Engineering +



ASBESTOS ABATEMENT OF SIX SCHOOLS
RIVERSIDE ELEMENTARY SCHOOL
16303 SE RIVER ROAD, MILWAUKIE, OREGON NORTH

> BID# 990-10-2800

HAZARDOUS MATERIAL ABATEMENT PLAN

ROJECT: 21078.020 000 HECKED:

MARCH 2010 DATE: REVISIONS:

**HM3.0** 

SHEET 4 OF 7

## MAIN LEVEL FLOOR PLAN

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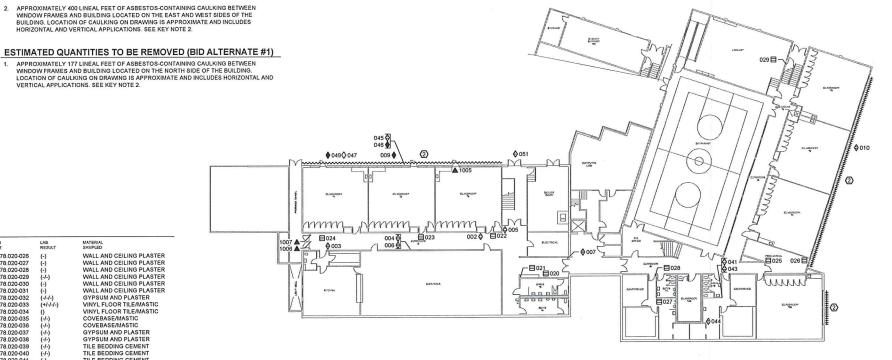
EGYERED PLAY STRUCTURE

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LOWER LEVEL FLOOR PLAN

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. ONLY ACCESSIBLE AREAS AND MATERIALS ANTICIPATED TO BE IMPACTED BY THE RENOVATION WERE SURVEYED.
- ABATEMENT CONTRACTOR IS TO FIELD VERIFY ALL MATERIALS, LOCATIONS, CONDITIONS, AND QUANTITIES.
- THIS DRAWING IDENTIFIES ONLY ASBESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 CONCORD ELEMENTARY SCHOOL RENOVATION PROJECT. KNOWN ASBESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE
- QUANTITIES OF ASBESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN PRIOR CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT.

#### **KEY NOTES**

- TRANSITE, GLAZING AND SEALANTS ARE ASBESTOS-CONTAINING COMPONENTS. ALL TRANSITE, GLAZING AND SEALANTS ARE ASBESTOS-CONTAINING, ABATEMENT CONTRACTOR SHALL REMOVE THE ENTIRE WINDOW ASSEMBLY AND CLEAN ALL SEALANTS FROM THE REMAINING OPENING, ABATEMENT CONTRACTOR TO COORDINATE
- (2) ASBESTOS-CONTAINING GYPSUMJOINT COMPOUND CEILINGS. LIMITED IMPACTS ARE ANTICIPATED. ABATEMENT CONTRACTOR TO PERFORM IMPACTS PER GENERAL CONTRACTORS NEEDS. ABATEMENT CONTRACTOR UNIT PRICING WILL APPLY.
- AREA OF ANTICIPATED PENETRATION INTO AND THROUGH ASBESTOS-CONTAINING FLOORING ANDIOR GYPSUM WALLBOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND, ABATEMENT CONTRACTOR TO PERFORM IMPACTS PER GENERAL CONTRACTORS NEEDS. ABATEMENT CONTRACTOR UNIT PRICING WILL APPLY.
- 4 CEILING MOUNTED HEATING UNIT VENTED THOUGH ASBESTOS-CONTAINING TRANSITE PANEL IN WINDOW ASSEMBLY, ABATEMENT CONTRACTOR TO COORDINATE THE REMOVAL OF VENT OR TRANSITE PANEL WITH THE GENERAL CONTRACTOR IF ALTERNATE #1 IS NOT AWARDED. IF NECESSARY, UNIT COSTS WILL APPLY TO THIS WORK.
- (5) ABATEMENT CONTRACTOR WILL ASSIST THE GENERAL CONTRACTOR IN CUTTING AND REMOVAL OF TACK BOARDS IF APPLIED TO GYPSUM WALL SYSTEMS WITH ASBESTOS-CONTAINING JOINT COMPOUND. IF CONTAINMENT AND/OR ABATEMENT IS NEEDED, UNIT COSTS WILL APPLY TO THIS WORK.
- 6 WOOD WALL SYSTEM AND GLASS IS TO BE CAREFULLY PROTECTED DURING ABATEMENT
- 7 RUBBER COVEBASE ASSOCIATED WITH AREAS OF FLOORING ABATEMENT ARE TO BE REMOVED AS PART OF THE FLOORING ABATEMENT SCOPE OF WORK.
- ASBESTOS-CONTAINING GYPSUMJOINT COMPOUND CEILING SYSTEM CONCEALED BEHIND NON-ASBESTOS GLUED-ON CEILING. BOTH CEILINGS TO BE REMOVED AND DISPOSED OF BY THE ABATEMENT CONTRACTOR.
- BID ALTERNATE #1 WINDOW REMOVAL WORK.
- (1) BID ALTERNATE 2 WINDOW REMOVAL WORK
- (1) BASE BID WINDOW REMOVAL WORK

#### ABATEMENT NOTES

- THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK
- COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR, SCHEDULE, ACCESS, ABATEMENT PHASING, LOCK OUT/TAG OUT PROCEDURES, TEMPORARY FACILITIES, STAGING AREAS, SECURITY AND SAFETY PROTOCOLS.
- ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES.
- COORDINATE TRANSITION LOCATIONS BETWEEN ABATED AND NON-ABATED FLOORS WITH THE GENERAL CONTRACTOR.
- ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASBESTOS-CONTAINING MATERIALS WHERE NECESSARY.
- ABATEMENT CONTRACTOR IS TO FIELD VERIFY WITH THE GENERAL CONTRACTOR ALL FIXTURES, CASEWORK, CABINETS AND SHELVING THAT REQUIRE REMOVAL TO ACCESS AND ABATE MATERIALS.
- ALL FLOORING AND/OR ASSOCIATED MASTIC ABATEMENT WILL REQUIRE A MINIMUM 1 LAYER 6 MIL PLASTIC TO THE CEILING LINE. PLASTIC MUST BE ATTACHED IN A MANNER THAT DOES NOT DAMAGE THE SURFACE. ANY DAMAGE CAUSED BY INSTALLATION OR REMOVAL OF GUARDS MUST BE REPAIRED AT ABATEMENT CONTRACTOR'S EXPENSE AND ACCEPTED BY OWNER PRIOR TO COMPLETION OF CONTRACT.
- 8. ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS
- ASBESTOS-CONTAINING GYPSUM WALLBOARD IS PRESENT IN VARIOUS LOCATION OF THE SCHOOL. UNLESS OTHERWISE NOTED LIMITED IMPACTS ARE ANTICIPATED. ABATEMENT CONTRACTOR TO PERFORM IMPACTS PER GENERAL CONTRACTORS NEEDS. ABATEMENT CONTRACTOR UNIT PRICING WILL APPLY.

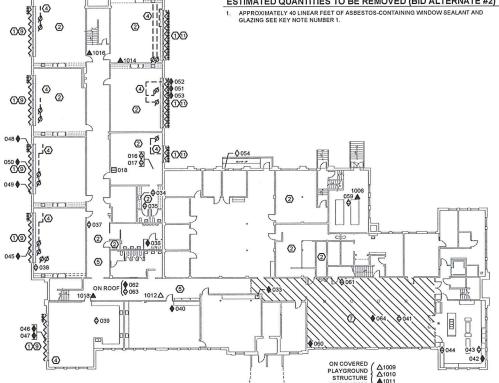
#### ESTIMATED QUANTITIES TO BE REMOVED (BASE BID)

- APPROXIMATELY 2,308 SQUARE FEET OF NON-ASBESTOS FLOOR TILE WITH ASBESTOS-CONTAINING MASTIC.
- APPROXIMATELY 115 LINEAR FEET OF EXTERIOR WINDOW ASSEMBLY OF VARYING HEIGHT WITH TRANSITE WINDOW PANEL. SEE KEY NOTE NUMBER 1.
- APPROXIMATELY 165 LINEAR FEET OF EXTERIOR WINDOW ASSEMBLY OF VARYING HEIGHT WITH ASBESTOS-CONTAINING WINDOW SEALANT/C AULK. SEE KEY NOTE NUMBER 1.
- APPROXIMATELY 2,850 SQUARE FEET OF WALL AND CEILING SYSTEMS WITH ASBESTOS-CONTAINING JOINT COMPOUND.
- 5. APPROXIMATELY 250 LINEAR FEET OF ASBESTOS-CONTAINING PIPE INSULATION.
- 6. ONE SINK WITH ASBESTOS-CONTAINING UNDERCOATING.

#### ESTIMATED QUANTITIES TO BE REMOVED (BID ALTERNATE #1)

- 1. APPROXIMATELY 120 LINEAR FEET OF EXTERIOR WINDOW ASSEMBLY OF VARYING HEIGHT WITH TRANSITE WINDOW PANEL SEE KEY NOTE NUMBER 1.
- APPROXIMATELY 220 LINEAR FEET OF EXTERIOR WINDOW ASSEMBLY OF VARYING HEIGHT WITH ASBESTOS-CONTAINING WINDOW SEALANT/C AULK SEE KEY NOTE NUMBER 1.

#### ESTIMATED QUANTITIES TO BE REMOVED (BID ALTERNATE #2)



### LOWER LEVEL FLOOR PLAN

#### **LEAD PAINT NOTES**

REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING
 COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT UNLESS OTHERWISE
 INDICATED, ALL PAINTED SURFACES SHOULD BE CONSIDERED LEAD-CONTAINING.

#### LEGEND

NON-ASBESTOS FLOOR TILE WITH ASBESTOS-CONTAINING MASTIC ON

CONCRETE SUBSTRATE TO BE REMOVED

GYPSUM WALLBOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND TO BE

ASBESTOS-CONTAINING HORIZONTAL PIPE RUN TO BE REMOVED

ASBESTOS-CONTAINING VERTICAL PIPE RUN TO BE REMOVED

X ASBESTOS-CONTAINING SINK UNDERCOATING TO BE REMOVED

#### LEAD SAMPLE SYMBOLS

#### ▲ LEAD DETECTED.

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#### INVENTORY OF AA LEAD SAMPLES

SAMPLE NUMBER	FIELD	LAB RESULT (ppm)	MATERIAL DESCRIPTION
<b>▲</b> 1001	21078.021-1001	6,920 ppm	PAINT ON ROOM 29; AT WINDOW, BROWN, METAL, HEATER
▲1002	21078.021-1002	630 ppm	PAINT ON ROOM 29; EAST WALL, WHITE, PLASTER
∆1003	21078.021-1003	<483 ppm	PAINT ON ROOM 29; CABINET, BROWN, PLASTER
<b>▲</b> 1004	21078.021-1004	1,760 ppm	PAINT ON GYMNASIUM; INTERIOR, CLEAR, WOOD, WINDOW
<b>▲</b> 1005	21078.021-1005	184,000 ppm	PAINT ON GYMNASIUM; EXTERIOR, BROWN, WOOD, WINDO
<b>▲</b> 1006	21078.021-1006	299 ppm	PAINT ON BOILER #1; DOOR, METAL SUBSTRATE, SILVER
▲1007	21078.021-1007	251 ppm	PAINT ON GYM SOUTH WALL; WOOD SUBSTRATE, WHITE
△1008	21078.021-1008	<211 ppm	PAINT ON EAST EXTERIOR; DOOR, METAL, BLUE
∆1009	21078.021-1009	<77.2 ppm	PAINT ON COVERED PLAY STRUCTURE; SIDING, WOOD, GR
∆1010	21078.021-1010	<463 ppm	PAINT ON COVERED PLAY STRUCTURE; POLE, METAL, RED
<b>▲</b> 1011	21078.021-1011	358 ppm	PAINT ON COVERED PLAY STRUCTURE; POLE, METAL, BLU
Δ1012	21078.021-1012	ND	PAINT ON WEST WALL; WALL, SHEET ROCK, WHITE
<b>▲</b> 1013	21078.021-1013	672 ppm	PAINT ON W. AND N. HALL; DOOR FRAME, WOOD, TAN
<b>▲</b> 1014	21078.021-1014	3,210 ppm	PAINT ON HALL; WALL, WOOD, TAN
<b>▲</b> 1015	21078.021-1015	1,340 ppm	PAINT ON HEALTH ROOM; WALL, SHEET ROCK, TAN
<b>▲</b> 1016	21078.021-1016	1,250 ppm	PAINT ON ROOM 20; DOOR FRAME, WOOD, TAN/PINK

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#### ASBESTOS SAMPLE SYMBOLS

--- DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

MISCELLANEOUS MATERIAL

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- AREA OF ASBESTOS-CONTAINING GYPSUM WALLBOARD WALLS AND CEILINGS TO BE REMOVED BY ABATEMENT CONTRACTOR.

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**UPPER LEVEL FLOOR PLAN** 

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#### INVENTORY OF ASBESTOS SAMPLES

DRAWING	FIELD CODE	LAB RESULT	MATERIAL SAMPLED
REFERENCE	21078.021-001	(-/-)	WALL AND CEILING PLASTER
<b>=</b> 002	21078.021-002	(-)	WALL AND CEILING PLASTER
<b>=</b> 003	21078.021-003	(-/-)	WALL AND CEILING PLASTER
\$ 004	21078.021-004	(-/-)	GLUED-ON CEILING TILES (1)
005	21078.021-005	(-/-)	GLUED-ON CEILING TILES (1)
006	21078.021-006	(-/-)	GLUED-ON CEILING TILES (1)
♦ 007	21078.021-007	(-)	NAILED-ON CEILING TILES
\$008	21078.021-008	(-)	VINYL FLOOR TILE (1)
009	21078.021-009	(+/-)	FELT WRAP PIPE INSULATION
<b>♦</b> 010	21078.021-010	(-)	CAULK
011	21078.021-011	(+)	CAULK
012	21078.021-012	(-/-)	GYPSUM WALLBOARD/JOINT COMPOUND GYPSUM WALLBOARD/JOINT COMPOUND
013	21078.021-013	(+/-)	GYPSUM WALLBOARD/JOINT COMPOUND
♦014 ♦015	21078.021-014 21078.021-015	(- <i>l</i> -) (-)	WALL TILE
016	21078.021-016	(-/-)	GYPSUM WALLBOARD/JOINT COMPOUND
₩017	21078.021-017	(-/-)	GLUED-ON CEILING TILES (1)
<b>Ě</b> 018	21078.021-018	(-/-)	WALL AND CEILING PLASTER
€019	21078.021-019	(-)	WOOD PANEL MASTIC
020	21078.021-020	(-/-)	COVEBASE/MASTIC
♦ 019 ♦ 020 ♦ 021	21078.021-021	(-)	TACKBOARD MASTIC
022	21078.021-022	(+/-)	VINYL FLOOR TILE/MASTIC
023	21078.021-023	(+)	SINK UNDERCOATING
<b>♦</b> 024	21078.021-024	(-)	SINK UNDERCOATING
025	21078.021-025	(+)	TRANSITE PANEL
026	21078.021-026	(-/-)	GYPSUM WALLBOARD/JOINT COMPOUND
027	21078.021-027	(-1-1-1-)	CORKBOARD MASTIC SINK UNDERCOATING
<b>♦</b> 028 <b>♦</b> 029	21078.021-028 21078.021-029	(+) (-/-)	SHEET FLOOR COVERING (1)
030	21078.021-029	(+/-/-)	VINYL FLOOR TILE/MASTIC (1)
031	21078.021-030	(+/-)	VINYL FLOOR TILE/MASTIC (2)
032	21078.021-032	(-)	CEILING TILE
033	21078.021-033	(+)	SINK UNDERCOATING
034	21078.021-034	(-)	SINK UNDERCOATING
035	21078.021-035	(-1-1-)	SHEET FLOOR COVERING (1)
♦ 036	21078.021-036	(-/+)	COVEBASE/MASTIC
♦037	21078.021-037	(-/-)	TACKBOARD MASTIC
₹038	21078.021-038	(-/-)	GYPSUM WALLBOARD/JOINT COMPOUND
₹039	21078.021-039	(-/-)	SHEET FLOOR COVERING (2)
040	21078.021-040	(-/-)	GYPSUM WALLBOARD/JOINT COMPOUND NAILED-ON CEILING TILE
041 042	21078.021-041 21078.021-042	(-) (+)	COUNTER UNDERCOATING
042	21078.021-042	(-/-)	VINYL FLOOR TILE/MASTIC (3)
044	21078.021-044	(-1-)	VINYL FLOOR TILE/MASTIC (4)
045	21078.021-045	(+)	SEALANT
046	21078.021-046	(-/+)	SEALANT
047	21078.021-047	(+)	SEALANT
048	21078.021-048	(+)	SEALANT
<b>0</b> 49	21078.021-049	(-/+)	SEALANT
<b>050</b>	21078.021-050	(+)	SEALANT
<b>051</b>	21078.021-051	(+)	SEALANT
052	21078.021-052	(-/+)	SEALANT
053	21078.021-053	(+)	SEALANT
054	21078.021-054 21078.021-055	(NT)	SEALANT WINDOW GLAZING COMPOUND
056	21078.021-056	(+)	WINDOW GLAZING COMPOUND
057	21078.021-057	(-) (-)	WINDOW GLAZING COMPOUND
6 058	21078.021-058	(-)	SEALANT
059	21078.021-059	(-1-1-)	BOILER INSULATION
060	21078.021-060	(-/+)	VINYL FLOOR TILE/MASTIC
061	21078.021-061	(-1-)	COVEBASE/MASTIC
062	21078.021-062	(-/+)	3-TAB ROOFING
\$ 063	21078.021-063	(-/-)	BUILT-UP ROOFING
♦ 064	21078.021-064	(-/+)	VINYL FLOOR TILE/MASTIC

BID# 990-10-2800

HAZARDOUS MATERIAL

**HM4.0** 

SHEET 5 OF 7



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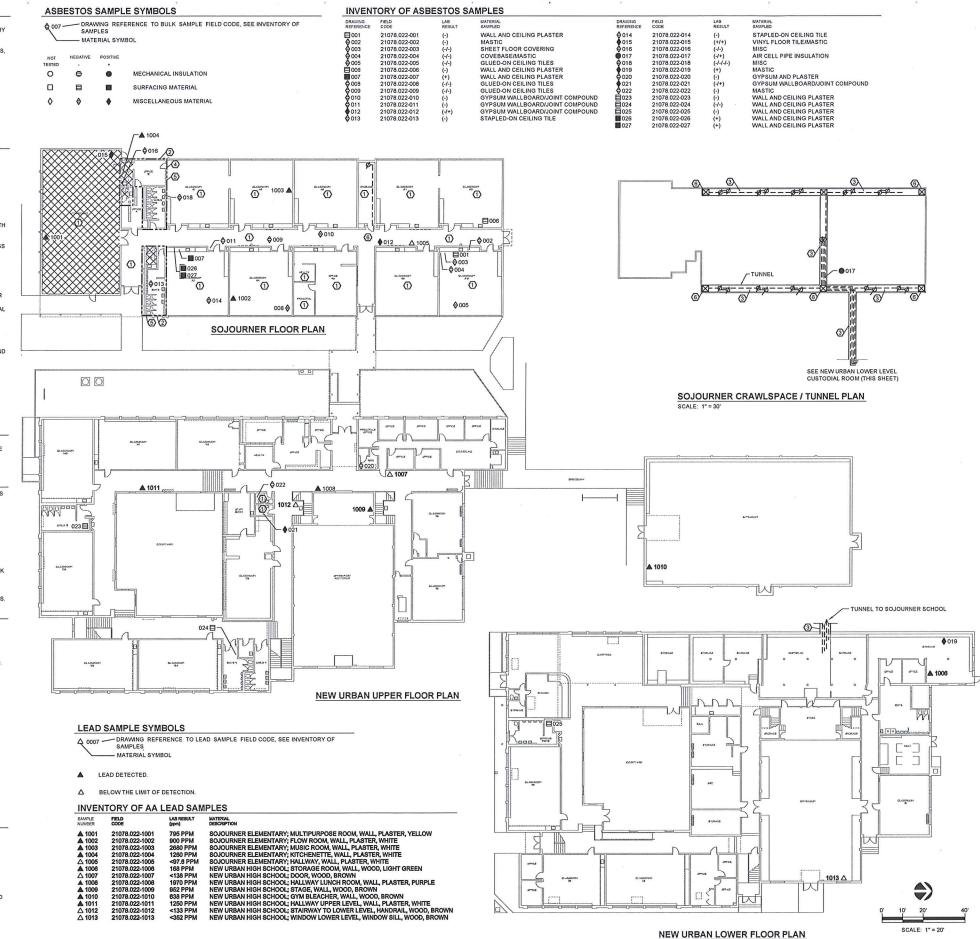
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ABATEMENT PLAN

MARCH 2010

#### **GENERAL NOTES** THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. ONLY ACCESSIBLE ARRAEAS AND MATERIALS ANTICIPATED TO BE IMPACTED BY THE RENOVATION WERE SURVEYED. ABATEMENT CONTRACTOR IS TO FIELD VERIFY ALL MATERIALS, LOCATIONS, CONDITIONS, AND QUANTITIES. THIS DRAWING IDENTIFIES ONLY ASBESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 NEW URBAN HIGH SCHOOL AND SOJOURNER ELEMENTARY SCHOOL RENOVATION PROJECT. KNOWN ASBESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE NOT IN THE SCOPE OF THIS ABATEMENT 4 QUANTITIES OF ASSESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT. ABATEMENT NOTES 1. THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK. 2. COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR, SCHEDULE, ACCESS, ABATEMENT PHASING, LOCK OUT/ TAG OUT PROCEDURES, TEMPORARY FACILITIES. STAGING AREAS, SECURITY AND SAFETY PROTOCOLS. 3. ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES. 4. COORDINATE TRANSITION LOCATIONS BETWEEN ABATED AND NON-ABATED FLOORS WITH THE GENERAL CONTRACTOR. ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASBESTOS-CONTAINING MATERIALS WHERE NECESSARY. ABATEMENT CONTRACTOR IS TO FIELD VERIFY WITH THE GENERAL CONTRACTOR ALL FIXTURES, CASEWORK, CABINETS AND SHELVING THAT REQUIRE REMOVAL TO ACCESS AND ABATE MATERIALS. 7. ALL FLOORING AND ASSOCIATED MASTIC ABATEMENT WILL REQUIRE A MINIMUM 1 LAYER 6 MIL PLASTIC TO THE CEILING LINE. PLASTIC MUST BE ATTACHED IN A MANNER THAT DOES NOT DAMAGE THE SURFACE. ANY DAMAGE CAUSED BY INSTALLATION OR REMOYAL OF GUARDS MUST BE REPAIRED AT ABATEMENT CONTRACTOR'S EXPENSE AND ACCEPTED BY OWNER PRIOR TO COMPLETION OF CONTRACT. ALL FLOOR TILE REMOVAL SHALL BE NOTIFIED AS A FRIABLE ASBESTOS-ABATEMENT PROJECT. REFERENCE THE ABATEMENT PROJECT SPECIFICATIONS FOR FRIABLE PREPARATION, NEGATIVE PRESSURE ENCLOSURE, DECONTAMINATION PROCEDURES AND 9. ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS COMPLETE. 10. JOINT COMPOUND APPLIED TO GYPSUM WALLS AND PLASTER IN SOJOURNER SCHOOL CONTAINS ASBESTOS. GENERAL CONTRACTOR MAY REQUIRE AND LAYOUT ADDITIONAL ABATEMENT OTHER THAN SHOWN. UNIT COSTS WILL APPLY TO THIS ABATEMENT WORK. LEAD PAINT NOTES REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT. UNLESS OTHERWISE INDICATED, ALL PAINTED SURFACES SHOULD BE CONSIDERED LEAD-CONTAINING. **ESTIMATED QUANTITIES TO BE REMOVED** 1. APPROXIMATELY 1,610 SQUARE FEET OF MULTI LAYERED ASBESTOS AND NON-ASBESTOS WALL AND CEILING SYSTEMS TO BE REMOVED 2. APPROXIMATELY 240 LINEAR FEET OF ASBESTOS-CONTAING PIPE INSULATION AND ASSOCIATED HARD FITTINGS TO BE REMOVED AFTER WALL AND CEILING DEMOLITION IS 3 APPROXIMATELY 820 LINEAR EFET OF ASBESTOS AND NON-ASBESTOS PIPE INSULATION AND ASSOCIATED HARD FITTING TO BE REMOVED IN THE TUNNEL SYSTEM. 4 APPROXIMATELY 2 640 SQUARE FEET OF TUNNEL FLOOR TO BE CLEANED OF ALL ASBESTOS AND NON-ASBESTOS DIRT, DUST AND DEBRIS, HEPA VAC, WET WIPE AND LOCK DOWN OF ALL TUNNEL SURFACES IS ALSO REQUIRED. 5. APPROXIMATELY 2.625 SQUARE FEET OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC. INCLUDING REMOVAL OF REMNANT FLOOR TILE FROM TUNNEL ACCESS HATCHES. 1 ALL WALL SYSTEMS CONTAIN ASBESTOS IN THE JOINT COMPOUND AND PLASTER. ABATEMENT CONTRACTOR MAY BE REQUIRED TO REMOVE PORTIONS OF WALLS OR MAKE PENETRATION AS REQUESTED BY THE GENERAL CONTRACTOR. UNIT COSTS WILL APPLY TO THIS WORK ② WALLS AND CEILINGS WITHIN THE RESTROOMS AND ADJOINING ROOMS TO BE REMOVED. WALLS AND CELLINGS WITHIN THE RESTRUCTION AND AUSTRIANCE ROUTED BE REMOVED. AND CELLINGS INCLUDE ALL LAYERS OF BOTH ASBESTOS MATERIALS TO THE STORY OR JOINT ASSESTOS MATERIALS TO THE STORY OR JOINT ASSESTORY OF THE STORY ADDITIONAL (3) ALL ASBESTOS AND/OR NON-ASBESTOS PIPE INSULATION AND ASSOCIATED HARD FITTINGS TO BE REMOVED IN THE TUNNEL. REMOVE ALL ASBESTOS AND NON-ASBESTOS DATA AND DEBRIS FROM THE TUNNEL FLOOR, CELING AND WALLS. HEPA VACUUM, WET WIPE AND LOCK-DOWN ALL TUNNEL SURFACES AND PIPES. (4) REMOVE ALL PIPE INSULATION AND ASSOCIATED HARD FITTINGS AFTER WALL AND CEILING DEMOLITION IS COMPLETE. REPAIR ALL EXPOSED ENDS OF PIPE INSULATION THAT RUN OUTSIDE THE DESIGNATED WORK AREA WITH "DIP-LAG" (5) SAVE AND PROTECT CERAMIC TILE FLOORS AND CERAMIC TILE BASE AND BETWEEN URINALS IN RESTROOMS DURING AND AFTER DEMOLITION AND ABATEMENT. (6) REMOVE AND HEPA VAC ALL REMNANT BROKEN FLOOR TILE ON AND AROUND ACCESS HATCHES TO TUNNEL. LEGEND ---- ASBESTOS-CONTAINING HORIZONTAL PIPE RUN TO BE REMOVED DESIGNATED WORK AREA OF WALL AND CEILING DEMOLITION, LAY-OUT TO \_---BE PERFORMED BY THE GENERAL CONTRACTOR ASBESTOS-CONTAINING VERTICAL PIPE RUN TO BE REMOVED $\boxtimes$ ACCESS HATCH $\bowtie$ ASBESTOS-CONTAINING FLOOR TILE AND MASTIC ON CONCRETE SUBSTRATE TO



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EMENT OF SIX SCHOOLS SOJOURNER ELEM. SCHOOL BOULEVARD, MILWAUKIE, OREGON DISTRICT SCHOOL S ABATEMENT CH.S. AND SOJOUF CLACKAMAS ASBESTOS A NEW URBAN H.S. 1/1905 SE OAK GR ORTH N 1901

BID# 990-10-2800

HAZARDOUS MATERIAL

ABATEMENT PLAN

MARCH 2010

VISIONS

HM5.0

SHEET 6 OF 7

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. ONLY ACCESSIBLE AREAS AND MATERIALS ANTICIPATED TO BE IMPACTED BY THE RENOVATION WERE SURVEYED.
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- 3. THIS DRAWING IDENTIFIES ONLY ASBESTOS-CONTAINING MATERIALS THAT REQUIRE ABATEMENT AS PART OF THE 2010 OAK GROVE ELEMENTARY SCHOOL RENOVATION PROJECT, KNOWN ASSESTOS-CONTAINING MATERIALS EXIST IN THIS FACILITY THAT ARE NOT IN THE SCOPE OF THIS ABATEMENT WORK, OR DEPICTED ON THIS DRAWING.
- 4. QUANTITIES OF ASBESTOS-CONTAINING OR CONTAMINATED MATERIALS IN EXCESS OF THOSE SPECIFIED SHALL NOT BE ABATED AND/OR REMOVED WITHOUT WRITTEN PRIOR CONSENT OF THE DISTRICT AND THE DISTRICTS ENVIRONMENTAL CONSULTANT.

#### ABATEMENT NOTES

- 1. THE ABATEMENT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO FIXTURES AND FINISHES AS A RESULT OF ABATEMENT WORK
- COORDINATE WITH THE DISTRICT AND GENERAL CONTRACTOR, SCHEDULE, ACCESS, ABATEMENT PHASING, LOCK OUT/TAG OUT PROCEDURES, TEMPORARY FACILITIES, STAGING AREAS, SECURITY AND SAFETY PROTOCOLS.
- ALL ABATED SURFACES SHALL BE VISUALLY INSPECTED BY THE DISTRICT'S REPRESENTATIVES ON SITE PRIOR TO LOCK DOWN AND CLEARANCES.
- ABATEMENT CONTRACTOR IS TO PERFORM ALL SOFT DEMOLITION ACTIVITIES TO ACCESS AND ABATE ASBESTOS-CONTAINING MATERIALS WHERE NECESSARY.
- DO NOT REMOVE METAL OR WOOD BASEBOARD TO ABATE FLOOR TILE AND/OR MASTIC. SAVE AND PROTECT IN PLACE, IF REMOVAL IS NECESSARY, REPLACE IN ITS ORIGINAL LOCATION AFTER ABATEMENT
- ALL FLOOR TILE REMOVAL SHALL BE NOTIFIED AS A FRIABLE ASBESTOS-ABATEMENT PROJECT. REFERENCE THE ABATEMENT PROJECT SPECIFICATIONS FOR FRIABLE PREPARATION, NEGATIVE PRESSURE ENCLOSURE, DECONTAMINATION PROCEDURES AND ADDITIONAL INFORMATION.
- 7. ABATEMENT CONTRACTOR IS TO "BAG" AND PROTECT SMOKE DETECTORS PRIOR TO PREPARATION FOR ABATEMENT. BAGS ARE TO REMAIN IN PLACE UNTIL TEAR DOWN IS COMPLETE.

#### LEAD PAINT NOTES

REPRESENTATIVE SAMPLES OF DIFFERENT COATINGS ON VARIOUS BUILDING COMPONENTS WERE COLLECTED AND TESTED FOR LEAD CONTENT. UNLESS OTHERWISE INDICATED, ALL PAINTED SURFACES SHOULD BE CONSIDERED LEAD-CONTAINING.

#### ABATEMENT KEY NOTES

- ASBESTOS-CONTAINING GYPSUMJOINT COMPOUND WALLS AND CEILINGS ARE PRESENT THROUGHOUT RESTROOMS. LIMITED IMPACTS TO THE WALLS AND/OR CEILINGS ARE ANTICIPATED TO BE REQUIRED. LOCATIONS TO BE IMPACTED ARE TO BE DEFINED BY THE GENERAL CONTRACTOR, THEN IMPACTS ARE TO BE MADE BY THE ABATEMENT CONTRACTOR. UNIT COST WILL APPLY TO THIS WORK.
- ② RUBBER COVEBASE ASSOCIATED WITH AREAS OF FLOORING ABATEMENT ARE TO BE REMOVED AS PART OF THE FLOORING ABATEMENT SCOPE OF WORK.
- (3) WINDOW GLASS AND ASBESTOS-CONTAINING GLAZING TO BE REMOVED AND DISPOSED OF BY THE ABATEMENT CONTRACTOR. WINDOW FRAMES TO BE CLEANED OF ALL GLAZING COMPOUND AND REMAIN INTACT. ABATEMENT CONTRACTOR TO COORDINATE ABATEMENT SCHEDULE WHIT GENERAL CONTRACTOR'S WINDOW REPLACEMENT SCHEDULE. WINDOW STOPS TO BE DISPOSED OF AS ASBESTOS-CONTAINING WASTE.
- 4 ASBESTOS-CONTAINING GYPSUM WALLBOARD SYSTEMS ARE PRESENT IN VARIOUS LOCATIONS OF THE CAFETERIA.

#### **ESTIMATED QUANTITIES OF HAZARDOUS MATERIALS** TO BE REMOVED

- 1. APPROXIMATELY 3,300 SQUARE FEET OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC.
- 2. APPROXIMATELY 700 LINEAR FEET OF ASBESTOS-CONTAINING WINDOW GLAZING.

#### LEGEND

ASBESTOS-CONTAINING WINDOW GLAZING COMPOUND TO BE REMOVED ASBESTOS-CONTAINING FLOOR TILE AND MASTIC TO BE REMOVED

#### LEAD SAMPLE SYMBOLS

O007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES - MATERIAL SYMBOL

- ▲ LEAD DETECTED.
- △ BELOW THE LIMIT OF DETECTION.

#### INVENTORY OF AA LEAD SAMPLES

INVENTORY OF AA LEAD SAWIFLES					
SAMPLE NUMBER	FIELD CODE	LAB RESULT (ppm)	MATERIAL DESCRIPTION		
△ 1001	21078.023-1001	Not Analyzed	CAFETERIA: BLACK, METAL, BASKETBALL HOOP SUPPORT, GOOD CONDITION		
<b>▲ 1002</b>	21078.023-1002	512 ppm	NORTH WALL: WHITE, CONCRETE, WALL, GOOD CONDITION		
<b>▲ 1003</b>	21078.023-1003	2,220 ppm	ROOM 3; TAN, METAL, HEATER, GOOD CONDITION		
△ 1004	21078.023-1004	<107 ppm	ROOM 3; WHITE, GYPSUM, WALL, GOOD CONDITION		
<b>▲ 1005</b>	21078.023-1005	3,320 ppm	ROOM 25; TAN, METAL, HEATER, GOOD CONDITION		
△ 1006	21078.023-1008	<223 ppm	ROOM 25; WHITE, GYPSUM, WALL, GOOD CONDITION		
△ 1007	21078.023-1007	<98.5 ppm	GYMNASIUM; WHITE, CONCRETE, WALL, GOOD CONDITION		

#### ASBESTOS SAMPLE SYMBOLS

- DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF

MISCELLANEOUS MATERIAL

- MATERIAL SYMBOI NEGATIVE POSITIVE

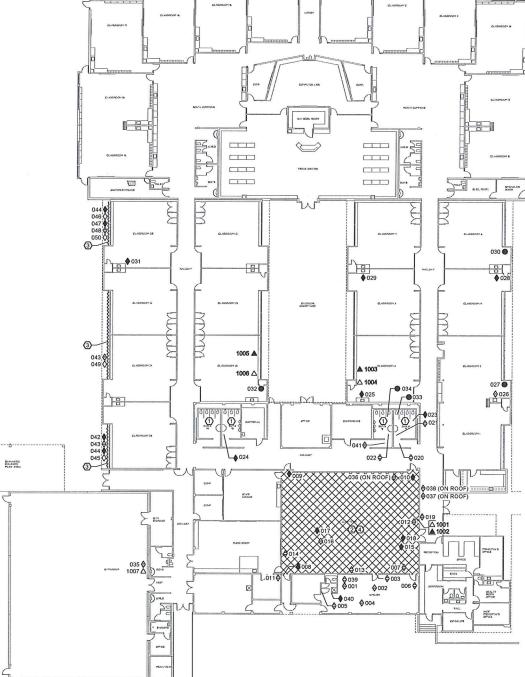
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0 0 . MECHANICAL INSULATION SURFACING MATERIAL

INVENTORY OF ASBESTOS SAMPLES

DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED
♦ 001	21078.023-001	(-/-/-)	SHEET FLOOR COVERING (1)
♦ 002	21078.023-002	(-/-)	SHEET FLOOR COVERING (2)
<b>♦</b> 003	21078.023-003	(-/-)	SHEET FLOOR COVERING (3)
♦ 004	21078.023-004	(-/-)	COVEBASE/MASTIC -
♦ 005	21078.023-005	(-/-)	COVEBASE/MASTIC
₫ 006	21078,023-006	(-/-)	COVEBASE/MASTIC
₿ 007	21078.023-007	(-/-/-)	VINYL FLOOR TILE/MASTIC (1)
008	21078.023-008	(+/+)	VINYL FLOOR TILE/MASTIC (2)
009	21078.023-009	(+/+)	VINYL FLOOR TILE/MASTIC (2)
010	21078.023-010	(+/+)	VINYL FLOOR TILE/MASTIC (2)
011	21078.023-011	(-/-)	COVEBASE/MASTIC
012	21078.023-012	(-/-)	COVEBASE/MASTIC
013	21078.023-013	(-/-)	COVEBASE/MASTIC
014	21078.023-014	(-/-)	VINYL FLOOR TILE/MASTIC (3)
015	21078.023-015	(+)	VINYL FLOOR TILE/MASTIC (4)
016	21078.023-016	(-)	VINYL FLOOR TILE/MASTIC (5)
017	21078.023-017	(+)	VINYL FLOOR TILE/MASTIC (6)
018	21078.023-018	(+)	VINYL FLOOR TILE/MASTIC (7)
019	21078.023-019	(-)	TEKTUM
020	21078.023-020	(-)	LAY-IN CEILING TILE
021	21078.023-021	(-)	TERRAZZO SINK
022	21078.023-022	(-)	TERRAZZO SINK
023	21078.023-023	(-/+)	GYPSUM WALLBOARD/JOINT COMPOUND
024	21078.023-024	(-/+)	GYPSUM WALLBOARD/JOINT COMPOUND
025	21078.023-025	(+)	SINK UNDERCOATING
026	21078.023-026	(-)	SINK UNDERCOATING
027	21078.023-027	(+)	HARD FITTINGS/FIBERGLASS
028	21078.023-028	(+)	SINK UNDERCOATING
029	21078.023-029	(+)	SINK UNDERCOATING
030	21078.023-030	(+/-)	HARD FITTINGS/FIBERGLASS
♦ 031	21078.023-031	(+)	SINK UNDERCOATING
032	21078.023-032	(+/-)	HARD FITTINGS/FIBERGLASS
033	21078.023-033	(+)	HARD FITTINGS/FIBERGLASS
034	21078.023-034	(-/+)	HARD FITTINGS/FIBERGLASS
♦ 035	21078.023-035	(-)	PAINT
036	21078.023-036	(-1-1-1-)	BUILT-UP ROOFING
₩ 037	21078.023-037	(-)	SEALANT
038	21078.023-038	(-)	PAINT
039	21078.023-039	(-)	SHEET FLOOR COVERING
040	21078.023-040	(-/+)	GYPSUM WALLBOARD/JOINT COMPOUND
041	21078.023-041	(-)	GROUT
042	21078.023-042	(+)	WINDOW GLAZING COMPOUND
043	21078.023-043	(-)	WINDOW GLAZING COMPOUND
044	21078.023-044	(+)	WINDOW GLAZING COMPOUND
044	21078.023-045	(NT)	SEALANT
X 045	21078.023-046	(NT)	SEALANT
047	21078.023-045	(+)	WINDOW GLAZING COMPOUND
047	21078.023-047	(-)	WINDOW GLAZING COMPOUND
8049	21078.023-049		SEALANT
050	21078.023-049	(NT)	SEALANT
A 020	210/0.023-050	(NT)	SEALANT

FLAT AREA



**FLOOR PLAN** 



Engineering + Environmental 4412 SW Corbett Ave Portland, OR 97239 503.248.1939 Main 503.248.0223 Fax www.pbsenv.cor



NORTH CLACKAMAS SCHOOL DISTRIA ASBESTOS ABATEMENT OF SIX SCHOOLS OAK GROVE ELEMENTARY SCHOOL 2150 SE TORBANK ROAD, MILWAUKIE, OREGON

BID# 990-10-2800

HAZARDOUS MATERIAL ABATEMENT PLAN

21078.023 0002 MARCH 201

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SHEET 7 OF 7

