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DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE AID PROGRAM

Cover Sheet for Air Permit Application – Tier I **Form CSTI**

Revision 5  
08/28/08



**DEQ AIR QUALITY PROGRAM**  
1410 N. Hilton, Boise, ID 83706  
For assistance, call the  
**Air Permit Hotline – 1-877-5PERMIT**

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Best Bath Systems, Inc.		
2. Facility Name	3. Facility ID No.		
4. Brief Project Description - One sentence or less	Operating Permit for an existing fiberglass tub and shower unit manufacturing facility.		
PERMIT APPLICATION TYPE			
5. <input checked="" type="checkbox"/> Initial Tier I <input type="checkbox"/> Tier I Administrative Amendment <input type="checkbox"/> Tier I Minor Modification <input type="checkbox"/> Tier I Significant Modification <input type="checkbox"/> Tier I Renewal: Permit No.: _____ Date Issued: _____			
FORMS INCLUDED			
Include d	N/A	Forms	DEQ Verify
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form CSTI – Cover Sheet	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form GI – Facility Information	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form EU0 – Emissions Units General	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU1– Industrial Engine Information      Please specify number of EU1s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU2– Nonmetallic Mineral Processing Plants      Please specify number of EU2s attached: _____	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form EU3– Spray Paint Booth Information      Please specify number of EU3s attached: <u>1</u>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU4– Cooling Tower Information      Please specify number of EU4s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU5 – Boiler Information      Please specify number of EU5s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CBP– Concrete Batch Plant      Please Specify number of CBPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form HMAP – Hot Mix Asphalt Plant      Please specify number of HMAPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	PERF – Portable Equipment Relocation Form	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form BCE– Baghouses Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form SCE– Scrubbers Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form VSCE – Venturi Scrubber Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form ESP – Electrostatic Precipitator	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form AO – Afterburner/Oxidizer	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CYS – Cyclone Separator	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CA – Carbon Adsorber	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forms EI-CP1 - EI-CP4– Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CAM – Compliance Assurance Monitoring	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form FRA – Federal Regulation Applicability	<input type="checkbox"/>

AIR QUALITY TIER I OPERATING PERMIT  
APPLICATION FORM DOCUMENTATION

Best Bath Systems, Inc.  
723 Garber Street  
Caldwell, Idaho 83605

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November 1, 2012

Prepared for: Best Bath Systems, Inc.  
723 Garber Street  
Caldwell, Idaho 83605

For the Facility at: 723 Garber Street  
Caldwell, Idaho 83605

Prepared by: TORF Environmental Management  
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 Best Bath Systems, Inc., Caldwell, Idaho  
 November 2, 2012

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**AIR QUALITY OPERATING PERMIT APPLICATION**  
**Best Bath Systems, Inc.**  
**723 Garber Street**  
**Caldwell, Idaho 83605**

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**SUMMARY**

Best Bath Systems, Inc. (BBS) is submitting information in support of an Operating Permit for the fiberglass tub and shower manufacturing facility at 723 Garber Street in Caldwell, ID (Site), PTC No. P-2010.0047

Emissions of VOCs and HAPs qualify the facility as a Major Facility under IDAPA 58.01.01.008.10 (Tier 1), but will not exceed the 250 tons per year threshold that would qualify the facility for prevention of significant deterioration (PSD) permitting requirements.





Please see instructions on page 2 before filling out the form.

**All information is required. If information is missing, the application will not be processed.**

**IDENTIFICATION**

1. Company Name		2. Facility Name:	
Best Bath Systems, Inc.			
3. Brief Project Description:	Operating Permit for an existing fiberglass tub and shower unit manufacturing facility.		

**FACILITY INFORMATION**

4. Primary Facility Permit Contact Person/Title	Jay Multanen	Owner-Project Manager
5. Telephone Number and Email Address	(208) 860-9157	jay@best-bath.com
6. Alternate Facility Contact Person/Title	Hugo Castillo	Safety & Compliance Coordinator
7. Telephone Number and Email Address	(208) 955-7377	hugoc@best-bath.com
8. Address to Which the Permit Should be Sent	723 Garber Street	
9. City/County/State/Zip Code	Caldwell	Canyon ID 83605
10. Equipment Location Address (if different than the mailing address above)		
11. City/County/State/Zip Code		
12. Is the Equipment Portable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
13. SIC Code(s) and NAICS Code	Primary SIC: 3088	Secondary SIC: NAICS: 326191
14. Brief Business Description and Principal Product	BBS manufactures fiberglass tub and shower units	
15. Identify any adjacent or contiguous facility that this company owns and/or operates		
16. Specify the reason for the application	<input type="checkbox"/> Permit to Construct (PTC) <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.</p> <input type="checkbox"/> Incorporate the PTC at the time of the Tier I renewal  <input type="checkbox"/> Co-process the Tier I modification and PTC  <input type="checkbox"/> Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c)         </div> <input checked="" type="checkbox"/> Tier I Permit <input type="checkbox"/> Tier II Permit <input type="checkbox"/> Tier II/Permit to Construct	

**CERTIFICATION**

In accordance with IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

17. Responsible Official's Name/Title	Jay Multanen	Secretary
18. Responsible Official Address	723 Garber Street	
19. Responsible Official Telephone Number	(208) 860-9157	
20. Responsible Official Email Address	jay@best-bath.com	
21. Responsible Official's Signature		Date: 11-2-12
22. <input checked="" type="checkbox"/> Check here to indicate that you would like to review the draft permit prior to final issuance.		

Operating Permit Application  
Best Bath Systems (BBS), Caldwell, Idaho  
November 2, 2012  
Page 1-1

**1. GENERAL FACILITY INFORMATION – FORM T1GI/CS DOCUMENTATION**

BBS currently operates the fiberglass tub and shower manufacturing facility at 723 Garber Street in Caldwell, ID (Site) under authority of Permit to Construct (PTC) P-2010.0047

BBS is applying for its first Operating Permit. Enclosed is a signed Tier I Application and General Information Cover Sheet (T1GI/CS).





Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc		2. Facility Name:		3. Facility ID No:		
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name:		RESIN STORAGE ROOM				
6. EU ID Number:		EU-7				
7. EU Type:		<input checked="" type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:			Date Issued:	
8. Manufacturer:						
9. Model:						
10. Maximum Capacity:		11000 GALLONS				
11. Date of Construction:		2010				
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes    If Yes, complete the following section. If No, go to line 22.						
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved? <input type="checkbox"/> Yes <input type="checkbox"/> No						
20. Does the manufacturer guarantee the control efficiency of the control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)						
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation:		8760 HOURS/YEAR				
23. Maximum Operation:		8760 HOURS/YEAR				
REQUESTED LIMITS						
24. Are you requesting any permit limits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, indicate all that apply below)						
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports				
<input type="checkbox"/> Other:						
25. Rationale for Requesting the Limit(s):						



Please see instructions on page 2 before filling out the form.

IDENTIFICATION							
1. Company Name: Best Bath Systems, Inc		2. Facility Name:		3. Facility ID No:			
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility							
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION							
5. Emissions Unit (EU) Name:		LAMINATION AREA					
6. EU ID Number:		EU-9					
7. EU Type:		<input checked="" type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:			Date Issued:		
8. Manufacturer:		BBS					
9. Model:							
10. Maximum Capacity:							
11. Date of Construction:		2010					
12. Date of Modification (if any):							
13. Is this a Controlled Emission Unit? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes    If Yes, complete the following section. If No, go to line 22.							
EMISSIONS CONTROL EQUIPMENT							
14. Control Equipment Name and ID:		Exhaust filters EC-9A to 9G and EC-10A to 10G					
15. Date of Installation:		2010		16. Date of Modification (if any):			
17. Manufacturer and Model Number:		Purolator FACET-Aire F312 and Bulk Media					
18. ID(s) of Emission Unit Controlled:		EU-9					
19. Is operating schedule different than emission units(s) involved?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
20. Does the manufacturer guarantee the control efficiency of the control equipment?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)					
		Pollutant Controlled					
		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Control Efficiency		90	90				
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. see Appendix C							
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)							
22. Actual Operation:		250 DAYS PER YEAR, 10 HOURS PER DAY					
23. Maximum Operation:		8760 HOURS PER YEAR					
REQUESTED LIMITS							
24. Are you requesting any permit limits? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, indicate all that apply below)							
<input type="checkbox"/> Operation Hour Limit(s):							
<input type="checkbox"/> Production Limit(s):							
<input type="checkbox"/> Material Usage Limit(s):							
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports					
<input checked="" type="checkbox"/> Other:		100 TONS/YEAR OF NESHAP SUBPART WWWW HAPS					
25. Rationale for Requesting the Limit(s):		NESHAP SUBPART WWWW REGULATORY THRESHOLD					



Please see instructions on page 2 before filling out the form.

IDENTIFICATION							
1. Company Name: Best Bath Systems, Inc		2. Facility Name:		3. Facility ID No:			
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility							
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION							
5. Emissions Unit (EU) Name:		BLUE BOTTOM AREA					
6. EU ID Number:		EU-11					
7. EU Type:		<input checked="" type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source			Date Issued:		
		<input type="checkbox"/> Modification to a Permitted Source – Previous Permit #:					
8. Manufacturer:		BBS					
9. Model:							
10. Maximum Capacity:							
11. Date of Construction:		2010					
12. Date of Modification (if any):							
13. Is this a Controlled Emission Unit?		<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.					
EMISSIONS CONTROL EQUIPMENT							
14. Control Equipment Name and ID:		Exhaust filters EC-11 and EC-12					
15. Date of Installation:		2010		16. Date of Modification (if any):			
17. Manufacturer and Model Number:		Purolator FACET-Aire F312 and Bulk Media					
18. ID(s) of Emission Unit Controlled:		EU-9					
19. Is operating schedule different than emission units(s) involved?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
20. Does the manufacturer guarantee the control efficiency of the control equipment?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)					
		Pollutant Controlled					
		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Control Efficiency		90	90				
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. see Appendix C							
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)							
22. Actual Operation:		250 DAYS PER YEAR, 10 HOURS PER DAY					
23. Maximum Operation:		8760 HOURS PER YEAR					
REQUESTED LIMITS							
24. Are you requesting any permit limits?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, indicate all that apply below)					
<input type="checkbox"/> Operation Hour Limit(s):							
<input type="checkbox"/> Production Limit(s):							
<input type="checkbox"/> Material Usage Limit(s):							
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports					
<input checked="" type="checkbox"/> Other:		100 TONS/YEAR OF NESHAP SUBPART WWWW HAPS					
25. Rationale for Requesting the Limit(s):		NESHAP SUBPART WWWW REGULATORY THRESHOLD					



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc		2. Facility Name:		3. Facility ID No:		
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name:		UNIT HEATERS - NORTH				
6. EU ID Number:		EU15				
7. EU Type:		<input checked="" type="checkbox"/> New Source		<input type="checkbox"/> Unpermitted Existing Source		Date Issued:
		<input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:				
8. Manufacturer:		DAYTON AND OTHERS				
9. Model:						
10. Maximum Capacity:		1,500,000 BTU/HR INPUT DUTY				
11. Date of Construction:		2010				
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit?		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.				
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved? <input type="checkbox"/> Yes <input type="checkbox"/> No						
20. Does the manufacturer guarantee the control efficiency of the control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)						
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation:		2500 HOURS PER YEAR				
23. Maximum Operation:		8760 HOURS PER YEAR				
REQUESTED LIMITS						
24. Are you requesting any permit limits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, indicate all that apply below)						
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports				
<input type="checkbox"/> Other:						
25. Rationale for Requesting the Limit(s):						



Please see instructions on page 2 before filling out the form.

**IDENTIFICATION**

1. Company Name: Best Bath Systems, Inc	2. Facility Name:	3. Facility ID No:
--	-------------------	--------------------

4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility

**EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION**

5. Emissions Unit (EU) Name:	UNIT HEATERS - EAST		
6. EU ID Number:	EU16		
7. EU Type:	<input checked="" type="checkbox"/> New Source	<input type="checkbox"/> Unpermitted Existing Source	Date Issued:
	<input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:		
8. Manufacturer:	DAYTON AND OTHERS		
9. Model:			
10. Maximum Capacity:	1,200,000 BTU/HR INPUT DUTY		
11. Date of Construction:	2010		
12. Date of Modification (if any):			
13. Is this a Controlled Emission Unit?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.		

**EMISSIONS CONTROL EQUIPMENT**

14. Control Equipment Name and ID:						
15. Date of Installation:						16. Date of Modification (if any):
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved?	<input type="checkbox"/> Yes <input type="checkbox"/> No					
20. Does the manufacturer guarantee the control efficiency of the control equipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)					
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

**EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)**

22. Actual Operation:	2500 HOURS PER YEAR
23. Maximum Operation:	8760 HOURS PER YEAR

**REQUESTED LIMITS**

24. Are you requesting any permit limits?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, indicate all that apply below)	
<input type="checkbox"/> Operation Hour Limit(s):		
<input type="checkbox"/> Production Limit(s):		
<input type="checkbox"/> Material Usage Limit(s):		
<input type="checkbox"/> Limits Based on Stack Testing:	Please attach all relevant stack testing summary reports	
<input type="checkbox"/> Other:		
25. Rationale for Requesting the Limit(s):		



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc		2. Facility Name:		3. Facility ID No:		
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name:		UNIT HEATERS - SOUTH				
6. EU ID Number:		EU17				
7. EU Type:		<input checked="" type="checkbox"/> New Source		<input type="checkbox"/> Unpermitted Existing Source		Date Issued:
		<input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:				
8. Manufacturer:		DAYTON AND OTHERS				
9. Model:						
10. Maximum Capacity:		600,000 BTU/HR INPUT DUTY				
11. Date of Construction:		2010				
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit?		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.				
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved?		<input type="checkbox"/> Yes <input type="checkbox"/> No				
20. Does the manufacturer guarantee the control efficiency of the control equipment?		<input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)				
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation:		2500 HOURS PER YEAR				
23. Maximum Operation:		8760 HOURS PER YEAR				
REQUESTED LIMITS						
24. Are you requesting any permit limits?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, indicate all that apply below)				
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports				
<input type="checkbox"/> Other:						
25. Rationale for Requesting the Limit(s):						



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc	2. Facility Name:			3. Facility ID No:		
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name: MAKE UP AIR UNIT 1						
6. EU ID Number: MAU1						
7. EU Type: <input checked="" type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source – Previous Permit #:                      Date Issued:						
8. Manufacturer: HASTINGS						
9. Model: SBD 233 (OR EQUIVALENT)						
10. Maximum Capacity: 8565000 BTU/HR INPUT DUTY						
11. Date of Construction: 2010						
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes    If Yes, complete the following section. If No, go to line 22.						
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved? <input type="checkbox"/> Yes <input type="checkbox"/> No						
20. Does the manufacturer guarantee the control efficiency of the control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No    (If Yes, attach and label manufacturer guarantee)						
Control Efficiency		Pollutant Controlled				
		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation: 250 DAYS PER YEAR, 10 HOURS PER DAY						
23. Maximum Operation: 8760 HOURS PER YEAR						
REQUESTED LIMITS						
24. Are you requesting any permit limits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    (If Yes, indicate all that apply below)						
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:    Please attach all relevant stack testing summary reports						
<input type="checkbox"/> Other:						
25. Rationale for Requesting the Limit(s):						



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc	2. Facility Name:			3. Facility ID No:		
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name: MAKE UP AIR UNIT 2						
6. EU ID Number: MAU2						
7. EU Type: <input checked="" type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:                      Date Issued:						
8. Manufacturer: HASTINGS						
9. Model: SBD 215 (OR EQUIVALENT)						
10. Maximum Capacity: 1,000,000 BTU/HR INPUT DUTY						
11. Date of Construction: 2010						
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes    If Yes, complete the following section. If No, go to line 22.						
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved? <input type="checkbox"/> Yes <input type="checkbox"/> No						
20. Does the manufacturer guarantee the control efficiency of the control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)						
Control Efficiency		Pollutant Controlled				
		PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation: 250 DAYS PER YEAR, 10 HOURS PER DAY						
23. Maximum Operation: 8760 HOURS PER YEAR						
REQUESTED LIMITS						
24. Are you requesting any permit limits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, indicate all that apply below)						
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:    Please attach all relevant stack testing summary reports						
<input type="checkbox"/> Other:						
25. Rationale for Requesting the Limit(s):						



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Best Bath Systems, Inc			2. Facility Name:		3. Facility ID No:	
4. Brief Project Description: PTC for a new fiberglass tub and shower unit manufacturing facility						
BOOTH INFORMATION						
5. Booth Type: <input checked="" type="checkbox"/> New Booth <input type="checkbox"/> Unpermitted Existing Booth <input type="checkbox"/> Modification to a Permitted Booth, Permit #: , Date Issued:						
6. Construction Date:						
SPRAY GUN DESCRIPTION AND SPECIFICATIONS						
Gun No.	7. Manufacturer	8. Model	9. Type	10. Transfer Eff. %	11. Rated Capacity (gal/hr)	
1	Sata	Sata Jet	gravity-feed, low pressure	25		
2						
3						
4						
Number of guns to be used simultaneously:						
SPRAY MATERIAL DESCRIPTION AND SPECIFICATIONS						
12. Type of Spray Material Used	13. Type of Material Coated	14. Max. Usage (gal/day)	15. Solid TAP/HAP Content (lb/gal)	16. VOC TAP/HAP Content (lb/gal)	17. MSD (Y/N)	
JNO HD Paint (or equiv.)	fiberglass shower units	See Table 4.1	See Table 4.1	See Table 4.1	Y	
REQUEST FOR PERMIT LIMITATIONS						
18. Are you requesting any permit limits? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes. If Yes, check all that apply below and fill in requested limit(s)						
<input type="checkbox"/> Operation Hour Limits:			<input type="checkbox"/> Production Limits:			
<input type="checkbox"/> Material Usage Limits: 2000 lb/yr			<input type="checkbox"/> Other:			
19. Rationale for Requesting the Limit(s):						
EMISSION CONTROL DEVICE (FILTER <sup>b</sup> ) DESCRIPTION AND SPECIFICATIONS						
Stack Served	20. Filter Manufacturer	21. Model	22. PM Control Efficiency(%) <sup>a</sup>	23. Dimension (Total Area, Thickness and Number of Filters)		
Stack 1	TBD	TBD	>= 90%	44.4 SQ Ft, 3+ Inches, 16 filters		
Stack 2						
Stack 3						
Stack 4						
Notes: a. Provide either stack test data or vendor's documentation to support the control efficiency specified above. b. Fill out and submit appropriate control equipment form(s) if this booth has a control device(s) other than a filter system.						
BOOTH OPERATING SCHEDULE (indicate hours/day, hours/year, or other)						
24. Actual Operation: 100 days/year			25. Maximum Operation: 250 days/year			

## 2. APPLICABLE EQUIPMENT- SPECIFIC APPLICATION FORMS

### 2.1 Emission Unit Specific Documentation

#### 2.1.1 EU7- Resin Storage Room (Form EU0)

Fiberglass resin is stored in two 5500-gallon capacity tanks in the Resin Storage Room, EU7, located in the southwest corner of the building. The tanks sit inside secondary containment. The room is equipped with a roof-mounted ventilation fan. This centrifugal, up-blast exhaust fan, EF7, discharges vertically.

The resin tanks are refilled via a supply truck. The resin is composed of styrene and unsaturated polyester polymer in a 35/65 wt% mix. Maximum daily styrene emissions from the room will occur when the tanks are refilled and styrene-saturated air is displaced from the tanks. EU7 emission calculations are provided in the BBS Permit to Construct Application, Appendix A.<sup>1</sup> The estimated hourly styrene emission rate is 0.221 lb/hr.

#### 2.1.2 EU8 – Maintenance Room (Form EU0)

The Maintenance Shop is used for miscellaneous equipment fabrication and repair. Maintenance Shop activities periodically require incidental welding. The exhaust fan in the Maintenance Shop is used to exhaust welding fumes but will primarily be used to provide air flow for worker comfort. Makeup air to the Maintenance Shop is drawn in from outside, not from the production area. The maintenance shop pollutant emissions are assumed to be insignificant in comparison to the other facility emissions and are not included in the analysis.

#### 2.1.3 EU9 – Lamination Area (Form EU0)

BBS produces fiberglass shower and tub units primarily using spray layup techniques on open molds. Typically, three polyester-styrene layers are applied to molds to create the units: gel coat, barrier coat, and glass-reinforced resin. A fourth polymeric diisocyanate material, "blue foam," is sprayed on to create reinforced floors. The first three layers are applied in the Lamination Area.

#### Additional Process Description

The Caldwell facility employs an "open-plan" production floor in the Lamination Area. The

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<sup>1</sup> Best Bath Systems, Inc., Permit To Construct Application, Submitted to the Department of Environmental Quality, Caldwell, Idaho, March 26, 2010.



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open-plan system improves efficiencies as the units are moved through the production cycle. The production cycle is shown in Figure 3-2. Molds on wheeled carts are brought into the Lamination Area from Mold Storage. The first material, gel coat, is applied to the molds using atomizing, manual spray guns. The molds are then moved east to the next station where a second layer, barrier coat, is applied using atomizing, manual spray guns. The molds are then moved clockwise through two more stations where two layers of resin and chopped glass strand are applied using non-atomizing, manual spray guns. The surface is "rolled" to remove any trapped air. The resin is given time to cure, after which the units are removed from the molds before being moved into the next production area.<sup>2</sup>

#### Additional Equipment Information

The open plan floor eliminates the traditional spray booths for the different sprayed layers. Instead, air exhaust and emission control are handled differently. Two long, cylindrical horizontal ducts are suspended above the production floor along the north and south Room 2 walls. Fourteen intakes (seven per duct) are spaced along the horizontal ducts. These intakes are 50" by 12" rectangular ducts that descend to the shop floor. Approximately 1 foot above the floor, each intake has a 24" by 24" opening fitted with particulate control filters. Emissions from the Lamination Area stations are drawn via two exhaust fans into and up the intakes, through the horizontal ducts, and discharged outside, vertically, above the roof from EF9 and EF10.

Fresh air to the Lamination Area is provided by a direct-fired, natural gas Make Up Air Unit, MAU1<sup>3</sup>. The Lamination Area is designed to operate under negative pressure.

The atomizing spray gun used for the gel and barrier coat application is a Magnum Venus ATG-3500 gel gun. The non-atomizing spray gun used for the resin application is a Magnum Venus TRT-1000-F.

The fourteen exhaust 24" x 24" exhaust air filter units, EC9A to EC9G and EC10A to EC10G, are equipped with two Purolator fiberglass panel filters installed in series: FACET-Aire F312 with an average arrestance of 72 wt% and Purolator Bulk Media with an average arrestance of 84 wt%. Test data for the F312 filter and manufacturer's specification sheets for both filters were provided to DEQ.<sup>4</sup> Test data to support the manufacturer's spec sheet are not available for the bulk media.

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<sup>2</sup> Ibid, Section 3.4.

<sup>3</sup> Ibid, Section 3.6.

<sup>4</sup> Ibid, Appendix C.

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The calculated overall arrestance of the two filters in series is:  
Overall Arrestance, % =  $100\% - 100\% * (1-0.72) * (1-0.84) = 95.5 \text{ wt\%}$

However, because of the lack of test data documentation for the bulk media, for this permit analysis 90% filter efficiency was used.

### Emission Estimates

Emissions from the Lamination area are below the 100 ton per year NESHAP limit

NESHAP Subpart WWWW clearly defines emission factors to be used for the process steps included in that regulation. For the processes not regulated by NESHAP Subpart WWWW, emission factors from AP-42 and/or other accepted methods are used to estimate maximum emission rates.<sup>5</sup>

#### 2.1.4 EU11 - Trim/Finish Area (Form EU0)

Activities at the Trim/Finish Area includes finishing raw edges, installing plumbing holes, spraying reinforced flooring and touching-up small flaws on the tub and shower units.

At the Blue Bottom Area rigid floor foam is manually sprayed under the base of some units. At the Finish Area, inspection and any required touch-up work occur. Assembly/Packaging includes attaching fixtures and crating for shipment.

### Equipment

Fresh air for the Trim/Finish Area is provided by a direct-fired, natural gas make up air unit, MAU2 (see Section 2.1.7). Emissions from the Blue Bottom Area stations are drawn via two exhaust fans, EF11 and EF12, located on the roof directly above the Blue Bottom Area. Intake plenums equipped with particulate filters, EC11 and EC12, descend to the shop floor adjacent to the Blue Bottom spray area.

The Trim Room corridors (approximately 15 feet tall) are also equipped with particulate emission control equipment, ECT1 and ECT2. Trim Room fans, RF1 and RF2, draw air from the trimming area through particulate filters. The Trim Room fans discharge the filtered air back into the Trim/Finish Area, not to the outside.

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<sup>5</sup> Ibid, Section 3.

All of the particulate filters used are equivalent or more efficient than Purolator FACET-Aire F312 and Purolator Bulk Media used in emission calculations. Currently, particulate filters at the Trim Room corridors are American Air Filter, DuraShield Cartridge Filter. The manufacturer indicates a minimum efficiency value  $\geq 90\%$ . With 2 cartridges arranged in series, the overall efficiency is calculated as follows:

$$\% = 100\% - 100\% * (1 - 0.90) * (1 - 0.90) = 99. \text{ wt}\%$$

Since 90% was used in the emission estimation calculations for the Trim/Finish Area from EF11 and EF12, the DuraShield filter performs better and exceeds the efficiency used in the emission calculations.<sup>6</sup>

Since the Trim Room fans discharge back into the Trim/Finish Area, particulate not captured by the Trim Room filters could be discharged outside via exhaust fans EF11 or EF12. To estimate the facility particulate emissions from the Trim Room operations, 80% capture and control efficiency was estimated for the Trim Rooms circulating air treatment system.

#### Emission Estimates

Emissions from the Trim/Finish Area are VOCs associated with adhesives, finishing compounds and foams used in the area, and particulates generated from the sanding and drilling plumbing holes in the units. Volatile emissions calculations assume all material is emitted.<sup>7</sup>

Particulate emissions from the Trim Booth are estimated conservatively assuming that 5% of the resin applied to the molds is removed as PM<sub>10</sub> during edge trimming and hole drilling. The 5% estimate is based on comparing the potential trimmed resin volume to the complete unit.<sup>8</sup>

#### 2.1.5 EU15/EU16/EU17 – Unit Heaters (Form EU0)

There are eleven gas-fired unit heaters installed throughout the facility. These units typically have an input design duty of 300,000 Btu/hr. The combustion gases from these units are vented via 8" ducts directly up through the roof. The location of the unit heaters is shown on Figure 3-1 Plot Plan.

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<sup>6</sup> Ibid.

<sup>7</sup> Ibid, Table 3-3.

<sup>8</sup> Ibid Appendix A, Table 3-3.

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Because the potential emissions from each of these small units is not large, and because they are clustered together in certain rooms around the facility, groups of heaters are collocated into three composite point sources for emission estimating.

EU15 is a composite of five unit heaters located in the Mold Maintenance Area (Room 1). EU16 is a composite of four unit heaters located in the Assembly/Packaging Area (Room 4). EU17 is a composite of two unit heaters located in and just outside the Maintenance Room. The combustion emissions from EU15-EU17 are estimated at the design capacity of 0.3 MMBtu/hr per unit heater and 8760 hours per year.<sup>9</sup>

#### 2.1.6 MAU1- Make Up Air Unit 1 (Form EU0)

Fresh air to the Lamination Area is provided by a make up air unit, MAU1, located just outside the west wall of the building. For cold weather operations, MAU1 includes a direct-fired, natural gas fueled air heater with a design input duty of 8.565 MMBtu/hr. A Hastings Model SBD 233 make up air unit has been specified for this service.<sup>10</sup>

Combustion gas emissions from MAU1 are estimated at the design capacity and 8760 hours per year.<sup>11</sup> The unit is direct-fired and the combustion gas are emitted via the Lamination Area exhaust fans, EF9 and EF10.

#### 2.1.7 MAU2- Make Up Air Unit 2 (Form EU0)

Fresh air to the Trim/Finish Area is provided by a make up air unit, MAU2, located just outside the west wall of the building. For cold weather operations, MAU2 includes a direct-fired, natural gas fueled air heater with a design input duty of 1.00 MMBtu/hr. A Hastings Model SBD 215 make up air unit has been specified for this service.<sup>12</sup>

Combustion gas emissions from MAU2 are estimated at the design capacity and 8760 hours per year.<sup>13</sup> The unit is direct-fired and the combustion gas are emitted via the Blue Bottom Area exhaust fans, EF11 and EF12.

#### 2.1.8 Spray Paint Booth Documentation (Form EU3)

The Accent Booth is located in the Assembly/Packaging Area (Room 4, see Figure 3-1) and is

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<sup>9</sup> Ibid, Table 3-5.

<sup>10</sup> Ibid Appendix C

<sup>11</sup> Ibid Table 3-6.

<sup>12</sup> Ibid Appendix C

<sup>13</sup> Ibid, Table 3-7.

---

used to apply trim color to certain tub and shower units. Automotive paint is applied with a manual spray gun. Accent painting is not done on every tub and shower unit. Therefore the paint booth typically operates 2-3 days per week.

The booth is equipped with an exhaust fan, EF14, which draws booth air through overspray filters and discharges through a roof stack. BBS will install overspray air filters and pre-filters with a minimum combined capture efficiency of 90%. The Accent Booth exhaust fan is a Greenheck Model TAB-30-030T3, operating at 12,600 CFM.<sup>14</sup>

Wet coatings are applied using a Sata Jet gravity-feed manual spray gun. The EPA reports typical transfer efficiency of 25% for wet coating spray application.<sup>15</sup> All wet coating particulate emissions are conservatively assumed to be PM<sub>10</sub>. All volatile wet coating components are assumed to be completely emitted.<sup>16</sup>

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<sup>14</sup> Ibid Appendix B.

<sup>15</sup> U.S. Environmental Protection Agency, Compilation of Air Quality Emission Factors, AP-42, Chapter 4.2.2.12, Table 4.2.2.12-1.

<sup>16</sup> Best Bath Systems, Inc., Permit To Construct Application, Submitted to the Department of Environmental Quality, Caldwell, Idaho, March 26, 2010, Table 3-3.









## **2.2 EMISSION INVENTORY WORKBOOK FORMS EI-CP1 - EI-CP4 DOCUMENTATION**

### **2.2.1 Criteria Pollutant Facility-Wide Point Source Emissions**

Estimated criteria pollutant emissions at BBS are summarized on Permit Form EI1. All particulate emissions are conservatively assumed to be PM<sub>10</sub>.

### **2.2.2 Criteria Pollutant Facility-Wide Fugitive Emissions**

BBS is an indoor production facility with point sources of emissions. The building operates at negative pressure. There are no outdoor stockpiles or unpaved roads. There are no known sources of fugitive emissions.

### **2.2.3 Criteria Pollutant Facility-Wide Point Source and Fugitive Emissions Increase**

This is a new facility that has never been permitted so calculating an emissions increase is not applicable.

### **2.2.4 Hazardous Air Pollutant Facility-Wide Emissions**

Estimated HAP emissions from the manufacturing processes are 100.1 tons per year from the fabrication process, 0.18 tons per year from painting operations, and 0.11 tons per year from the combustion equipment.<sup>17</sup> Therefore, maximum total HAP emissions are 100.4 tons per year.

### **2.2.5 Greenhouse Gas Facility-Wide Emissions**

Processes at BBS that generate Greenhouse Gas Emissions are the natural gas combustion units, including eleven unit heaters and two make-up air heating units.

The input design duties of the heaters are generally 300,000 Btu/hr and total approximately 4.3 MMBtu/hr. The input duty of Make-Up Air Unit #1 is 8.565 MMBtu/hr and the input duty of Make-Up Air Unit #2 is 1 MMBtu/hr. The facility-wide duty for natural-gas combustion equipment is 13.865 MMBtu/hr.

CO<sub>2</sub>e emissions are calculated as follows:

PTE Operating assumptions – 24 hours/day; 8,760 hours/year

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<sup>17</sup> Ibid, Section 3.

1 therm = 0.1 MMBtu

$(13.865 \text{ MMBtu/hr.}) * (8760 \text{ hours}) = 112,457 \text{ MMBtu/year}$

$112,457 \text{ MMBtu/year} / (1 \text{ therm} / 0.1 \text{ MMBtu}) = 1,214,570 \text{ therm/year}$   
 $1,214,570 \text{ therms} = 6,073 \text{ metric tons CO}_2\text{e/year}^{18} = 6,694 \text{ tons CO}_2\text{e/year}$

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<sup>18</sup> U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator,  
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>.



**DEQ AIR QUALITY PROGRAM**  
 1410 N. Hilton, Boise, ID 83706  
 For assistance, call the  
**Air Permit Hotline – 1-877-5PERMIT**

# AIR PERMIT APPLICATION

Revision 6  
 10/7/09

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION	
1. Company Name:  Best Bath Systems, Inc	2. Facility Name:
3. Brief Project Description:      Operating Permit for a fiberglass tub and shower unit manufacturing facility	
APPLICABILITY DETERMINATION	
4. List applicable subparts of the New Source Performance Standards (NSPS) ( <a href="#">40 CFR part 60</a> ).  Examples of NSPS affected emissions units include internal combustion engines, boilers, turbines, etc. The applicant must thoroughly review the list of affected emissions units.	List of applicable subpart(s):  <input checked="" type="checkbox"/> Not Applicable
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in <a href="#">40 CFR part 61</a> and <a href="#">40 CFR part 63</a> .  Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. <a href="#">EPA has a web page dedicated to NESHAP</a> that should be useful to applicants.	List of applicable subpart(s):  Subpart WWWW  <input type="checkbox"/> Not Applicable
6. For each subpart identified above, conduct a complete a regulatory analysis using the instructions and referencing the example provided on the following pages.  <b>Note</b> - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation applies. Regulatory reviews that are submitted with insufficient detail will be determined incomplete.	<input type="checkbox"/> A detailed regulatory review is provided (Follow instructions and example).  <input checked="" type="checkbox"/> DEQ has already received a detailed regulatory review (PTC Application, 3/26/10); DEQ completed its regulatory review (DEQ Statement of Basis, 6/16/10)
<b>IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT</b>	
<p><i>It is emphasized that it is the applicant's responsibility to satisfy all technical and regulatory requirements, and that DEQ will help the applicant understand what those requirements are <u>prior</u> to the application being submitted but that DEQ will not perform the required technical or regulatory analysis on the applicant's behalf.</i></p>	

### **2.3 Federal Requirements Applicability Documentation (Form FRA)**

Proposed non-applicability determinations for federal requirements are listed in Section 5.

#### **2.3.1 New Source Performance Standards (40 CFR Part 60)**

EPA has established NSPS for new, modified, or reconstructed facilities and source categories. Best Bath is not a designated facility and has no equipment subject to any NSPS subparts.

#### **2.3.2 National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 and 63)**

The gel coat, barrier coat and reinforced resin application processes are covered under NESHAP Prevention of Significant Deterioration/NSR (40 CFR 52.1). Best Bath's operations are not included in the list of 28 Prevention of Significant Deterioration (PSD) source categories. Therefore, to qualify as a PSD Major Source, the Best Bath facility must have the Potential to Emit (PTE) greater than 250 tons per year of any NSR regulated pollutant.

In 2011 Best Bath operated 2,783 hours. 2011 VOC emissions, the NSR-regulated pollutant of most concern at Best Bath, are estimated at approximately 43 tons. At 8760 hours per year operation, estimated VOC emissions (PTE) would therefore be

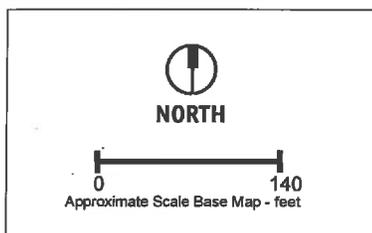
$$(43 \text{ tons} * 8760 \text{ hrs/yr}) / 2,783 \text{ hrs} = 135 \text{ tons per year.}$$

Best Bath does not qualify as a PSD Major Source.



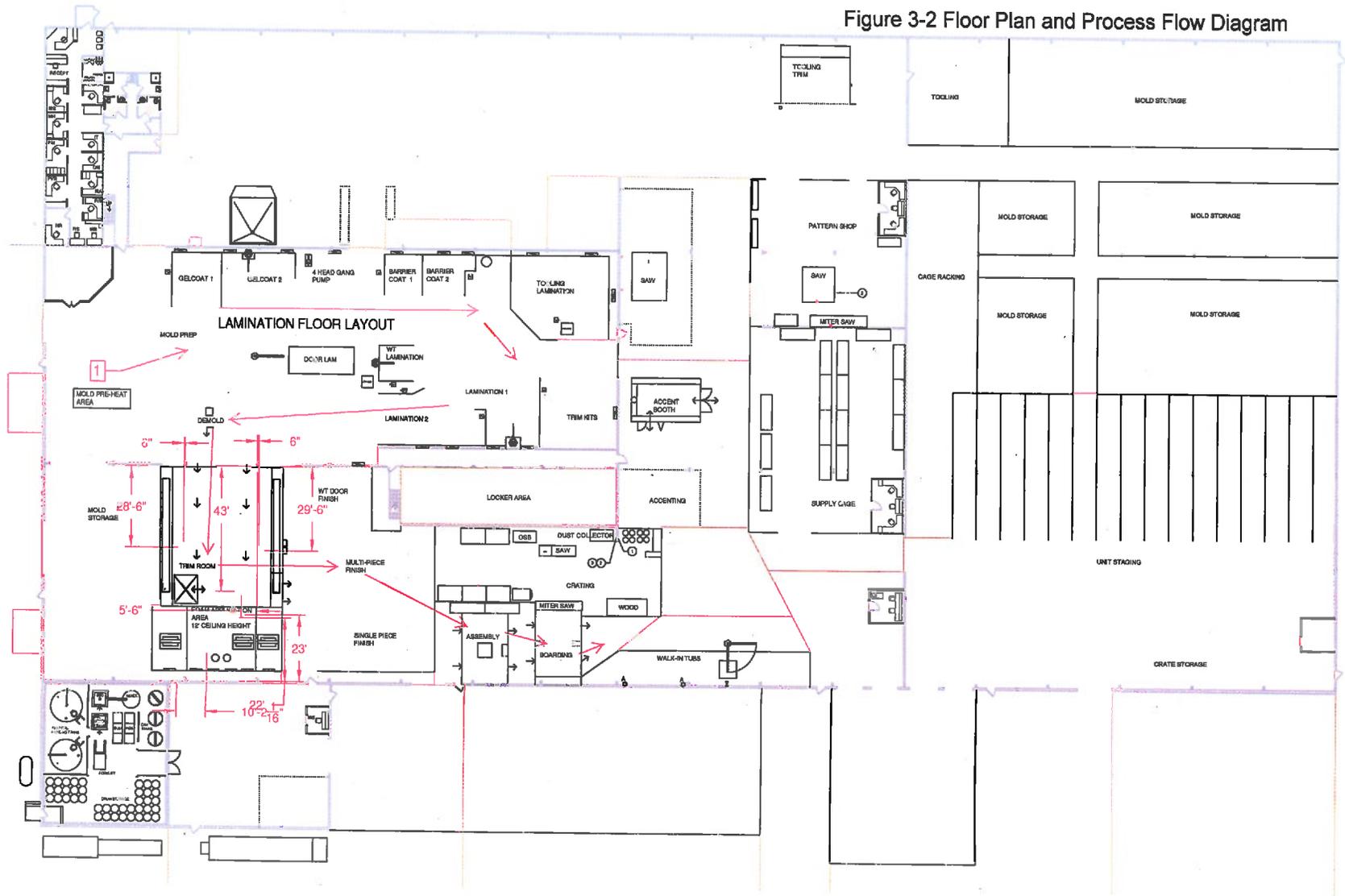
- Building Edge
- Property Boundary
- Emission Point
- ⬡ Actual Unit Heater Location
- ⬡ Modeled Unit Heater Location (composite)

Base Map Source: Valley Air Photos, Caldwell, Idaho, October 1, 2009



**Figure 3-1 Plot Plan**  
**723 Garber Street**  
**Caldwell, Idaho 83605 March 2010**

Figure 3-2 Floor Plan and Process Flow Diagram



### **3. ADDITIONAL REQUIRED INFORMATION NOT COVERED BY EQUIPMENT-SPECIFIC FORMS**

#### **3.1 Plot Plan**

Figure 3-1 Plot Plan is enclosed. The BBS facility is located in an industrial area. There is one building associated with the facility and all emission sources.

#### **3.2 Floor Plan**

Figure 3-2 Floor Plan is enclosed. Figure 3-2 shows the layout, equipment locations and production path at the BBS facility.

#### **3.3 Material Safety Data Sheets**

Material Safety Data Sheets (MSDS) for chemicals used was provided previously to the DEQ.<sup>19</sup>

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<sup>19</sup> Best Bath Systems, Inc., Permit To Construct Application, Submitted to the Department of Environmental Quality, Caldwell, Idaho, March 26, 2010, Appendix D.

#### 4. APPLICABLE REQUIREMENTS – STATE OF IDAHO IDAPA

This section lists and describes the applicable state and federal requirements affecting BBS. Details on the method of compliance, the compliance status and the compliance certifications are provided in Section 7.

##### 4.1 Facility-Wide Requirements

The following requirements apply to the entire facility

<i>IDAPA 58.01.01.123</i>	Certification of Documents
<i>IDAPA 58.01.01.125</i>	Prohibition against False Statements
<i>IDAPA 58.01.01.126</i>	Tampering of Monitoring Devices or Methods Required
<i>IDAPA 58.01.01.130-136</i>	Reporting of Excess Emission Events
<i>IDAPA 58.01.01.300-316</i>	Procedures and Requirements for Tier I Operating Permits
<i>IDAPA 58.01.01.322</i>	Standard Contents of Tier I Operating Permits
<i>IDAPA 58.01.01.380-386</i>	Changes to Tier I Operating Permits
<i>IDAPA 58.01.01.390-397</i>	Registration and Registration of Fees
<i>IDAPA 58.01.01.625 &amp; P-2010.0047, Conditions 7, 18</i>	Visible Emissions
<i>IDAPA 58.01.01.650-651 &amp; P-2010.0047, Conditions 8, 19</i>	Control of Fugitive Dust
<i>IDAPA 58.01.01.775-776 &amp; P-2010.0047, Conditions 9, 16</i>	Control of Odors
<i>P-2010.0047, Condition 10</i>	Use of Natural Gas in Fuel-burning Equipment
<i>P-2010.0047, Condition 13</i>	Material Usage Records

##### 4.2 Emission Unit Specific Requirements

The following requirement applies to the gel coat, barrier coat and reinforced resin application processes at BBS.

<i>IDAPA 58.01.01.591</i>	National Emission Standards For Hazardous Air Pollutants
<i>40 CFR 63 Subpart WWWW</i>	NESHAP: Reinforced Plastic Composites Production
<i>P-2010.0047, Conditions 5,14</i>	Emission Limits for Lamination Area and Blue Bottom Area
<i>P-2010.0047, Condition 11</i>	Spray Gun and Filter Specifications
<i>P-2010.0047, Condition 15</i>	O & M Manual for Dust Collection System

## 5. PROPOSED DETERMINATION OF NON-APPLICABLE REQUIREMENTS

### 5.1 Fuel Burning Equipment – Particulate Matter – 58.01.01.675-681

IDAPA 58.01.01.675-681 establishes exhaust gas particulate limits for fuel burning equipment. The definition of “fuel-burning equipment” provided in IDAPA 58.01.01.006.45 is- *Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.*

The natural gas-fired makeup air and unit heaters at the Best Bath facility are direct heat transfer units. Therefore, IDAPA 58.0101.675-681 does not apply.

### 5.2 Particulate Matter Process Weight Limitations – 58.01.01.700-701

IDAPA 58.01.01.700-701 establishes Process Weight Limitations for emissions. Particulate at the Best Bath facility is contributed by the gel coats, barrier coat, resin and paints used. The total weight of these materials used in the PTC Permit analysis was 2,426,088 lbs per year.<sup>20</sup> The Process Weight (PW) was calculated as 404.3 lb/hr. In accordance with IDAPA 58.01.01.701.01.b, the allowable particulate emissions is calculated as follows:

$$E = 0.045(PW)^{0.60} = 0.045*(404.3)^{0.60} = 1.65 \text{ lb/hr particulate}$$

Since the PTC estimated 24-hr averaged particulate rate is 1.54 lb/hr, less than the allowable limit 1.65 lbs/hr, the facility satisfies the standards of IDAPA 58.01.01.701 for the estimated maximum production rate.

The total weight of gel coats, barrier coat, resin and paints used in 2011 was 1,087,195 lbs., less than 50% of the PTC analysis amount. The actual hours of operation in 2011 is Since the actual production is considerably less than the maximum, emission rates during the course of the Tier 1 Permit will similarly be less than the corresponding allowable emission rate. This is shown using actual 2011 material use amounts. Estimated 2011 hourly particulate emission rate is calculated as follows:

$$(1,087,195 \text{ lbs})(1.54 \text{ lbs/hr})/(2,426,088 \text{ lbs}) = 0.69 \text{ lbs/hr}$$

2011 PW and E are calculated as follows:

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<sup>20</sup> Ibid. Section 9.

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$$PW = (1,087,195)/(250)(24) = 181.20$$
$$E = 0.045(PW)^{0.60} = 0.045*(181.20)^{0.60} = 1.02 \text{ lb/hr particulate}$$

Since the 2011 24-hr averaged particulate rate is 0.69 lb/hr is less than the allowable limit 1.02 lbs/hr, and the maximum 24-hr averaged particulate rate satisfies the standards of IDAPA 58.01.01.701.

Since the maximum 24-hr averaged particulate rate satisfies the standards of IDAPA 58.01.01.701, and since emissions less than this rate satisfy the standards of IDAPA 58.01.01.701, this requirement is not applicable.

### **5.3 NSPS Standards for Volatile Organic Liquid Storage - 40 CFR 60 Subpart Kb**

The resin kept in storage tanks at the facility does contain a significant percentage of VOC. However, the combined capacity of these tanks is less than the 19,800-gallon threshold for applicability by NSPS Subpart Kb. Therefore, Subpart Kb does not apply.

### **5.4 NESHAP for Paint Stripping and Misc. Surface Coating - 40 CFR 63 Subpart 6H**

None of the paint coatings applied at Best Bath contain the target HAPs of chromium, lead, manganese, nickel or cadmium. Therefore, NESHAP Subpart HHHHHH: Paint Stripping and Miscellaneous Surface Coating Operations does not apply.

### **5.5 Greenhouse Gas Emissions - 75 FR 34514 and 40 CFR 98**

The EPA issued the Tailoring Rule (75 FR 34515) on June 3, 2010 for 40 CFR 51, 52, 70 and 71 which requires facilities that have the potential to emit (PTE) more than 100,000 tons CO<sub>2</sub>-Equivalent (CO<sub>2</sub>e) per year and 100 tons CO<sub>2</sub>-mass-basis per year to obtain Title V Operating Permits.

The facility PTE 6,211 tons CO<sub>2</sub>e/year (see Section 2.2.5) is considerably less than the 100,000 ton CO<sub>2</sub>e Title V Permit threshold. In addition, because the CO<sub>2</sub>e threshold is not exceeded, the applicability requirement that both CO<sub>2</sub>e and CO<sub>2</sub>-mass thresholds be exceeded is not satisfied. Consequently, the Title V permitting requirement does not apply.

EPA issued the Greenhouse Gas Mandatory Reporting Rule (GHG-MRR; 40 CFR 98 Subpart C) on October 30, 2009 that requires facilities with fuel-burning equipment that release more than 25,000 tons CO<sub>2</sub>-Equivalent (CO<sub>2</sub>e) per year to submit annual GHG emission reports.

The GHG PTE of 6,211 tons CO<sub>2</sub>e/year is below the GHG Reporting Threshold of 25,000 tons/year. Therefore, annual reporting of GHG emissions will not be required.



**6. ALTERNATIVE OPERATING SCENARIOS**

None proposed.

## **7. COMPLIANCE CERTIFICATIONS**

A description of the compliance certifications required with this permit application is provided below. The actual compliance certifications including status are provided in DEQ Form AQ-C2-Application, attached.

### **7.1 Certification of Documents – P-2010.0047 Condition 33, 58.01.01.123**

Certification that all submitted documents are true, accurate and complete based on information and belief formed after reasonable inquiry is provided for this application in Section 13 and with all documents submitted to DEQ.

### **7.2 False Statements – P-2010.0047 Condition 34, 58.01.01.125**

Certification that all submitted documents are true, accurate and complete based on information and belief formed after reasonable inquiry is provided for this application in Section 13 and with all documents submitted to DEQ.

### **7.3 Tampering – P-2010.0047 Condition 35, 58.01.01.126**

Emission testing and other data collected to comply with P-2010.0047 is reviewed to determine if there is evidence that any person has tampered with any monitoring device or method required under this permit.

### **7.4 Excess Emissions – P-2010.0047 Condition 32, 58.01.01.130-136**

Operational and emissions records are reviewed to determine if BBS has had an excess emissions event subject to these regulations.

### **7.5 Requirement to Obtain a Tier 1 Permit - 58.01.01.301**

The owner or operator of a facility with potential to emit greater than 100 tons per year of VOC and greater than 10 tons per year of a HAP is a major facility and required to submit a permit application.

Compliance is demonstrated by submission of this Application.

### **7.6 Application for Tier I Operating Permit - 58.01.01.312**

The owner or operator is required to submit a permit application, in accordance with sections 311 – 315.

Compliance is demonstrated by certifying and submitting this Tier I Operating Permit application.



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### **7.7 Required Standard Application - 58.01.01.314**

The owner or operator is required to submit permit application forms and information designated by the IDEQ.

Compliance is demonstrated by the forms and information enclosed. The information required includes General Information (Section 1, above); Emission Unit information (Section 2, above); Emission type, rate and location information (Section 2, above), Applicable Requirements (this Section 4), Determinations Of Non-Applicability (Section 5, below), Alternative Operating Scenarios (Section 6, below), Compliance Certifications (Section 7, below), Compliance Plans (Section 8, below), and Trading Scenarios (see Section 9, below).

### **7.8 Duty to Supplement or Correct Application - 58.01.01.315**

The applicant is required to supplement information or revise incorrect information upon becoming aware of the need for additional or revised information. In addition, the applicant is required to provide additional information that may be requested for requirements that become applicable after the date of a complete application but prior to proposed action.

No supplemental or correction information is applicable for this submission.

### **7.9 Insignificant Activities- 58.01.01.317**

The list of insignificant activities (58.01.01.317[a]) and list of insignificant activities on the basis of size or production rate (58.01.01.317[b]) have been considered for the purpose of submitting a complete application.

The 11 unit heaters and Make-up Air Unit #2 are each individually less than 5,000,000 Btu/hr. (58.01.01.317[b][5]). Consequently, these units are considered insignificant.

The Make-up Air Unit #1 has a design duty of 8.6 MMBtu/hr. and, consequently is considered significant for the purpose of the Tier 1 Operating Permit

### **7.10 Standard Content of Tier I Operating Permits - 58.01.01.322**

BBS has not yet been issued a Tier I operating permit. The requirements are expected to be similar to those required by PTC P-2010.0047, with some additions. BBS is required to submit compliance certifications during the term of the permit for each emissions unit to the Department.

Compliance certifications for all emissions units shall be submitted no less frequently than annually, or more frequently if specified by the underlying applicable requirement or by the Department. The compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards and work practices.



The compliance certifications are shown on DEQ Form AQ-C2-Application, attached.

**7.11 Visible Emissions – 58.01.01.625 & P-2010.0047 Conditions 7, 18**

Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625. PTC P-2010.0047, Condition 18 requires a quarterly (by calendar) facility-wide inspection of potential point sources (i.e., each stack, vent or functionally equivalent opening) of visible emissions during daylight hours and under normal operating conditions.

P-2010.0047 requires that BBS maintain records of the results of each visible emission inspection. The records shall, at a minimum, include the date of each inspection and a description of the following: assessment of the conditions existing at the time of each inspection, assessment of the conditions existing at the time visible emissions are present (if observed), and any corrective action taken. Records shall be maintained in accordance with P-2010.0047, Condition 31.

The compliance certification for Quarterly Visible Emissions Inspection is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for Quarterly Visible Emission Inspection will be submitted annually.

**7.12 Control of Fugitive Dust – 58.01.01.650-651 & P-2010.0047 Conditions 8, 19**

In accordance with IDAPA 58.01.01.651, all reasonable precautions shall be taken to prevent PM from becoming airborne. The facility has no known sources of fugitive dust. All manufacturing operations occur indoors under negative pressure so that all emissions will be released through the stacks. There are no outdoors stockpiles or unpaved roads. There is no vehicle loading, unloading, or transport of unpackaged, dusty materials.

Compliance is demonstrated by conducting quarterly (by calendar) facility-wide inspections of potential sources of fugitive dust emissions. BBS is required to maintain records of the results of each fugitive dust emission inspection.

The compliance certification for Quarterly Fugitive Dust Emission Inspection is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for Quarterly Fugitive Dust Emission Inspection will be submitted annually.

**7.13 Rules for Control of Odor - 58.01.01.775-776, PTCP-2010.0047 Conditions 9, 16**

Reasonable control of odors is required.

Compliance is demonstrated by developing a written plan that describes procedures that will be followed to control odors. The Plan is required to include:

- Maintaining negative air pressure inside the building.



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- Keeping all storage containers and vessels closed when not in use.
  - Keeping the door to the mixing tank room closed while extenders and fillers are being added to the resin matrix.
  - Maintaining records of all odor complaints received.
  - Taking appropriate corrective action as expeditiously as practicable on all complaints of merit.
  - Maintaining records of the BBS' assessment of the validity of complaints received.
  - Maintaining records of any corrective action taken, and the date the corrective action was taken.

The BBS Odor Management Plan is provided in Appendix A.

The compliance certification for Control of Odor is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for Control or Odor will be submitted annually.

#### **7.14 National Emission Standards for Hazardous Air Pollutants – 58.01.01.591**

BBS is required to comply with the applicable emission limitations, operating limitations and work practice standard of the National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, 40 CFR 63, Subpart WWWW. See Section 2.3.3 and 4.17, above, for NESHAP requirements.

Compliance is demonstrated with the emission limitations (40 CFR 63.5805; 40 CFR 63, Subpart WWWW, Table 3) by calculating monthly and rolling 12-month MACT emissions and comparing the amounts to MACT limits based on chemical mixtures used and submittal of semiannual reports to IDEQ.

The compliance certification for calculating monthly and rolling 12-month MACT emissions and comparing the amounts to MACT limits is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for monthly and rolling 12-month MACT emissions will be submitted semi-annually.

Compliance is demonstrated by keeping records that include the following:  
the name and identification number for each gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used;  
the percent by weight of each VOC in each compound;  
gallons and pounds of gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used per month.

The compliance certification for keeping material usage records is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for keeping material usage records will be submitted annually.



Compliance is demonstrated with the Work Practice Standards by submitting semi-annual reports to IDEQ that include certification of compliance with the work practice standards.

The compliance certification for complying with Work Practice Standards is shown on MACT Tier I Permit Application Compliance Certification, attached. The compliance certification for complying with Work Practice Standards will be submitted semi-annually.

**7.15 Emissions Limits – P-2010.0047 Conditions 5, 14, 15, 17**

Total emissions from Stacks EF-9, EF-10, EF-11, and EF-12 shall not exceed 1.60 lbs PM10/hr or 108 tons VOCs/yr by P-2010.0047 Condition 5.

In order to demonstrate compliance with the PM10 emission limit, a written Operations and Maintenance (O&M) Manual is required for the Dust Collection System. The manual describes procedures that will be followed to comply with P-2010.0047 Condition 24 and the manufacturer specifications for the dust filter system. The manual is required to include the following provisions:

Inspecting the filters for collapse, and record date of inspection. At a minimum, the inspections occur weekly.

Replacing filters when collapsed or otherwise not functioning properly.

Maintaining negative air pressure inside the building.

The BBS Dust Collection System O&M Manual is provided in Appendix B. The compliance certification for complying with the O&M Plan is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for complying with the Dust Collection O&M Plan will be submitted annually.

In addition, to demonstrate compliance with the PM10 emission limit, performance testing (monitoring) in accordance with the procedures in IDAPA 58.01.01.157 is required.

Compliance with P-2010.0047 Condition 17 is demonstrated by the Performance September 2012 Test Report submitted to DEQ.<sup>21</sup>

In order to demonstrate compliance with the VOC emission limit, the annual VOC emission rate

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<sup>21</sup> CCI Environmental Consultants, Inc., Best Bath Systems PM-10 Emissions from Coatings Applications, Stacks E-9 and EF-10, Submitted to Best Bath Systems, 723 Garber St., Caldwell, ID 83605, Salt Lake, City, UT, September 2012, 17 pp. plus Appendices.

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expressed as a rolling 12-month period is calculated monthly to demonstrate compliance with the annual VOC emission limit as required by P-2010.0047 Condition 14.

The compliance certification for complying with rolling 12-month VOC emission limit is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for complying with the rolling 12-month VOC emission limit will be submitted annually.

#### **7.16 Natural Gas in Fuel-Burning Equipment – P-2010.0047 Condition 10**

Natural gas is the only fuel approved for use in fuel-burning equipment.

The compliance certification that this requirement is being followed is provided in DEQ Form AQ-C2-Application, attached.

#### **7.17 Spray Gun and Filter Specifications – P-2010.0047 Condition 11**

Low-pressure spray guns are required for gel-coat applications. The facility is required to use Magnum Venus model ATG-3500 or functionally equivalent spray guns demonstrated to produce similar operating pressures and emissions.

Air ventilation system for spray operations are required to be equipped with a 1-inch fiberglass filter and then a fiberglass bulk media filter with a combined collection efficiency of at least 90% for PM<sub>10</sub>, or filters with an equivalent or greater collection efficiency. The combined efficiency may be determined using the following equation:

$$\text{Combined collection efficiency} = E = 1 - [(1 - e_1) * (1 - e_2)]$$

Where:  $e_1$  = PM<sub>10</sub> collection efficiency for the initial filter; and

$e_2$  = PM<sub>10</sub> collection efficiency for the secondary filter (e.g., where 72% collection efficiency is expressed as 0.72)

#### **7.18 Material Usage Records – P-2010.0047 Condition 13**

The following material use records are required to be maintained:

- the name and identification number for each gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used;
- the percent by weight of each VOC in each compound;
- gallons and pounds of gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used per month.

The compliance certification for maintaining material use and VOC composition records is shown on DEQ Form AQ-C2-Application, attached. The compliance certification for maintaining material use and VOC composition records will be submitted annually.



## TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE

### FORM AQ-C2-Application

Facility/Permittee Name: Best Bath, Inc. Tier I Operating Permit No.: TBD  
 Facility Location: 723 Garber Street, Caldwell, ID Issuance Date: TBD  
 AIRS Facility No.: \_\_\_\_\_ Compliance Reporting Period: Operating Permit Application

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> / I <sup>2</sup>	6 Attachment
P-2010.0047 Condition 33, 58.01.01.123	Certification that all submitted documents are true, accurate and complete based on information and belief formed after reasonable inquiry is provided for this application in Section 13 and with all documents submitted to DEQ.	NA		C	
P-2010.0047 Condition 34, 58.01.01.125	Certification that all submitted documents are true, accurate and complete based on information and belief formed after reasonable inquiry is provided for this application in Section 13 and with all documents submitted to DEQ.	NA		C	
P-2010.0047 Condition 35, 58.01.01.126	Emission testing and other data collected to comply with P-2010.0047 is reviewed to determine if there is evidence that any person has tampered with any monitoring device or method required under this permit.	NA		C	
P-2010.0047 Condition 32, 58.01.01.130-136	Operational and emissions records are reviewed to determine if BBS has had an excess emissions event subject to these regulations.	NA		C	
58.01.01.301	The owner or operator of a facility with potential to emit greater than 100 tons per year of VOC and greater than 10 tons per year of a HAP is a major facility and required to submit a permit application. Compliance is demonstrated by submission of this Application.	NA		C	
58.01.01.312	The owner or operator is required to submit a permit application, in accordance with sections 311 – 315. Compliance is demonstrated by certifying and submitting this Tier I Operating Permit application.	NA		C	X
58.01.01.314	The owner or operator is required to submit permit application forms and information designated by the IDEQ. Compliance is demonstrated by the forms and information enclosed.	NA		C	X
58.01.01.315	The applicant is required to supplement information or revise incorrect information upon becoming aware of the need for additional or revised information. No supplemental or correction information is applicable for this submission.	NA		C	

**TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE**

**FORM AQ-C2-Application**

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> / I <sup>2</sup>	Attachment
58.01.01.317	The list of insignificant activities (58.01.01.317[a]) and list of insignificant activities on the basis of size or production rate (58.01.01.317[b]) have been considered for the purpose of submitting a complete application.	NA		C	X
58.01.01.322	BBS has not yet been issued a Tier I operating permit. BBS is required to submit compliance certifications during the term of the permit for each emissions unit to the Department.	NA		C	
P-2010.0047 Conditions 7, 18 58.01.01.625	<p>Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625. PTC P-2010.0047, Condition 18 requires a quarterly (by calendar) facility-wide inspection of potential point sources (i.e., each stack, vent or functionally equivalent opening) of visible emissions during daylight hours and under normal operating conditions.</p> <p>P-2010.0047 requires that BBS maintain records of the results of each visible emission inspection. The records shall, at a minimum, include the date of each inspection and a description of the following: assessment of the conditions existing at the time of each inspection, assessment of the conditions existing at the time visible emissions are present (if observed), and any corrective action taken. Records shall be maintained in accordance with P-2010.0047, Condition 31.</p> <p>Visible Emission Inspections are conducted quarterly. The compliance certification for Quarterly Visible Emission Inspection will be submitted annually.</p>	I		C	
P-2010.0047 Conditions 8, 19 58.01.01.650-651	<p>In accordance with IDAPA 58.01.01.651, all reasonable precautions shall be taken to prevent PM from becoming airborne. The facility has no known sources of fugitive dust. All manufacturing operations occur indoors under negative pressure so that all emissions will be released through the stacks. There are no outdoors stockpiles or unpaved roads. There is no vehicle loading, unloading, or transport of unpackaged, dusty materials.</p> <p>Compliance is demonstrated by conducting quarterly (by calendar) facility-wide inspections of potential sources of fugitive dust emissions. BBS is required to maintain records of the results of each fugitive dust emission inspection.</p> <p>The compliance certification for Quarterly Fugitive Dust Emission Inspection will be submitted annually.</p>	I		C	
PTCP-2010.0047 Conditions 9, 16 58.01.01.775-776	<p>Reasonable control of odors is required. Compliance is demonstrated by developing a written plan that describes procedures that will be followed to control odors. The Plan is required to include:</p> <ul style="list-style-type: none"> <li>• Maintaining negative air pressure inside the building.</li> <li>• Keeping all storage containers and vessels closed when not in use.</li> <li>• Keeping the door to the mixing tank room closed while extenders and fillers are being added to the resin matrix.</li> <li>• Maintaining records of all odor complaints received.</li> <li>• Taking appropriate corrective action as expeditiously as practicable on all complaints of merit.</li> <li>• Maintaining records of the BBS' assessment of the validity of complaints received.</li> <li>• Maintaining records of any corrective action taken, and the date the corrective action was taken.</li> </ul> <p>BBS has prepared an Odor Management Plan. The compliance certification for Control or Odor will be submitted annually.</p>	I		C	X

## TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE

### FORM AQ-C2-Application

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> /I <sup>2</sup>	Attachment
58.01.01.591 40 CFR 63, Subpart WWWW	<p>BBS is required to comply with the applicable emission limitations, operating limitations and work practice standard of 40 CFR 63, Subpart WWWW.</p> <p>Compliance is demonstrated with the emission limitations (40 CFR 63.5805; 40 CFR 63, Subpart WWWW, Table 3) by calculating monthly and rolling 12-month MACT emissions and comparing the amounts to MACT limits based on chemical mixtures used and submittal of semiannual reports to IDEQ.</p> <p>The compliance certification for monthly and rolling 12-month MACT emissions will be submitted semi-annually.</p> <p>Compliance is demonstrated by keeping records that include the following: the name and identification number for each gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used; the percent by weight of each VOC in each compound; gallons and pounds of gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used per month.</p> <p>The compliance certification for keeping material usage records will be submitted annually.</p> <p>Compliance is demonstrated with the Work Practice Standards by submitting semi-annual reports to IDEQ that include certification of compliance with the work practice standards.</p> <p>The compliance certification for complying with Work Practice Standards will be submitted semi-annually.</p>	NA		C	
40 CFR 63, Subpart WWWW Table 4 (2), (3),(6), (7), (8)	<p>Must not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.</p> <p>MACT Work Practice 1. Chemicals are reviewed at the time of receiving, prior to use, to ensure that HAP containing solvents are not used for cleaning, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.</p> <p>Must keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.</p> <p>MACT Work Practice 2. Containers that store HAP-containing materials remain closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.</p> <p>Must use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.</p> <p>MACT Work Practice 3. Mixer covers are used and will have no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.</p>	NA		C	

**TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE**

**FORM AQ-C2-Application**

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> /I <sup>2</sup>	Attachment
	<p>Must close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.</p> <p>MACT Work Practice 4. Mixer vents are closed when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety.</p> <p>Must keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.</p> <p>MACT Work Practice 5. Mixer covers are closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.</p>				
<p>40 CFR 63, Subpart                      WWWW                      Table 14 (1) (a)</p>	<p>A statement that there were no deviations during the reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply.</p> <p>There were no deviations during the reporting period from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply.</p>	<p>NA</p>		<p>C</p>	

## TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE

### FORM AQ-C2-Application

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> / I <sup>2</sup>	Attachment
40 CFR 63.5910 [c] [4]	<p>If a startup, shutdown, or malfunction occurs during the reporting period a compliance report including the information in §63.10(d)(5)(i) must be submitted.</p> <p>The Report shall summarize actions taken to minimize emissions during such startups, shutdowns, and malfunctions and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. The report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually. <u>Reports are only required if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period.</u></p> <p>In the event a startup, shutdown, or malfunction occurs during the reporting period and actions taken are consistent with the startup, shutdown, and malfunction plan, a Report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate).</p> <p>In the event actions inconsistent with the plan are taken, a Report shall be submitted within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event. The information in the letter shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions.</p>	NA		C	
40 CFR 63.5910 [c][5]	<p>If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.</p> <p>There were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.</p>	NA		C	
40 CFR 63.6(e)(1)(i)	<p>General Conditions. Operation and Maintenance. At all times, including periods of startup, shutdown, and malfunction, Best Bath Systems operates and maintains the permitted sources, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</p>	NA		C	



### TIER I PERMIT APPLICATION COMPLIANCE CERTIFICATION TABLE

#### FORM AQ-C2-Application

1 Permit Condition	2 Compliance Determination Methods	3 Monitoring Frequency  C <sup>1</sup> , I <sup>2</sup> , or N/A <sup>3</sup>	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status  C <sup>1</sup> / I <sup>2</sup>	Attachment
P-2010.0047 Condition 13	<p>The following material use records are required to be maintained:</p> <ul style="list-style-type: none"> <li>the name and identification number for each gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used;</li> <li>the percent by weight of each VOC in each compound;</li> <li>gallons and pounds of gel-coat, resin, adhesive, catalyst, paint, promoter, styrene, and wax used per month.</li> </ul> <p>BBS maintains the required material use records.</p> <p>The compliance certification for maintaining material use and VOC composition records will be submitted annually.</p>	NA		C	

### 8. COMPLIANCE PLANS

For each applicable requirement listed in Section 7 Compliance Certifications, above, BBS will continue to comply with the applicable requirement.

### 9. TRADING SCENARIOS

None proposed.

### 10. INSIGNIFICANT ACTIVITIES BASED ON SIZE OR PRODUCTION RATE

The 11 unit heaters and Make-up Air Unit #2 are each individually less than 5,000,000 Btu/hr. (58.01.01.317[b][5]). Consequently, these units are considered insignificant.

### 11. ACID RAIN PROGRAM REQUIREMENTS

No affected emission units.

### 12. PERMIT SHIELD REQUEST

With this Tier I Operating Permit application BBS requests a permit shield with respect to the Applicable Requirements listed in Section 3 and the Non-Applicable Requirements listed in Section 5.

### 13. CERTIFICATION OF DOCUMENTS

I hereby certify that based upon information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

Jay Multanen  
(printed name)

Secretary  
(title)

[Signature]  
(signature)

11-2-12  
(date)

Operating Permit Application  
Best Bath Systems (BBS), Caldwell, Idaho  
October 26, 2012

APPENDIX A: ODOR MANAGEMENT PLAN



# BEST BATH SYSTEMS INC. (BBS) ODOR MANAGEMENT PLAN

Updated 7-7-2012

1. BBS will maintain negative pressure inside the building during operating hours by keeping doors to the facility closed.
2. BBS will keep all storage containers and vessels closed when not in use with exception of a 1" acceptable gap as specified by IDEQ.
3. BBS will continue using a series of two filters. First, a pre-filter with a collection efficiency rated at no less than 84%, then a secondary filter rated at no less than 72%. During operating hours the exhaust fans will be in operation before spraying takes place.
4. The door to the mixing tank room will be closed while extenders and fillers are being added to the resin matrix.
5. BBS will maintain records of all odor complaints received.
6. BBS will take appropriate corrective action as expeditiously as practicable on all complaints of merit.
7. BBS will maintain records of the assessment of the validity of complaints received.
8. BBS will maintain records of any corrective action taken, and the date the corrective action was taken.
9. BBS will hold annual employee training meetings to maintain our Odor Management Plan

# Best Bath Systems

## IDEQ odor complaint log

Date:

Name:

Preferred Contact Info:

Location, Date and Time of Complaint:

Reason for Complaint Description:

*\*below for Best Bath use only\**

Best Bath Official Assessor:

Styrene levels at location:

Date:

Time:

Level:

Date:

Time:

Level:

Date:

Time:

Level:

Assessment of Merit:

Corrective Actions Taken:

Date Corrective Actions Completed:

Operating Permit Application  
Best Bath Systems (BBS), Caldwell, Idaho  
October 26, 2012

APPENDIX B: OPERATIONS AND MAINTENANCE MANUAL FOR DUST COLLECTION SYSTEM



# **Operations and Maintenance Manual for Dust Collection System:**

## **FILTER CHANGE SCHEDULE**

All pre-filters (bulk fiberglass media or equivalent) will be inspected daily by the production staff or supervisor and changed when 90% obscured. Pre-filters will be inspected, evaluated and recorded weekly by a manager or compliance officer for quality assurance.

All secondary filters (1" Facet-Aire 3 or equivalent) will be inspected daily by the production staff or supervisor and changed when needed or weekly whichever is first. At anytime, a filter that is collapsed or otherwise not functioning properly should be replaced by staff or a supervisor. Secondary filters will be inspected, evaluated and recorded weekly by a manager or compliance officer.

Duct areas and casings behind filters are to be inspected weekly for evidence for non-functionality such as abnormal amounts of collected dust or bent or broken hardware.

All doors to the building are to remain closed unless in use to ensure proper engineered air flow.

# Filter Inspection log

DATE	INSPECTION AREA	SATISFACTORY	UNSATISFACTORY	CORRECTIVE ACTION	INSPECTED BY
7-11-12	Production Area	X			Hugo C
7-11-12	Blue Bottom	X			Hugo C
	Tooling Fabrication	X			Hugo C
7-11-12	Accounting	X			Hugo C
			X	Change filters	
7-16-12	Blue Bottom		X	Change filters	
7-16-12	Accounting Booth	X			Hugo C
7-16-12	Tooling Fabrication	X			Hugo C
7-16-12	Production Area		X		
		X			
			X		
			X		
7-31-12	Production Area	X			
7-31-12	Hydrate P		X		Hugo C
7-31-12	Tooling Fabrication	X			Hugo C
7-31-12	Blue Bottom		X	Replace all filters	
	Account Booth		X	Turn over pre filters	
	Production Area	X			HUGO
<del>8-7-12</del>	<del>Blue Bottom</del>				HUGO
8-7-12	Blue Bottom	X			HUGO
8-7-12	Tooling Fabrication	X			HUGO
8-7-12	Accounting Booth	X			HUGO
8-15-12	Production Area	X			HUGO
8-15-12	Tooling Fab	X			HUGO
8-15-12	Blue Bottom		X	Change backside filters	HUGO
8-15-12	Accounting Booth	X			HUGO
		X			HUGO
		X			HUGO
		X			HUGO
8-21	Accounting Booth		X	Replace back filters	HUGO
<del>8-21</del>	<del>Blue Bottom</del>				
			X		
		X			
			X		
9-5-12	Production Area	X			HUGO
9-5-12	Tooling Fab	X			HUGO
9-5-12	Account Booth	X			HUGO
	Blue Bottom		X	Replace filters	HUGO
9-13	Blue Bottom	X			HUGO
9-13	Account Booth	X			HUGO