# Environmental Compliance Plan

## For

# Kitchen and Bath Center, Inc.

## Ft. Walton Beach, FL

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# Introduction

This plan provides necessary information to demonstrate Owner's commitment to operate this facility in compliance with applicable laws and rules as specified in DEP Operation Permit.

The Plan was developed in accordance with the unique requirements for this facility and provides management and operators with adequate information and description regarding the design, operation and maintenance features of this facility. The Plan includes information concerning process control and performance evaluation for the facility, as well as equipment and procedural descriptions (including any notification/report requirements of appropriate agencies) for emergency operating conditions. Regular maintenance for plant equipment and monitoring procedures are also included.

This Plan includes the following elements:

1. Operator Training: Concerning plant operation, permit and other regulatory requirements.
2. Plant Monitoring: Establishment and use of parameters to monitor plant operation, such as spray booth Dwyer (pressure differential) gauges
3. Recording of materials used in casting operation including calculations of resultant air emissions and rolling twelve month totals for such emissions.
4. Operation and Maintenance Plan: Establishment and use of a plant specific Operation and Maintenance (O & M) Plan.
5. Facility Inspections: Use of periodic facility walk-through inspections by plant staff with specific inspection guidelines, checklists and record keeping.

# Corporate Commitment

Kitchen and Bath Center, Inc. adheres to a company-wide environmental program. This program includes an environmental policy, environmental auditing procedures and employee education and involvement.

# Operator Training

This Plan represents continuing education program for all plant operators concerning plant operation, permit and other regulatory requirements. A copy of the approved Plan will be available to the operators, maintenance personnel, and technicians.

Personnel are trained to operate facility in accordance to CFA training procedures and this Plan. Consequently, new employees will be trained within 90 days after commencement of employment and prior to unsupervised equipment operation.

Environmental education is key to maintaining successful environmental stewardship. Education includes new hire orientation and training sessions. During orientation, new hires are educated about the various permits, permit conditions and monitoring requirements.

The training sessions teach management and operating personnel about air emissions control, waste management, spill prevention, air permits and other environmental topics. These training sessions are intended to teach plant management the environmental issues so they, in turn, teach their employees.

Gelcoat spray gun operators are trained in understanding the effects of transfer efficiency on emissions, of spray gun pressure calibration, and of proper spray gun handling. The gelcoat spray gun operators shall be provided annual refresher training. All training is conducted utilizing Consolidated Fabricators Association recommended training techniques as appropriate to maintain a program of controlled gelcoat spraying. Operators are trained to observe manometer pressure gauge daily before commencing spraying operation. If gauge is not within specified range, spraying should be halted and gauge and filters checked.

# Plant Monitoring

This section establishes the use of parameters to monitor plant operation such as magnehelic pressure differential gauge and gelcoat spray booth manometer. Monitoring also includes recording of materials used on monthly basis and calculation of resulting air emissions. The monitoring will be carried out in the manner as described:

## Gelcoat Spray Booth

The performance parameters include such physical, chemical or electrical characteristics as are applicable to the particular spray booth. Such parameters generally include the following indicators.

Condition of filtering media
Manometer gauge reading
Flow indicators placed on open faces of spray booths which can be gauges developed for that purpose or simple plastic strips hanging atop booth openings

Manometer, which measures negative pressure inside spray booth is a useful parameter to monitor spray booth performance, specifically condition of filtering media. A given spray booth operates with a certain negative pressure maintained inside the booth. Kitchen and Bath Center spray booth manometer normally reads – 0.3 to –0.7 " W.G. When negative pressure drops less than –0.3" W.G., it indicates filters are clogged and need replacing.

Weekly recording of manometer readings on spray booth is conducted by the plant operator, as part of the weekly inspection .

## Finishing Process Baghouses

Finishing process operators are trained to understand the operating parameters of the pollution control devices (baghouses) as follows:

Pressure drop (Delta P) across baghouse
Visible emissions

The pressure drop across the baghouse is a useful parameter to monitor baghouse performance. A given baghouse will operate within a pressure drop range.

A pressure drop much lower than the lower end of the operating range could indicate:

New bags which have not developed filter cake
Bag failure
Baghouse structural failure
Ductwork structural failure

A pressure drop much higher than the upper end of the operating range could indicate:

Plugged bags
Blocked stack
Fan malfunction
Plugged ductwork

Readings on baghouse #1 are 4-6" W.G.

Readings on baghouse #2 are expected to be between 6-7.5" W.G.

Additionally, the permit requires annual visual emission testing using EPA Method 9, to determine compliance with DEP rules.

Weekly records of magnehelic gauge readings on both baghouse are conducted by the plant operator as part of weekly inspection.

**Material Monitoring**

Recording of materials used in casting operation and calculation of resultant air emissions will be conducted as follows:

At the beginning of each month, no later than the 10$^{th}$, calculation of air emissions for previous month are performed assuming that all VOC and HAP(s) contents in such materials become airborne during casting and are released into atmosphere. Filtering media in spray booth eliminates only liquid mists and/or solids, but does not capture any of the gases such as

VOCs or HAPS. Therefore all contents of VOCs and HAPS as published in manufacturer's MSDS (Material Safety Data Sheet) must be accounted for when calculating air emissions. All HAPS are identified by CAS numbers and up to date list is listed on Florida web site www.dep.state.fl.us/air/rules/fac/62-210.pdf under definitions, hazardous air pollutant.

Sample of calculation form is a part of this report. Calculations can also be computer generated.

Summary of calculated VOCs and HAPS are shown on monthly summary form together with calculation of rolling twelve month totals for each pollutant.

Calculated rolling twelve month totals cannot exceed the following (as specified in DEP Operation Permit):

59.4 tons for VOCs
59.4 tons for Total HAPS
57.4 tons for any individual HAP

# Operation and Maintenance Plan

This section establishes a plant specific Operations and Maintenance (O & M) Plan. This element provides reasonable assurance that this facility can be effectively operated and maintained, through reasonable provisions for the operation and maintenance of the facility. Routine maintenance of equipment is performed as needed to assure optimal operation. The facility shall be operated to control objectionable odors in accordance with Rule 62-296.320(2), F.A.C. Fuels, solvents, lubricants and other maintenance materials are stored in approved areas.

This plan includes a schedule for the maintenance and inspection of the spray booth and associated manometer differential gauge. Also schedule for the maintenance and inspection of baghouses and corresponding magnehelic gauges.

The Plan also contains inspection and maintenance schedules including periodic assessments of the condition of filtering media, manometer associated with gelcoat spray booth, magnehelic differential gauges associated with both baghouses, blowers, electric motors, belts and other equipment associated with operation of spray booth and baghouses.

**Startup of spraying operation:**

Before commencing
Check and make sure that all filtering media is in place and in good working order .

Check and make sure that exhaust fan is operating.

Check manometer gauge and make sure it is within operating range.

**Startup of finishing operation**

Before commencing

Check and make sure that exhaust fan is operating

Check magnehelic differential pressure gauge and make sure readings are within operating range.

**Routine maintenance includes**:

MONTHLY

Apply grease to all grease fittings

Adjust all belt tensions

Blow out differential pressure lines associated with magnehelic gauges

ANNUALLY

Shut down the plant's operations each year to conduct preventive maintenance procedures

# Facility Inspections

This element describes the use of periodic facility "walk-through inspections" by plant staff with specific inspection guidelines. The condition of facility will be noted and compared to its condition during the initial survey and during subsequent inspections.

Daily inspections are made by paint booth operator prior to spray booth startup as described in Startup Procedures to make sure paint booth's components are in good working order.

**Routine observations of the pollution control devices are:**

SEMI-ANNUALLY

Inspect integrity of spray booth, filtering media, manometer gauge, exhaust fan and stack

Inspect both baghouses, filtering media, magnehelic gauges, exhaust fans and ductwork.

# Records

Records of inspections, maintenance and performance data of paint booths and auxiliary equipment shall be retained for a minimum of five years and shall be made available to DEP upon request. These records are retained at the plant office.

**Records requirements shall include:**

Weekly Records of spray booth operating parameters

Weekly Records of baghouse(s) operating parameters

Records of spray booth malfunctions or failures and corrective actions taken

Records of baghouse failures and corrective actions taken

Results of yearly compliance tests (visible emissions) required by DEP (for baghouses only)

Monthly records of material(s) usage and calculations of resultant air emissions. Also include rolling twelve month emissions totals.

# Periodic Plan Review

This plan will be reviewed at least annually from date of approval. This review will evaluate the effectiveness of the Plan and will make any changes necessary for the Plan to be continuously administered.

The Environmental Compliance Plan shall be updated as operations change, but no less frequently than upon renewal of permit. DEP shall be notified of changes to this plan other than those required for routine maintenance. The Environmental Compliance Plan shall be revised when operational procedures change, to reflect any facility alterations performed or to reflect experience resulting from facility operation. The Company will periodically review and revise the operating protocol, as appropriate, to ensure satisfactory system performance.

# Abnormal Events

In the event the Company is temporarily unable to comply with any of the conditions of DEP permit due to breakdown of equipment, power outages, destruction by hazard of fire, wind or other cause, the Company will notify DEP. Notification shall be made in person, by telephone, or other means within 24 hours of breakdown or malfunction. The telephone number to call to notify DEP is 850/595-0578. For emergencies involving a significant threat to human health or the environment, the number is 850/320-0519.

A written report of any noncompliance referenced above shall be submitted to the Florida Department of Environmental Protection, 160 W. Government Street, Pensacola, FL 32502-5740, within 30 days after its occurrence. The report shall describe the nature and cause of the breakdown or malfunction, the steps being taken or planned to be taken to correct the problem and prevent its reoccurrence, emergency procedures in use pending correction of the problem and time when the facility will again be operating in accordance with permit conditions.

If an emergency arises or there is any condition, which prevents the continued operation of the emissions control components or results in non-compliance with applicable regulations, the operator will:

Stop operating immediately

Notify Area Superintendent(s), as soon as practically possible, of the time, date and nature of the occurrence and the corrective action(s) taken

Ensure that the emission control components are in good working order before resuming production.

# F o r m s

# Kitchen and Bath Center, Inc.
**Ft. Walton Beach, FL**

## Production Monthly Log
## Including Calculated Emissions

**Month_____ By_____**

**Total VOC's** _____ **tons**

**Individual HAPS – Name or CAS #**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

**Total HAPS (Sum of all HAPS listed above)** _____ **tons**

**Rolling twelve month totals:**

**VOC's** _____ **tons**

**HAPS**
**Name or CAS #**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

_____ _____ **tons**

# Kitchen and Bath Center, Inc.
## Ft. Walton Beach, FL

## Weekly Spray Booth Operation Log

**Date** **Manometer Reading " W.G"**

# Kitchen and Bath Center, Inc.
## Ft. Walton Beach, FL

## Weekly Finishing Baghouse Operation Log

| Date | Magnehelic Gauge Reading " W.G. | |
|---|---|---|
| | Baghouse # 1 | Baghouse #2 |

**Kitchen and Bath Center, Inc.**

# Ft. Walton Beach, FL

**Date: _____** **Page ____ of ____**

| Material Description | Density lb/Gal | Total lb/mo | V O C ‘ s lb/gal | % Wt | lb/mo. | H A P S Name | CAS No. | %wt | lb/mo. |
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