Facility Name: **Jacuzzi Luxury Bath**
City: Valdosta
County: Lowndes
AIRS #: 04-13-185-00104

Application #: TV-814633 and TV-29637
Date Application Received: April 1, 2024
Permit No: 3088-185-0104-V-04-0

| Program | Review Engineers | Review Managers |
|---|---|---|
| **SSPP** | Anna Gray | Wendy Troemel |
| **ISMU** | Emilio Rickicki | Dan McCain |
| **SSCP** | N/A | N/A |
| **Toxics** | Jack Habib | William Fleming |
| **Permitting Program Manager** | | Steve Allison |

## Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

## I. Facility Description

A. Facility Identification

1. Facility Name: Jacuzzi Luxury Bath

   The Facility sent Application No. 29637 on March 11, 2025, for the name change from Jacuzzi Whirlpool Bath to Jacuzzi Luxury Bath.

2. Parent/Holding Company Name: Investindustrial VI L.P.

3. Previous and/or Other Name(s):

   BathCraft, Inc.
   Jacuzzi Luxury Bath

   This building had been previously permitted in 2006 (Permit No. 3088-185-0073-V-03-0) as an addition to Bathcraft, Inc. (AIRS No. 185-00073) and was located across the street from Bathcraft, Inc. The building was proposed to contain a new operating group (Operations Group 2 (OG02)). Operations Group 2 (OG02) changed ownership and separated from Operations Group 1(OG01) in 2008 via permit 3088-185-0104-V-01-0. With this renewal the facility is now called Jacuzzi Whirlpool Bath.

   BathCraft, Inc. only operates Operations Group 1 (OG01) and is a separate facility with a different owner (Jupiter Bathware, Inc.).

4. Facility Location

   512 Highland Drive, Valdosta, Georgia 31601, Lowndes County

5. Attainment, Non-attainment Area Location, or Contributing Area

   The facility is located in an attainment area.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

| Permit Number and/or Off-Permit Change | Date of Issuance/ Effectiveness | Purpose of Issuance |
|---|---|---|
| Permit No. 3088-185-0104-V-03-0 | October 9, 2019 | Title V Renewal |

D. Process Description

1. SIC Codes(s)

3088 – Plastics Plumbing Fixtures

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

This facility manufactures two types of bathtubs/whirlpool bathtubs – an acrylic surface unit and a gel coat surface unit.

3. Overall Facility Process Description

Both acrylic surface and gel coat surface bathtubs are manufactured at the facility. The acrylic unit uses heat to mold an acrylic sheet to the proper shape, while the gel coat unit spray applies a styrene-based gel coat to forms and molds. Styrene based polyester resin, filled with inerts, is then spray applied to the undersides of the units. Whirlpool motors and tubing are installed on approximately 40% of the units. Miscellaneous activities include cutting, trimming and sanding of surface and application of foam and fixtures to the units. The facility will use a conveyor system to transport the tubs through the process. The primary pollutant emitted by the facility is styrene, which is both a volatile organic compound (VOC) and a hazardous air pollutant (HAP) and is emitted during the spray and curing of the styrene-based gel coat and resin. Final product assembly and packaging operations are conducted in the adjacent building.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

Because the VOC emissions are limited to less than 250 tons per year (tpy), the facility will not be subject to any PSD requirements. Moreover, this facility is not one of the 28 named source categories under PSD.

2. Title V Major Source Status by Pollutant

**Table 2: Title V Major Source Status**

| Pollutant | Is the Pollutant Emitted? | If emitted, what is the facility's Title V status for the pollutant? | | |
|---|---|---|---|---|
| | | Major Source Status | Major Source Requesting SM Status | Non-Major Source Status |
| PM | Yes | | | ✓ |
| $PM_{10}$ | Yes | | | ✓ |
| $PM_{2.5}$ | Yes | | | ✓ |
| $SO_2$ | No | | | |
| VOC | Yes | ✓ | | |
| $NO_x$ | No | | | |
| CO | No | | | |
| TRS | No | | | |
| $H_2S$ | No | | | |
| Individual HAP | Yes | ✓ | | |
| Total HAPs | Yes | ✓ | | |
| Total GHGs | Yes | | | ✓ |

3. MACT Standards

Jacuzzi is considered a major source for HAP emissions and is subject to the following MACT standards:

40 CFR 63, Subpart WWWW, *National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production*.

4. Program Applicability (AIRS Program Codes)

| Program Code | Applicable (y/n) |
|---|---|
| Program Code 6 - PSD | No |
| Program Code 8 – Part 61 NESHAP | No |
| Program Code 9 - NSPS | No |
| Program Code M – Part 63 NESHAP | Yes |
| Program Code V – Title V | Yes |

**Regulatory Analysis**

## II. Facility Wide Requirements

A. Emission and Operating Caps:

To avoid PSD requirements, the VOC emissions are limited to 249 tpy. The HAP emission limit of 100 tpy will remain to avoid MACT requirements and is discussed in the next section concerning equipment, which includes open molding and mixing operations.

This facility uses a resin which contains both styrene and vinyl toluene. Compared to an exclusively styrene-based resin, reduced emissions are achieved due to the lower vapor pressure of the vinyl toluene. The emission factors were determined with the assistance of the Division's SSCP using a ratio of the vapor pressures for vinyl toluene and styrene.

A toxic impact assessment (TIA) had previously been performed for Jacuzzi; moreover, this TIA evaluated styrene with an emission rate of 249 tpy. The TIA included all HAP emissions and used the maximum allowable emission rate of 100 tpy for each pollutant modeled.

The facility was modeled as a point source in a rural setting with flat terrain using SCREEN 3. Though there are several stacks at the facility, all of the emissions were modeled as venting from one stack and represented the stack with the worst air dispersion characteristics (e.g. lower height, larger diameter, lower flow rate).

Based on the results of this toxic impact assessment model, the maximum concentrations of all pollutants were below the acceptable ambient pollutant concentrations.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

There are no facility-wide compliance issues noted in these applications.

D. Permit Conditions

Condition 2.1.1 limits the VOC emissions from the entire facility to 249 tpy in order to avoid PSD requirements.

## III. Regulated Equipment Requirements

A. Brief Process Description

The acrylic unit uses heat to mold an acrylic sheet to the proper shape, while the gel coat unit spray applies a styrene-based gel coat to forms and molds. Styrene based polyester resin, filled with inerts, is then spray applied to the undersides of the units. Whirlpool motors and tubing are installed on approximately 40% of the units. Miscellaneous activities include cutting, trimming and sanding of surface and application of foam and fixtures to the units. Final product assembly and packaging operations are conducted in the adjacent building.

B. Equipment List for the Process

| Emission Units | | Applicable Requirements/Standards | Air Pollution Control Devices | |
|---|---|---|---|---|
| ID No. | Description | | ID No. | Description |
| GC01 | Gel Coat | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>40 CFR 63 Subpart WWWW | FGC01 | Filters |
| LM01 | Resin Lamination of Gel Coat Units | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>40 CFR 63 Subpart WWWW | FLM01 | Filters |
| LM02 | Resin Lamination of Acrylic Units | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>40 CFR 63 Subpart WWWW | FLM02 | Filters |
| MR01 | Mold Repair | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>40 CFR 63 Subpart WWWW | N/A | N/A |

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

C. Equipment & Rule Applicability

Emission and Operating Caps:

The open molding and mixing operations are subject to a 100 tpy limit on HAP emissions to avoid add-on control requirements that apply to large/new sources as stated in 40 CFR 63 Subpart WWWW.

A toxic impact assessment was performed for this equipment when the building was initially proposed as an expansion to BathCraft, Inc. The styrene emissions from the new building were modeled separately from the existing building with a VOC emission limit of 249 tpy for each building. SCREEN 3 was used and each building passed both the annual AAC and the 15-minute AAC.

Rules and Regulations Assessment:

The facility is subject to Federal Rule 40 CFR 63 Subpart WWWW - *National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production* which applies to the gel coat operations (GC01), the lamination operations for both gel coat tubs and acrylic tubs (LM01 and LM02), and the mold repair operations (MR01). 40 CFR 63 Subpart WWWW sets forth four different methods for compliance with the standard: demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit; demonstrate that on average the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type is being met; demonstrate compliance with a weighted average emission limit for all open molding operations; or meet the organic HAP emission limit for one application method and use the same resin(s) for all application methods of that resin type.

Georgia State Rule 391-3-1.02(2)(b) – The 40 percent opacity emission limit is applicable to all point sources at the Jacuzzi facility. The facility should routinely comply with the opacity limit due to the use of filters for gel coat and resin emissions.

Georgia State Rule 391-3-1.02(2)(e) – The particulate matter emission limits in Rule (e) are applicable to all facility manufacturing operations.

D. Permit Conditions

There were no changes to the existing conditions unless otherwise stated.

Condition 3.2.1 concerns open molding and mixing operations. This condition limits the HAP emissions from the open molding and mixing operations to 100 tpy in order to avoid add-on control requirements for large/new sources required by 40 CFR 63 Subpart WWWW.

Condition 3.3.1 requires compliance with 40 CFR 63 Subpart A and Subpart WWWW.

Condition 3.3.2 lists operations which may occur at the facility that will not be regulated under 40 CFR 63 Subpart WWWW.

Condition 3.3.3 lists the 12-month rolling average organic HAP emission limits for each open molding operation type.

Condition 3.3.4 lists the work practice standards the facility must comply with regarding new or existing cleaning operations, organic HAP-containing material storage operations, and all mixing operations.

Condition 3.4.1 subjects the facility to Georgia Rule (b).

Condition 3.4.2 subjects the facility to Georgia Rule (e).

Condition 3.5.1 was modified on this TV renewal to include the comments from the compliance engineers. This condition from last permit 3088-185-0104-V-03-0, referred the Permittee to change the filters for the spray booths of the gel coat and resin operations (Emission Unit IDs. GC01, LM01, and LM02) within 24 hours of whenever the static pressure drops across the filter systems falls outside the manufacturer's recommended value. Pressure drops do not vary much at all based on the records and there is not manufacturer's recommended value, so it is more appropriate for this facility to change the filters every other day of operation or any time there is observation buildup.

## IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Not applicable.

## V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

There were no changes to the existing conditions unless otherwise stated.

Condition 5.2.1 requires the facility to conduct weekly inspections to verify that all containers that contain any HAPs or VOCs are covered during periods of non-use. The facility is also required to document the date and time of these inspections.

Condition 5.2.2 requires pressure drop monitors for the filters and daily records of the pressure drop.

C. Compliance Assurance Monitoring (CAM)

The potential pre-controlled PM emissions from each individual booth do not exceed major limits of 100 tpy; therefore, CAM is not applicable.

## VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

There were no changes to the existing conditions unless otherwise stated.

Condition 6.2.1 requires the facility to maintain usage records for all VOC-containing materials.

Conditions 6.2.2 and 6.2.3 require the facility to calculate monthly VOC emissions and 12-month rolling total VOC emissions from the entire facility and to notify the Division if monthly VOC emissions equal or exceed 20.75 tons or if the 12-month rolling total VOC emissions equal or exceed 249 tons during any twelve consecutive month period.

<u>40 CFR 63 Subpart WWWW Requirements</u>

Conditions 6.2.4 through 6.2.14 detail HAP requirements as defined in 40 CFR 63 Subpart WWWW.

Condition 6.2.4 sets forth the information sources and methods to be used to determine the organic HAP content of the gel coats and resins used at the facility.

Condition 6.2.5 provides four different methods by which the facility can meet the open molding operations standards in Condition 3.3.3. Because the facility does not use any control devices, the language does not include any options for the use of control devices.

Condition 6.2.6 requires the facility to comply with Condition 3.3.3 by maintaining, on a 12-month rolling average, an organic HAP emission factor less than or equal to the appropriate organic HAP emission limit or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emission limits.

Condition 6.2.7 requires the facility to comply with Condition 6.2.5(d), if applicable, by maintaining, on a 12-month rolling average, an organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 6.2.5-2, or by including in each compliance report a statement that resins and gel coats individually meet the appropriate organic HAP content limits.

Condition 6.2.8 requires the facility to comply with the work practice standards listed in Condition 3.3.4.

Condition 6.2.9 requires the collection of records of resin and gel coat usage, organic HAP content, and type of operation in which each resin and gel coat is used when complying with the organic HAP emission limits listed in Table 3.3.3-1, or when complying with the organic HAP content limits in Table 6.2.5-2 by averaging organic HAP contents.

Condition 6.2.10 states that if individual resins and gel coats comply with the organic HAP emission limits in Table 3.3.3-1, then no usage records must be kept, but records of resin and gel coat organic HAP content must be retained and a list of these resins and gel coats and their application methods must be included in each compliance report. If a resin or gel coat changes or the organic HAP content increases, or the application method or controls change, then compliance with the emission limits will have to be demonstrated again, and if any of those changes result in a resin or gel coat exceeding its emission limit then resin and gel coat usage records will have to be collected and compliance will have to be calculated using an averaging option with a 12-month rolling average, such as the options in 6.2.5(b), (c), or (d)(ii).

Condition 6.2.11 requires the facility to maintain HAP usage records and to use the records to calculate the twelve-month rolling totals of HAP emissions from the open molding and mixing operations. The facility is required to notify the Division if monthly HAP emissions exceed 8.3 tons during any month or 100 tons during any twelve consecutive months.

Conditions 6.2.12 and 6.2.13 detail the requirements for an exemption for exceeding the HAP emission limit and how the facility will demonstrate future compliance.

Condition 6.2.14 lists the notifications and reports that must be submitted to the Division in the semiannual report

Condition 6.2.15 requires the facility to maintain copies of each notification and report submitted to the Division, copies of all records pertaining to the calculation of organic HAP emissions, and a statement certifying compliance with the work practice standards in Condition 3.3.4.

Condition 6.2.16 requires the facility to maintain 40 CFR 63 Subpart WWWW compliance records for 5 years. This condition also requires that these records are kept onsite for at least 2 years and stored in one of the specified formats.

<u>Other Record Keeping and Reporting Requirements</u>

Condition 6.2.17 requires the facility to maintain a log of the pressure drops and any filter changes.

## VII. Specific Requirements

A. Operational Flexibility

- None applicable.

B. Alternative Requirements

- indicate any new alternative requirements requested by the facility under Rule 391-3-1-.03(10)(d)8 to combine multiple overlapping of state and federal requirements

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

- None applicable.

E. Short-Term Activities

- None applicable.

F. Compliance Schedule/Progress Reports

- None applicable.

G. Emissions Trading

- None applicable.

H. Acid Rain Requirements

- None applicable.

I. Stratospheric Ozone Protection Requirements

- None applicable.

J. Pollution Prevention

- None applicable.

K. Specific Conditions

- There are no additional facility-specific conditions that are not covered elsewhere.

## VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

**Addendum to Narrative**

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//