

**FOUNDATION BUILDING MATERIALS, LLC - CASA GRANDE**

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## 1. Introduction

This permit pertains to a polystyrene foam products manufacturer, operated by Foundation Building Materials, LLC. The SIC Code is 3086 (Plastic Foam Products). The facility, also known as Prowall Building Materials is located at 1092 North Jefferson Avenue, in Casa Grande, Arizona upon a parcel also identified by Pinal County Assessor's Parcel #503-83-018J1. The source is situated in an area classified as attainment for volatile organic compounds.

The source includes equipment for expanding polystyrene pellets into foam products and a natural gas fired boiler. A complete list of the equipment from which emissions are allowed by this permit is given in Section 11 of this permit.

The production line consists of a bead pre-expander, an aging area, 2 block molding machines, a curing area, and cutters for cutting the foam blocks to shape. Expandable Polystyrene (EPS) resin beads, formulated to contain a small percentage of pentane gas, are received in bags and a pre-measured amount is introduced into a pre-expander with a capacity of 2000 lbs/hour. Steam causes the pentane to be released from the beads and the beads expand until an indicator shows that the desired density has been reached. Beads are then released into a bed dryer to remove all remaining moisture. Once dried, the beads are stored in nylon bags for aging. The aging process can take between 5 hours and 48 hours, depending on the desired density of the bead. The aged beads are transferred into a hopper directly on top of the mold, and a measured quantity is dropped into the mold cavity. A vacuum system evacuates the air from the cavity, and steam is added. The heat from the steam, and the pressure increase cause the beads to further expand, and since they are in a confined environment, the beads fill all voids fusing together into a solid block. The blocks are stored in the warehouse for curing at room temperature or with heat to accelerate the process. After curing, the blocks are cut with thermal hot wires to the desired dimensions.

The major emissions from this facility are pentane, a volatile organic compound (VOC), and some nitrogen oxides (NOx) from the steam boiler.

### Permitting History

This facility was initially permitted in 2002, with permit B30735.000, which restricted VOC emissions to 80 tons per year by limiting the amount of EPS beads the permittee could use per month and limiting the pentane content of the beads to 6%.

In May of 2006, having exceeded the 80 ton limit, the monthly use limitations, and the "major source" threshold of 100 tons per year in 2005, Prowall applied for a major source permit under CAA Title V. This permit also authorized the installation of a new mold. This new mold did not increase capacity at the plant, since the pre-expander capacity is still a bottleneck.

Revision V20631.R01, issued in February of 2007, allowed the allowable maximum pentane content of the polystyrene pellets to increase from 5.1% to 6%. While there was a potential emissions increase of 79 tons per year if allowed 6% content, the permit's limits prevented any actual increases. To maintain emissions below their allowable of 240 tons, permittee had to reduce the amount of beads used per month in accordance with Section §5.B.2 of this permit.

Revision V20651.R01, allowed the maximum pentane content of the polystyrene pellets to increase from 6% to 6.4%. Prowall has been experiencing difficulties with US suppliers manufacturing beads with a 6% content. Typical productions have been 6.1-6.2%, but sometimes it goes as high as 6.4%. While Prowall will continue to purchase beads from their oversea suppliers, which can produce a bead with 6% and under contents, product availability from those suppliers is not consistent. There is a potential increase in VOC emissions in the form of pentane, but the permit's limits prevent any actual increases. Permittee will have to reduce their bead use per month to maintain their emissions below the 240 tons per year VOC cap.

Revision V20651.R02 authorizes the installation of a 10,460,937 btu per hour boiler and an automatic pressurized pre-expander. This pre-expander will replace the existing pre-expander. Although the new pre-expander has the ability to process more beads but the Permittee wants to stay below the 240 ton per year PSD threshold for VOCs and therefore is no change in the product throughput limitation. Since the

boiler has a maximum design heat input capacity of 10 mm btu/hour and was manufactured in 1997, it is subject to the Standards of Performance for Small Industrial - Commercial Institution Steam Generating Units, Subpart Dc.

The Technical Support Document (TSD) for this permit provides additional information on this facility's operation, history and emissions.

## 2. Listing of (*Federally Enforceable*) Applicable Requirements

- A. Those specific provisions of the Pinal-Gila Counties Air Quality Control District (PGAQCD) Regulations, as adopted by the Pinal County Board of Supervisors on March 31, 1975, and approved by the Administrator as elements of the Arizona State Implementation Plan (SIP) at 43 FR 50531, 50532 (11/15/78), and specifically the following rules:

7-3-1.1	Emission Standards - Particulates - Visible Emissions - General
7-3-1.2	Emission Standards - Particulate Emissions - Fugitive Dust
7-3-1.7	Particulate Emissions - Fuel Burning Equipment
7-3-5.1	NOx Emissions - Fuel Burning Equipment

- B. Those specific provisions of the Pinal-Gila Counties Air Quality Control District Regulations, as last amended by the Pinal County Board of Supervisors on June 16, 1980, and approved by the Administrator as elements of the Arizona SIP at 47 FR 15579 (4/12/82), specifically the following rules:

7-3-1.1	Visible Emissions; General
7-3-1.7	Fuel Burning Equipment

- C. 40 CFR Part 61, Subpart M. National Emissions Standard for Asbestos
- D. The New Source Performance Standard ("NSPS") for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc.
- E. CAA §608 (11/15/90); 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction (9/7/95); regulations pertaining to use and handling of ozone-depleting substances.
- F. Those specific provisions of the PCAQCD Regulations, as last amended by the Pinal County Board of Supervisors on April 27, 2004, and approved by the Administrator as elements of the Arizona SIP at 75 FR 17307 (4/6/10), specifically, the following rule:

§4-2-040	Standards (Fugitive Dust Reasonable Precautions)
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## 3. Compliance Certification

- A. Compliance Plan [40 CFR §70.(5)(c)(8)](Code §3-1-083A.7)

Insofar as the Permittee is currently in compliance, the compliance plan consists of continued adherence to the requirements of this permit and those requirements set forth in applicable regulations and statutes.

- B. Compliance Schedule [40 CFR §§ 70.5(c)(8), 70.6(c)(3)](Code §3-1-083A.7)

Insofar as the Permittee is currently in compliance, no compliance schedule to attain compliance is required.

## 4. Authority to Construct [*Federally Enforceable pursuant to Code §§3-1-010, 3-1-040*]

- A. Equipment Authorized Under Authority to Construct Provided by Prior Permit Transactions (Code §3-1-081)

This permit acknowledges that authority to construct the equipment numbered 1 through 9 in "Equipment Schedule" section of this permit was provided under permits B30735 issued on April 4, 2002 and V20631.000 issued on October 13, 2006. The subsequent provisions of this permit include the relevant continuing applicable requirements.

**5. PSD Synthetic Minor Limitations - VOCs** [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*] (Code §3-1-081.A)

A. Emission Cap

Permittee shall limit emissions, in any consecutive twelve-month period, such that emissions of VOCs do not exceed 240 tons.

B. Product Throughput Limitations

To stay within the preceding emission cap for VOC emissions, and thereby also avoid classification, and regulation, as a major source within the meaning of Code §3-3-203, Permittee shall:

1. Use EPS beads which contain a blowing agent which is not a regulated pollutant or those which contain no more than 6.4% pentane by weight.
2. Limit the monthly use of input EPS beads in the manufacturing process, to:

$$Q = 20/P$$

Where:

Q is the tons of beads in each bead-lot used in a month, and

P is the pentane content in percent denoted in decimal format of each bead-lot as determined in §7.A.1.

*These operational limitations will limit the potential emissions of VOCs to approximately 240 tons per year.*

C. VOC Containment and Identification

Permittee shall store raw EPS beads in closed, leak-free, labeled containers when not in use.

**6. Emission Standards, Limitations and Controls** [*Mandated by 40 CFR §70.6(a)(1)*] (Code §3-1-081.A.2)

A. Standard for Sulfur Dioxide (SO<sub>2</sub>) [40 CFR Part 60, Subpart Dc, §60.42c.(h).(4)]

1. For affected facilities, compliance with the emission limits or sulfur limits, may be determined based on the certification from the fuel supplier as required under Section §7.B.1 of this permit
2. The SO<sub>2</sub> emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown and malfunction.

B. Applicable Limitations [*Federally enforceable pursuant to PCAQCD Code § 3-1-082 (11/3/93) approved as SIP Elements at 65 FR 79742 (12/20/00)*]

Where different standards or limitations apply under this permit, the most stringent combination shall prevail and be enforceable.

- C. Allowable Emissions [*Federally enforceable pursuant to PCAQCD Code § 3-1-040 (10/12/95) approved as SIP Elements at 65 FR 79742 (12/20/00)*]
1. General Limitation [*Code § 3-1-081.A.2. (as amended 10/12/95)*]  
 Permittee is authorized to discharge or cause to discharge into the atmosphere those emissions of air contaminants as set forth below. Unless exempted under Code §3-1-040.C., or authorized by a separate permit, by this permit or by a revision or operational change allowed under Chapter 3, Article 2 of the Code, Permittee shall not commence construction of, operate or make any modification to this source in a manner which will cause emissions of any regulated air pollutant in excess of the de minimis amount.
  2. Insignificant Activities (*Code §§1-3-140.74a, 3-1-040.B.2.a.i, 3-1-050*)  
 Apart from the authority of this permit, Permittee is authorized to discharge or cause to discharge into the atmosphere emissions from insignificant activities, as defined in Code §1-3-140.74a.
- D. Particulate Emissions - Fuel Burning Equipment [*Federally Enforceable pursuant to PGAQCD Reg. 7-3-1.7 (3/31/75) approved as a SIP element at 43 FR 50531 (11/15/78)*](§5-21-930)  
 Permittee shall not cause, allow or permit the emissions of particulate matter, caused by combustion of fuel, to exceed:  

$$E = 1.02Q^{0.769} \quad \text{where,}$$
 E = maximum allowable particulate matter emissions rate in pounds per hour.  
 Q = total heat input of all operating fuel-burning units on a plant or premises in MMBtu/hr.
- E. Fuel Use Limitations (§3-1-081)
1. Primary Fuel  
 Permittee is allowed to burn only natural gas in the boilers.
  2. Other Fuels (§§3-1-081.G, 5-23-1010.F)  
 Permittee shall not use used oil, used oil fuel, hazardous waste and hazardous waste fuel without first obtaining a separate permit or a permit revision.
- F. Particulate Emissions – Opacity Limits
1. SIP Limitation - [*Federally enforceable pursuant to PGAQCD Reg. 7-3-1.1 (6/16/80) approved as a SIP Element at 47 FR 15579 (4/12/82)*]  
 The opacity of any plume or effluent shall not be greater than 40 percent as determined by reference method 9 in the Arizona Testing Manual.
  2. Visibility Limiting Standard [*Federally enforceable pursuant to Code §2-8-300 (5/18/05) approved as a SIP element at 71 FR 15043 (3/27/06)*]  
 The opacity of any plume or effluent from any point source not subject to a New Source Performance Standard adopted under Chapter 6 of the Code, and not subject to an opacity standard in Chapter 5 of the Code, shall not be greater than 20% as determined in Method 9 in 40 CFR 60, Appendix A.
- G. Particulate Matter Reasonable Precautions [*Currently federally enforceable pursuant to Code §4-2-040 (6/29/93) approved as a SIP element at 72 FR 41896 (8/1/07)*]

1. Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
  2. Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
  3. Permittee shall not disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
  4. Permittee shall not crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
  5. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such a manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne. Other reasonable precautions shall be taken, as necessary, to effectively prevent fugitive dust from becoming airborne.
  6. Permittee shall not cause, suffer, allow or permit transportation of materials likely to give rise to fugitive dust without taking reasonable precautions to prevent fugitive dust from becoming airborne. Earth and other material that is tracked out or transported by trucking and earth moving equipment on paved streets shall be removed by the party or person responsible for such deposits.
  7. Permittee shall not cause, suffer, allow or permit the use, repair, construction or reconstruction of any road or alley without taking every reasonable precaution to effectively prevent fugitive dust from becoming airborne.
- H. **Surface Stabilization [*Federally enforceable pursuant to Code §4-1-030 (10/28/15) approved as a SIP element at 82 FR 20267 (5/1/17)*]**
1. Permittee shall not cause or allow visible fugitive dust emissions from open areas / vacant lots (areas not being utilized for an activity) to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
  2. Permittee shall erect barriers or no trespassing signs upon evidence of trespass on open areas / vacant lots.
  3. Permittee shall stabilize any open area / vacant lot greater than 1.0 acre that has 0.5 acre or more of disturbed surface and sign up for the Pinal County Dust Control forecast within 30 days of discovery. The open area / vacant lot shall be stabilized the day leading up to and the day that is forecast to be high risk for dust emissions.
  4. Permittee shall not remove vegetation from open areas/vacant lots without applying dust suppressants before and during the weed abatement. Trackout onto paved surfaces must be prevented or eliminated and dust suppressants must be applied following weed abatement to stabilize the entire surface.
  5. Stabilization of open areas / vacant lots is determined by the drop ball, threshold friction velocity, flat vegetation or standing vegetation methods listed in PCAQCD Code 4-9-320.

6. Permittee shall not cause or allow visible fugitive dust emissions from unpaved lots (areas being utilized for an activity) greater than 5000 square feet to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
7. Permittee shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup> or allow the silt content to exceed 8% on unpaved lots greater than 5000 square feet.
8. Permittee shall stabilize unpaved lots greater than 5000 square feet by paving, applying a dust suppressant or graveling.
9. Permittee shall clean up trackout on a paved public roadway that exceeds 50 feet within 24 hours of discovery and limit opacity to 20% or less while using a rotary brush or broom.
10. Permittee shall make a record of the control measures applied.

I. **General Maintenance Obligation** [*Federally Enforceable Provision pursuant to code §3-1-081.E (9/5/01) approved as a SIP element at 66 FR 63166 (12/5/01)*]

At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the permitted facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

J. **Additional Applicable Limitations**

1. **Asbestos NESHAP Compliance** [*40 CFR Part 61, Subpart M*] (Code §§7-1-030.A.8, 7-1-060)  
  
Permittee shall comply with Code §§7-1-030.A.8 and 7-1-060 and 40 CFR Part 61, Subpart M, when conducting any renovation or demolition activities at the facility.
2. **Stratospheric Ozone and Climate Protection** [*40 CFR Part 82 Subpart F*] (Code §§1-3-140.15, 1-3-140.58.k)  
  
The permittee shall comply with the applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

**7. Compliance Demonstration**

A. **Regular Emissions Monitoring** (§3-1-081)

1. **Non-instrumental Emissions Monitoring - VOC Records** [*Code §3-1-084(8/11/94)*]

Each day that raw EPS material is expanded at the facility, Permittee shall:

a. **Pentane/VOC content:**

Prior to expanding, obtain and retain an original or copy of the Manufacturer-Certified Bead-Lot VOC-content for each separate lot-number/identifier of beads received. The certified document shall contain all of the following:

- i. The VOC content printed or written by the manufacturer, after the manufacturer has had the bead-lot tested to determine the lot's percent VOC, before shipping from the manufacturer,
- ii. The manufacturer's name and bead-lot identifier, and
- iii. A signature of an officer or an officer's designee at the manufacturer's facility.

For purposes of calculating emissions, if the certified VOC-content is given in a range, the highest content will be used.

b. Lots Expanded:

Record the amount of each lot of beads expanded and its corresponding lot number/identifier.

c. Blocks:

For each day that blocks are made, record the approximate weight of new blocks molded.

2. Non-instrumental Emissions Monitoring - VOC Limitations [*Code §3-1-084(8/11/94)*]

a. Each day that a bead-lot is expanded, Permittee shall use the formula in §5.B to forecast the amount of beads that may be expanded for the remainder of the month.

b. Within 10 days of the beginning of each month, using the bead-lot records maintained for the previous month, Permittee shall perform the calculation of §5.B of this permit to demonstrate that the throughput limitation has not been exceeded.

3. Non-instrumental Emissions Monitoring - VOC Calculations [*Code §3-1-084(8/11/94)*]

Within 10 days of the beginning of each month, Permittee shall add up the previous month's bead use and calculate the monthly and rolling 12- month total VOC emission.

In order to prevent VOC emissions greater than the emission cap, if the monthly calculations show that VOC emissions are at 200 tons or more, Permittee shall begin calculating emissions on a weekly basis until they are brought down to below 200 tons. VOC emissions shall be calculated using the following formula:

$$\text{VOC (tons)} = \sum[\text{lot of beads (tons)} \times \text{lot pentane}^1 \% \text{ (by weight)}]$$

4. Non-instrumental Emissions Monitoring - NOx (Code §3-1-083)

Permittee shall maintain records of the natural gas purchased for the two boilers.

B. Reporting and Recordkeeping Requirements [40 CFR part 60, Subpart Dc, §§60.48c.(f).(4), 60.48c.(g).(2)]

1. Fuel supplier certification shall include the following information:

- a. The name of the supplier of the fuel;
- b. The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and
- c. The method used to determine the potential sulfur emission rate of the fuel.

2. The owner or operator of each affected facility that combusts only natural gas, uses fuel certification to demonstrate compliance with SO<sub>2</sub> standard and uses fuel that is not subject to an emission standard (excluding opacity) shall record and maintain records of

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<sup>1</sup>As determined in §7.A.1

the amount of each fuel combusted during each calendar month.

C. General Recordkeeping

1. Permittee shall maintain at the source, a file of all measurements, including monitoring-system-, monitoring-device-, and performance- testing measurements; all monitoring system performance evaluations; all monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required pursuant to any federally enforceable provision of this permit, recorded in a permanent form suitable for inspection.
2. Permittee shall keep records of the pentane content of each separate lot received as certified by a manufacturer.
3. Permittee shall keep all data and calculations used to determine VOC emissions.
4. Permittee shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of the permitted facility or any air pollution control equipment.
5. All information required pursuant to any federally enforceable provision of this permit, recorded in a permanent form suitable for inspection.

D. General Compliance Reporting (Code §3-1-083.A)

In order to demonstrate compliance with the provisions of this permit, the Permittee shall submit a semi-annual report containing a summary of the information required to be recorded pursuant to this permit, which summary shall clearly show that Permittee has complied with the operational and emissions limitations under this permit. All instances of deviations from permit requirements shall be clearly identified in such reports. For brevity, such deviation reports may incorporate by reference any written supplemental upset reports filed by Permittee during the reporting period. The report shall be submitted to the District within 30 days after the end of each calendar half. Appendix A is a form which may be used for this report.

E. Annual Regular Compliance/Compliance Progress Certification [*Mandated by 40 CFR §§70.5(c)(8), 70.5(c)(9), 70.6(c)(4), 70.6(c)(5)*]

Permittee shall annually submit a certification of compliance with the provisions of this permit to the Control Officer.

1. Be signed by a responsible official, namely the president, secretary, treasurer or vice-president of the corporation, the director of fossil generation, the plant manager, or such other person as may be approved by the Control Officer as an administrative amendment to this permit;
2. Identify each term or condition of the permit that is the basis of the certification;
3. Verify the compliance status with respect to each such term or condition;
4. Verify whether compliance with respect to each such term or condition has been continuous or intermittent;
5. Identify the permit provision, or other compliance mechanism upon which the certification is based; and
6. Be postmarked within thirty (30) days of the start of each calendar year.

**8. Other Reporting Obligation**

A. Deviations from Permit Requirements (Code §3-1-081.A.5.b.)

Permittee shall report any deviation from the requirements of this permit along with the probable cause for such deviation, and any corrective actions or preventative measures taken to the District within ten days of the earlier of date the Permittee learned, or should have learned, of the deviation unless earlier notification is required by the provisions of this permit.

B. Annual Emissions Inventory (Code §3-1-103)

Permittee shall complete and submit to the district an annual emissions inventory, disclosing actual emissions for the preceding calendar year. The submittal shall be made on a form provided by the District. The inventory is due by the latter of March 31, or ninety (90) days after the form is furnished by the District.

**9. Fee Payment**

As an essential obligation under this permit, permit fee shall be assessed by the District and paid by Permittee in accord with the provisions of Code Chapter 3, Article 7, as they may exist at the time the fee is due. The permit fee shall be due annually on or before the anniversary date of the issuance of an individual permit, or formal grant of approval to operate under a general permit, or at such other time as may be designated now or hereafter by rule. The District will notify the Permittee of the amount to be due, as well as the specific date on which the fee is due.

**10. General Conditions**

A. Term [*Mandated by 40 CFR §70.6(a)(2)*] (Code §3-1-089)

This permit shall have a term of five (5) years, measured from the date of issuance.

B. Basic Obligation [*Mandated by 40 CFR §§70.4(b)(15), 70.6(a)(6(i), 70.6(a)(6)(ii), 70.7.b)*] (Code §3-1-081.)

1. The owner or operator ("Permittee") of the facilities shall operate them in compliance with all conditions of this permit, the Pinal County Air Quality Control District ("the District") Code of Regulations ("Code"), and consistent with all State and Federal laws, statutes, and codes relating to air quality that apply to these facilities. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application and may additionally constitute a violation of the Clean Air Act (1990).
2. All equipment, facilities, and systems used to achieve compliance with the terms and conditions of this permit shall at all times be maintained and operated in good working order.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

C. Duty to Supplement Application [*Mandated by 40 CFR §§70.5(b), 70.6(a)(6)(v)*] (Code §3-1-081.A.8.e.)

Even after the issuance of this permit, a Permittee, who as an applicant who failed to include all relevant facts, or who submitted incorrect information in an application, shall, upon becoming aware of such failure or incorrect submittal, promptly submit a supplement to the application, correcting such failure or incorrect submittal. In addition, Permittee shall furnish to the District within thirty days any information that the Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit and/or the Code.

D. Right to Enter [*Mandated by 40 CFR §70.6(c)(2)*] (Code §§ 3-1-083.A.6, 3-1-132)

Authorized representatives of the District shall, upon presentation of proper credentials, be allowed:

1. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit;
2. To inspect any equipment, operation, or method required in this permit;
3. To sample emissions from the source.
4. To have access to and copy, at reasonable times, any records that are required to be kept under the terms of this permit; and
5. To record any inspection by use of written, electronic, magnetic and photographic media.

E. Transfer of Ownership (Code §3-1-090)

This permit may be transferred from one person to another by notifying the District at least 30 days in advance of the transfer. The notice shall contain all the information and items required by Code § 3-1-090. The transfer may take place if not denied by the District within 10 days of the receipt of the transfer notification.

F. Posting of Permit (Code §3-1-100)

Permittee shall firmly affix the permit, an approved facsimile of the permit, or other approved identification bearing the permit number, upon such building, structure, facility or installation for which the permit was issued. In the event that such building, structure, facility or installation is so constructed or operated that the permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.

G. Permit Revocation for a Cause [*Mandated by 40 CFR §70.6(a)(6)(iii)*] (Code §3-1-140)

The Director of the District ("Director") may issue a notice of intent to revoke this permit for cause pursuant to Code §3-1-140, which cause shall include occurrence of any of the following:

1. The Director has reasonable cause to believe that the permit was obtained by fraud or material misrepresentation;
2. Permittee failed to disclose a material fact required by the permit application form or a regulation applicable to the permit;
3. The terms and conditions of the permit have been or are being violated.

H. Certification of Truth, Accuracy, and Completeness (Code § 3-1-175.)

Any application form, report, or compliance certification submitted pursuant to the Code shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 3 of the Code shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

I. Renewal of Permit (Code §3-1-089)

Expiration of this permit will terminate the facility's right to operate unless either a timely application for renewal has been submitted in accordance with §§3-1-050, 3-1-055 and 3-1-060, or a substitute application for a general permit under §3-5-490. For Class I permit renewals, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of the permit expiration. For Class II or Class III permit renewals, a timely

application is one that is submitted at least 3 months, but not greater than 12 months prior to the date of permit expiration.

J. Severability [*Mandated by 40 CFR §70.6(a)(5)*] (Code §3-1-081.A.7)

Pursuant to Code § 3-1-081.A.7., the provisions of this permit are severable, and if any provision of this permit is held invalid the remainder of this permit shall not be affected thereby.

K. Permit Shield [*Mandated by 40 CFR §70.6(f)*] (Code § 3-1-102.)

1. Compliance with the terms of this permit shall be deemed compliance with any applicable requirement identified in this permit.
2. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

L. Permit Revisions [*Mandated by 40 CFR §70.7(d), 70.7(e)*] (Code Chapter 3, Article 2, specifically Code §3-1-081.A.8.c)

1. This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
2. The permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
3. Permit amendments, permit revisions, and changes made without a permit revision shall conform to the requirements in Article 2, Chapter 3, of the Code.
4. Should this source become subject to a standard promulgated by the Administrator pursuant to CAA §112(d), then Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard. (Code §3-1-050.C.5)
5. Revision to Permit Provisions Designated as Federally Enforceable Pursuant to Code §3-1-084 [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*]

As an express condition of preserving the federal enforceability of any provision of this permit designated "federally enforceable" pursuant to Code §3-1-084, Permittee shall not make any facility allowed change that would contravene such provision, until thirty (30) days after the Permittee has previously furnished notice of the proposed change to the District and to the Administrator, to thereby allow the Administrator opportunity to comment upon the continued "federal enforceability" of the subject provision after the proposed change.

M. Permit Re-opening [*Mandated by 40 CFR §§70.6(a)(6)(iii), 70.7(f), 70.7(g)*] (Code §3-1-087.)

1. This permit shall be reopened if:
  - a. Additional applicable requirements under the Clean Air Act (1990) become applicable to this source, and on that date, this permit has a remaining term of three or more years. Provided, that no such reopening under this subparagraph is required if the effective date of the newly applicable requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Code §3-1-089.C.

- b. The Control Officer determines that it contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of it;
  - c. The Control Officer determines that it needs to be revised or revoked to assure compliance with the applicable requirements; or
  - d. The EPA Administrator finds that cause exists to terminate, modify, or revoke and reissue this permit.
2. If this permit must be reopened or revised, the District will notify the permittee in accord with Code §3-1-087.A.3.
- N. Record Retention *[Mandated by 40 CFR §70.6(a)(3)(ii)(B)]* (Code §3-1-083.A.2.b)
- Permittee shall retain for a period of five (5) years all documents required under this permit, including reports, monitoring data, support information, calibration and maintenance records, and all original recordings or physical records of required continuous monitoring instrumentation.
- O. Scope of License Conferred *Mandated by 40 CFR §70.6(a)(6)(iv)]* (Code §3-1-081.A.8.d)
- This permit does not convey any property rights of any sort, or any exclusive privilege.
- P. Excess Emission Report; Emergency Provisions *[Mandated by 40 CFR §70.6(g)]* (Code §3-1-081.E, Code §8-1-030)
- 1. To the extent Permittee may wish to offer a showing in mitigation of any potential penalty, underlying upset events resulting in excess emissions shall reported as follows:
    - a. The permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. Such report shall be in two parts:
      - i. Notifications by telephone or facsimile within 24 hours or the next business day, whichever is later, of the time when the owner or operator first learned of the occurrence of excess emissions, including all available information required under subparagraph b. below.
      - ii. Detailed written notification within 3 working days of the initial occurrence containing the information required under subparagraph b. below.
    - b. The excess emissions report shall contain the following information:
      - i. The identity of each stack or other emission point where the excess emissions occurred.
      - ii. The magnitude of the excess emissions expressed in the units of the applicable limitation.
      - iii. The time and duration or expected duration of the excess emissions.
      - iv. The identity of the equipment from which the excess emissions occurred.
      - v. The nature and cause of such emissions.

- vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
  - vii. The steps that were or are being taken to limit the excess emissions. To the extent this permit defines procedures governing operations during periods of start-up or malfunction, the report shall contain a list of steps taken to comply with this permit.
  - viii. To the extent excess emissions are continuous or recurring, the initial notification shall include an estimate of the time the excess emissions will continue. Continued excess emissions beyond the estimated date will require an additional notification.
2. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  3. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of the following subparagraph are met.
  4. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
    - b. The permitted facility was at the time being properly operated;
    - c. During the period of emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
    - d. The permittee submitted notice of the emergency to the Control Officer by certified mail or hand delivery within 2 working days of the time when emissions limitations were exceeded due to emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

## 11. Facility Specific Data

- A. Equipment
  1. Boiler, natural gas fired, 200 hp
  2. Dixon Boiler, Model #DBSH-250-GD2, Serial #1381, natural gas fired, 10,460,937 btu/hr.
  3. Vacuum mold, 16' Sunghoon Engineering, Model SHB 4316 VS
  4. Hirsch pre-expander and bed dryer, Model Pre-X14000-P-DC-M
  5. (2) - 2' Tongue & Groove machines
  6. 4' Tongue & Groove machine

7. (2) - 16' downcutters
8. (2) - 16' Single belt slicers
9. (2) - XY Corporation Shape cutting machines
10. Vacuum mold, 24' Sunghoon Engineering, Model SHB-4325-VS

**Appendix A**

**Semi-annual Report**

**Permit V20693.000**

**Abstract**

This constitutes a semi-annual report, documenting emissions and use of emission-generating materials during the subject reporting period.

**Facility -** Foundation Building Materials, LLC  
Prowall Building Materials  
1092 North Jefferson Avenue, Casa Grande, AZ

**Reporting Period -** January-June \_\_\_\_ or July-December \_\_\_\_ Year \_\_\_\_\_

**Fuel Report**

Natural gas purchased - \_\_\_\_\_ therms

**Material and Emissions Report**

- Has Permittee calculated the monthly throughput limitations required by §7.A.2.b? ..... Yes / No
- Has Permittee exceeded the limitation of §5.B in any month? ..... Yes / No
- On a separate sheet, show the results of the monthly, weekly (if applicable) and rolling 12-month VOC emissions calculations required by §7.A.3

Foam product produced - \_\_\_\_\_ tons

EPS Beads Used -

Month						
Tons						

Maximum pentane content of beads - \_\_\_\_\_ percent by weight

**Recordkeeping Report**

Has Permittee maintained the recordkeeping requirements as specified in Section §7.B of this permit?  
Yes \_\_\_\_ No \_\_\_\_

**Other Compliance Issues**

On a separate sheet describe and explain any deviations from the terms of the permit. Is such a supplemental enclosure attached (§8.A)..... YES / NO

**Certification by Responsible Official**

I certify that, based on information and belief formed after accurate inquiry, that the statements and information in this report are true, accurate and complete.

Signed \_\_\_\_\_

Printed Name\_\_\_\_\_

Title\_\_\_\_\_

\_Contact Phone Number\_\_\_\_\_

Date\_\_\_\_\_

**Mail to:** Pinal County Air Quality Control District  
P.O. Box 987  
Florence, AZ 85132, or

**Email to:** [compliancereports@pinal.gov](mailto:compliancereports@pinal.gov)