

ENFORCEABLE BOARD AGREEMENT

This Enforceable Board Agreement is entered into by and among American Synthetic Rubber Company, LLC (ASRC), the Louisville Metro Air Pollution Control District (the District), and the Louisville Metro Air Pollution Control Board (the Board).

WHEREAS, as a participant in the West Louisville Air Toxics Study (WLATS) risk assessment process, ASRC has agreed to participate in voluntary measures to reduce 1,3-butadiene emissions consistent with the objectives of the WLATS Risk Management Plan; and

WHEREAS, ASRC has already implemented, prior to the date of issuance of this document, voluntary measures pertaining to 1,3-butadiene emissions at its Louisville facility; and

WHEREAS, ASRC has completed and submitted to the District the *Study of the Flare Used as an Emissions Control Device for 1,3-Butadiene Emissions* and proposed conditions for inclusion in the ASRC Title V Operating Permit for operation of the flare at maximum destruction efficiency; and

WHEREAS, ASRC was issued a construction permit on October 20, 2003 to modify the two production lines that were capable of making only poly-butadiene rubber (PBR) to have the capability to make either PBR or styrene-butadiene rubber (SBR) products; and

WHEREAS, ASRC installed Gas Chromatograph (GC) technology in August 2003 on its production lines, which allows more accurate measurement of the amount of 1,3-butadiene used in the manufacturing process; and

WHEREAS, ASRC has reported to the District the plantwide 1,3-butadiene emissions for the first quarter of 2004; and

WHEREAS, ASRC has completed and submitted to the District the *Study of 1,3-Butadiene Processes* and as a result of that study has agreed to implement additional voluntary measures pertaining to reduction of emissions of 1,3-butadiene at its Louisville facility;

NOW, THEREFORE, this Agreement reflects the commitment of ASRC and the approval of the District and the Board, to implement the following projects.

1. Project Descriptions

A. Projects to be implemented as described in the *Study of 1,3-Butadiene Processes*

Project	Estimated Emissions Reductions in Pounds per Year	1,3-Butadiene Reductions in Pounds	Comments
Phase 1 – Process improvements	9000		These projects to be completed by December 31, 2004.
a. Increase the cooling of 1,3-butadiene tanks in the Purification process;			
b. Increase the reintroduction of 1,3-butadiene in the Concentration processes;			
c. Increase the efficiency of recovery equipment by upgrading and adding instrumentation; and			
d. Implement recycling process when priming 1,3-butadiene pumps in the tank storage area.			
Phase 2 – Install new control device in addition to the flare	51000		Subject to receipt of the required construction permit, estimated date of completion is by December 2005.

The above figures represent estimated emissions that will not occur in the referenced and subsequent years as a result of the indicated project. These projects are estimated by ASRC to result in emission reductions for 2006 of at least 50% from emissions reported for 2003.

Project Explanations

Process Improvements – This set of process improvements is designed to improve the efficiency of the reintroduction of 1,3-butadiene into the manufacturing process. The improvements will reduce the amount of 1,3-butadiene sent to the flare for thermal destruction, thus reducing the amount of emissions. ASRC expects that these projects will reduce emissions of 1,3-butadiene to the atmosphere by an estimated 9000 pounds per year, or approximately an 8% reduction from emissions reported for 2003.

Install New Control Device - A new control device, similar to a thermal oxidizer or an enclosed ground flare system, will be installed for the flow currently destroyed at the flare, with the flare to be maintained as a safety device and a backup to the new control device. The new control device will have the capability to destroy the 1,3-butadiene that cannot be reintroduced into the manufacturing process, with a minimum destruction

efficiency of 99.5%. The minimum destruction efficiency of 99.5% will be verified using an approved EPA methodology. ASRC expects this project to reduce emissions of 1,3-butadiene to the atmosphere by an estimated 51000 pounds per year, or approximately a 43% reduction from emissions reported for 2003.

B. ASRC has multiple production lines and a batch process making liquid rubber polymer for solid rocket fuel. All but two of the production lines can make either polybutadiene rubber (PBR) or styrene-butadiene rubber (SBR), or are dedicated to making SBR. The production of SBR uses approximately thirty percent (30%) less 1,3-butadiene than the production of PBR. Construction to modify the two production lines to conform to the construction permit issued on October 20, 2003 will be completed by December 31, 2004. ASRC will notify the District within 30 days of completing construction.

C. Within 30 days of the end of each calendar quarter, ASRC will report to the District the plantwide 1,3-butadiene emissions for each month in the quarter.

D. ASRC commits to continue to review and study its operations to determine whether there are operating conditions, procedures, maintenance improvements, or new technology that could be implemented to reduce 1,3-butadiene emissions, as a requirement of the ASRC ISO 14001 program, including record keeping, reporting and auditing.

2. Verification and Reporting

ASRC shall submit quarterly reports to the District on the implementation status of the projects identified in Section 1.A and 1.B of this Agreement. These reporting requirements will end when these projects are certified as fully implemented. The reports shall be certified by a responsible official, as defined in Regulation 2.16 *Title V Operating Permits*, Section 1.35, at the facility. This certification shall include the statement, "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete." The District reserves its right to inspect the facility as provided in applicable law to verify compliance with ASRC's commitment set forth in Paragraph 1.

3. Effect on Permits

Nothing in this Agreement affects, limits or waives any permitting requirement to which ASRC is subject. If any of the measures that ASRC has undertaken or will undertake in accordance with this Agreement are subject to any permit requirement under federal or state law or District regulations, such measures shall remain subject to such permitting requirements.

4. Legal Effect of the Agreement

ASRC agrees to fully implement the projects set forth in Paragraph 1 above.

Nothing in this Agreement shall constitute evidence of any admission of liability, law or fact, a waiver of any right or defense, or estoppel against the parties to this Agreement.

5. Reservation of Rights and Legal Remedies

Nothing in this Agreement affects, limits or waives the District's legal rights, remedies or causes of action based on statutes, regulations or permit conditions within the jurisdiction of the District, and ASRC reserves its rights and defenses thereto. The District expressly reserves its right to seek enforcement of this Agreement or to take further action through administrative orders or other means at any time and to take any other action it deems necessary, including the right to order all necessary remedial measures and assess penalties for proven violations of applicable laws or regulations, and ASRC reserves its defenses thereto.

Nothing in this Agreement affects, limits or waives ASRC's legal rights, including ASRC's right to administrative or judicial review of any action by the District.

6. Unavoidable Delay

If ASRC's performance of its obligations under this Agreement is delayed or prevented by any event arising from causes beyond ASRC's control, ASRC will inform the District in writing within seven days after it becomes aware of any such event. The written notification to the District shall include: (1) the reason for the delay or prevention of performance; (2) the anticipated duration; (3) all actions taken to prevent or minimize the delay or prevention of performance; (4) an explanation of why the delay or prevention of performance was unavoidable; (5) the steps ASRC will take to ensure that the performance of its obligations under this Agreement will be reinstated as early as practicable after cessation of the event causing the unavoidable delay; and (6) in the event of prevention of performance, whether an alternative project for reducing 1,3-butadiene emissions will be proposed.

7. Amendments or Modifications

No modification or amendment to the terms or conditions of this Agreement shall be effective until reduced to writing and executed by ASRC, the District and the Board.

Agreed to by:

Approved:

**AMERICAN SYNTHETIC RUBBER COMPANY,
LLC**

**LOUISVILLE METRO AIR POLLUTION CONTROL
BOARD**

Joel Audureau, President

Date: _____

Dr. Karen Cassidy, Chair

Date: _____

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT

Arthur L. Williams, Director

Date: _____