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*References to sections of the Illinois "Business Corporation Act" of 1933, as amended

BY-LAWS

OF

CLEAN AIR ENGINEERING, INC.

ARTICLE I - DEFINITIONS

The following words and terms, as used in the By-laws of
CLEAN AIR ENGINEERING, INC.

an Illinois corporation, shall, unless the context shall otherwise require, mean and be defined as:

- (a) "Corporation": the aforesaid corporation.
- (b) "Shareholder": the persons who are the holders of the record of the shares of the corporation.
- (c) "Directors": the duly constituted members of the Board of Directors of the Corporation.
- (d) "Registered Office": that office maintained by the corporation in this state, and the address of which is on file with the Secretary of State of Illinois.
- (e) "Certificates of Stock": a written instrument signed by the designated officers evidencing that the person or persons named therein is the holder of record of the number of shares described.
- (f) "Shares": the units into which the shareholder's rights to participate in the control of the corporation, in its surplus or profits, or the distribution of its assets, are divided.

ARTICLE II - OFFICES AND REGISTERED AGENT

Sec. 1. Principal Office: The principal office of the corporation shall be located in Palatine, Illinois, and there may be such other place or places of business, within or without the state, as the Board of Directors or President shall designate.

Sec. 2. Registered Office and Agent: The registered office of the corporation and its registered agent may be changed by the Board of Directors.

ARTICLE III - SHAREHOLDERS MEETINGS

Sec. 1. Meetings: The Annual Meetings of the Shareholders shall be held on the first Monday of each July here after, at the hour of 9:00 A.M., unless otherwise designated by the Board of Directors. Special meetings may be called at such times as the President, a majority of the Directors, or the holders of not less than 20% of the outstanding shares, shall elect.

Sec. 2. Notice of Meeting: Notice of meetings shall be written or printed, and which shall be mailed to each shareholder at the address shown on the corporation's books. The notice shall give the date, time and place of meeting; and if a special meeting, the purpose or purposes for which the meeting is called, and shall be delivered not less than 10 days nor more than 40 days before the date it is proposed to hold the meeting. Notice as provided may be waived by all the shareholders in writing, and signed by the persons entitled to such notice.

Sec. 3. Place of Meetings: Meetings of shareholders shall be held at the principal office of the corporation, unless otherwise designated by the President or a majority of the Directors.

Sec. 4. Quorum: A majority of the outstanding shares, represented in person or by proxy, shall constitute a quorum at a meeting of the shareholders.

Sec. 5. Manner of Voting: At meetings of the shareholders, voting shall be determined by a majority of the number of shares represented in person or by proxy, and may be by voice unless any shareholder shall demand voting by written ballot. Each of the outstanding shares as registered on the corporation's books shall be entitled to one vote on any matter submitted.

Sec. 6. Informal Meetings: The formalities for calling a meeting or the holding of the same, shall be waived if the matters there transacted shall be reduced to writing and shall be signed by all the shareholders.

Sec. 7. Cumulative Voting: The Directors may in the election of Directors by the Shareholders, provide for cumulative voting in the manner as is set forth by statute.

ARTICLE IV - THE DIRECTORS

Sec. 1. Power: The Board of Directors shall:

(a) Manage and control the affairs of the corporation, unless otherwise provided by the By-laws or Articles of Incorporation.

(b) Adopt a corporate seal as the seal of the corporation.

(c) Designate a banking institution or institutions as depository of the corporation's funds; and the officer or officers authorized to make withdrawals therefrom, and to execute obligations on behalf of the corporation.

(d) As it deems desirable may, from time to time, declare and cause to be paid to the shareholders of record, dividends from the net earnings of the corporation or surplus, payable in cash, property or its own shares, subject to statutory limitation.

Sec. 2. Number: The number of Directors shall be two (2).

Sec. 3. Election and Term: The Directors shall be elected by the shareholders at the Annual Meeting, or at such other meeting as shall be called for such purpose by the Directors or President, and they shall hold office until their successors shall be elected and qualified.

Sec. 4. Qualifications: Directors shall be 21 years of age or over and residents of the State of Illinois unless waived by the shareholders. A Director may be an officer and an employee of the corporation at one and the same time.

Sec. 5. Meetings: All meetings of the Board of Directors shall be held upon the call of the President, who shall act as the presiding officer, or a majority of the Board of Directors, and shall be held at the principal office, unless otherwise designated in the call of the meeting. Notice of such meetings may be given in writing or orally, at least 24 hours prior to the meeting, or notice may be waived by the Directors in writing signed by them.

Sec. 6. Quorum: A majority of the Directors shall constitute a quorum to transact business of the corporation, and the act of the majority of the Directors present at any meeting shall be deemed the act of the Board of Trustees.

Sec. 7. Compensation: By a majority vote, the Directors may fix reasonable compensation for their services rendered, and to reimburse them for any expenses incurred in attending meetings.

Sec. 8. Vacancies: In the event a vacancy shall occur on the Board of Directors, such vacancy may be filled for the unexpired term of such Director by the shareholders at a special meeting called for that purpose.

ARTICLE V - THE OFFICERS

Sec. 1. Officers: The officers of the corporation shall be: a President, Vice-President, Treasurer and Secretary, and such other officers as the Directors shall designate. Two or more offices may be held by the same person, except that of President and Secretary.

Sec. 2. Election and Term: The officers shall be elected at the Meeting of the Directors held after the Annual Meeting of the Shareholders, or at such other meeting of the Directors as shall be called for such purpose, and said officers shall hold office for the term elected and until their successors shall be elected and qualified.

Sec. 3. The President: The President shall manage the affairs of the corporation, except as shall otherwise be reserved by the By-laws or action of the Directors; shall preside at the meetings of the Shareholders and Directors; and shall be vested with the powers and duties incident to the office of President.

Sec. 4. The Vice-President: In the absence of the President, or in the event of his inability or refusal to act, the Vice-President is

empowered to act, and shall thereupon be vested with all the powers and duties of the President.

Sec. 5. The Secretary: The Secretary shall keep minutes of the business and other matters transacted at the meetings of the Shareholders and Directors, mail or cause to be mailed all notices required under the By-laws, have custody of the corporate seal and records, maintain a list of the shareholders and their addresses, and perform all other duties incident to the office of Secretary.

Sec. 6. The Treasurer: The Treasurer shall have custody of the funds of the corporation, collect monies due, pay the obligations of the corporation out of its funds, and perform such other duties as are incident to the office of Treasurer. At the election of the Directors, the Treasurer may be required to be bonded for such amount and under such conditions as the Directors may see fit to impose.

Sec. 7. Removal of Officers: Any officer may be removed whenever in the judgment of the Directors, the best interests of the corporation will be served by such removal.

Sec. 8. Compensation: Compensation of the officers may, from time to time, be fixed by the Directors.

ARTICLE VI - SHARES OF STOCK

Sec. 1. Certificates: The certificates, the form of which shall be adopted by the Directors, shall bear the name of the person or persons to whom issued, the number of shares, the date of issuance, whether par or no par value, the class or series, if any, the signature of the President, and the Secretary or Treasurer, and shall be impressed with the seal of the corporation; and contain a statement, or a summary, of all the designations, preferences, qualifications, limitations, restrictions, and special or relative rights of the shares of each class authorized to be issued, if any, or contain a statement that such statement will be furnished upon request.

Sec. 2. Voting of Shares. Each outstanding share shall be entitled to one vote on any matter submitted to the shareholders. No shares of stock held by the corporation, except in a fiduciary capacity, shall be voted, or counted in determining the outstanding shares.

Sec. 3. Closing the Transfer Books and Fixing the Record Date: For the purpose of determining the right of shareholders to vote or receive dividends, the Directors may provide that the stock transfer books shall be closed for a period not to exceed forty (40) days, and not less than 10 days prior to a meeting of the shareholders. If the Directors shall not so provide for a closing of the transfer books, then the date on which notice of the meeting of the shareholders or the date on which the resolution of the Directors declaring a dividend was adopted, as the case may be, shall be the record date for determining the rights of shareholders.

Sec. 4. Transfer: All shares tendered for transfer shall bear the signature of the owner or owners of record, properly authenticated, and if by power of attorney, a proper power of attorney to be filed with

the Secretary. Certificates presented for transfer or redemption shall be cancelled and filed of record by the Secretary.

Sec. 5. Lost or Destroyed Certificates: Upon receipt of an affidavit setting forth the loss or destruction of a certificate of stock, upon such terms and conditions as the Board of Directors shall fix, the certificate may be restored to the owner.

ARTICLE VII - FISCAL PERIOD

Sec. 1. The fiscal year of the corporation shall begin on the 1st day of January and shall end on the 31st day of December.

ARTICLE VIII - AMENDMENTS

The By-laws of the corporation may be amended, repealed or new By-laws adopted, by the Directors upon approval of the Shareholders. (S. 9)

OCTOBER 14, 1996



AMENDMENTS TO THE CORPORATE BY-LAWS
OF
CLEAN AIR ENGINEERING, INC.

1. RESOLVED that Article IV, Section 2 of the By-Laws shall be amended to provide for a Board of Directors of at least six individuals, but not more than nine individuals. Furthermore, the Board of Directors shall have the authority, without further action by the shareholders, to establish the number of directors to be elected at each annual meeting of shareholders. Between annual meetings, the Board shall have the authority to expand and/or contract the size of the board within the numerical parameters set forth above, and to fill any vacancies which may occur as a result of the creation of new Board seats between annual meetings of shareholders.

The present By-Laws of Clean Air Engineering, Inc. provide for a Board of four individuals. The proposed amendments expands the number of directors, and provides for certain management flexibility with respect to the actual number of directors which will serve at any given time.

2. RESOLVED that Article IV, Section 2 of the By-Laws shall be amended to provide for initial staggered terms for members of the Board of Directors. Three term groups shall be established: one group shall have initial terms of one year; one group shall have initial terms of two years; and one group shall have initial terms of three years. At the expiration of each initial term, the board seats up for election shall have three year terms. At the annual meeting of shareholders to be held in 1996, seven directors shall be elected: three seats shall have initial terms of one year; three seats shall have initial terms of two years; one seat shall have an initial term of three years; the remaining two board seats with initial terms of three years will not be filled at the annual meeting.

Illinois law allows for staggering the initial terms of directors to establish board continuity. the entire board will not be re-elected each year as has been the past practice.

3. RESOLVED that Article IV, Section 8 of the By-Laws shall be amended to provide that the Board of Directors shall have the authority to fill any vacancies for unexpired terms of directors which may occur between annual meetings of shareholders.

The present By-Laws provide that vacancies on the Board of Directors are to be filled by the shareholders at a special meeting called for that purpose. This change dovetails with proposal number one to provide the Board with flexibility in managing the company in filling midterm vacancies. The shareholders will continue to elect their directors at each annual meeting.

4. RESOLVED that Article VIII of the By-Laws is hereby amended to provide that the By-Laws of the corporation may be amended, repealed, modified or new By-Laws adopted by action of the Board of Directors without approval by shareholders.

This amendment to the By-Laws updates the amendment provisions to correspond with current modern corporate practice. Today, the power to adopt, modify and revise By-Laws is generally reserved to the Board of Directors alone without shareholder input. This flexibility allows for better corporate management of the affairs of the business by the Board of Directors. It also allows the Board of Directors to quickly react to changes within the business environment so as to maintain the corporation's competitive position in its market place. This amendment will provide Clean Air's Board of Directors with the flexibility needed to adopt and implement the new plan of reorganization which is continuing to evolve.