R72-18 Grain Handling EXHIBIT No. 8

1.0 Introduction

The purpose in preparing this document is to present to the Board and public a summary of the reasons supporting the proposed regulations for grain handling operations. During the public hearings to be held by the Board on this proposal, oral and documentary evidence will be presented in support of the proposal and which amplify the points made in this summary document. Therefore, while this document should provide a certain amount of detail regarding the proposal submitted to the Board, it essentially is intended as a guide for those interested in following the hearings; it is not intended as the ultimate legal and technical support of the work of the IEPA-Industry Task Force on Grain Handling Operations.

1.1 Acknowledgements

Quite obviously the entire Task Force is to be commended for its ability to address the crucial issues, communicate positions effectively, and act as responsible citizens to meet the concerns of the grain handling industry and to insure the right of every citizen to an environment free from health hazards and undesirable conditions.

Specific appreciation is extended to Mr. Ed Campbell, EPA Surveillance Engineer and a member of the Task Force, for preparing the rough draft from which this document was drawn.

2.0 Background

Since its inception on July 1, 1970, the Illinois Environmental Protection Agency, Division of Air Pollution Control, has received numerous citizen complaints alleging that emissions from grain handling operations have unreasonably interferred with the complainant's health or welfare. These complaints, ranging from individual to multi-signatory complaints, have been lodged against over 150 different grain

5.0 Dump Pit

Elevators in Illinois receive grain primarily by truck and rail. The main contribution to dust generation while dumping grain into the receiving pit is the wind current generated by the falling stream of grain. When the falling mass of grain strikes the pit walls and floor, gross air turbulence results with a violent generation of dust. This displaced, dust laden air boils upward through the pit grating and into the dump pit area itself.

Most dump pits have a roof and two permanent side walls with a driveway for trucks. Such a configuration creates a wind tunnel which results in a greater draft through the dump pit area than the ambient wind speed. Thus, the dust laden air that boils out of the dump pit is blown out of the dump area and into the atmosphere.

In order to reduce the amount of airborne dust due to the grain drop, the Task Force has required an induced draft system within the dump pit. Several dump pits are already controlled with this technology.

Not all dust will be kept below the dump pit grate by such system; and, thus, the Task Force has required the use of techniques designed to reduce the wind tunnel effect through the dump pit area. It should be noted that control is required only of major dump pits, of which more than one may exist at an elevator.

Elevators with unenclosed major dump pits are expected to use the required techniques to control to the same level as elevators which have partially or fully enclosed dump pits.