FutureGen
Frequently Asked Questions—Health and Safety
June 8, 2011

H1: Is CO_2 hazardous or flammable?
A1: No. There are over 3,600 miles of CO_2 pipelines in the U.S. that have operated safely for decades. The Environmental Protection Agency has determined that the CO_2 is non-hazardous.

H2: Will security be increased at the storage site when it is accepting the CO_2?
A2: The storage site will be a secure site whether it is accepting CO_2 or not. Further, its operations are so quiet; most people will not even realize it is operating.

H3: What are the size and the operating pressure of the pipeline?
A3: The operating pressure of the pipeline will not exceed 2200 psig. The pipeline will be approximately 12 inches in diameter. Final engineering will determine the precise size.

H4: How close will the pipeline be to my house?
A4: The project has adopted a minimum distance of 150 feet, which is three times the legal requirement. Also, the pipeline is buried a minimum of four feet underground, which provides added safety. In farm areas, the pipeline will be buried at least five feet to allow surface farming to continue.

H5: In Weyburn, Canada, there are claims of a CO_2 leak. How is FutureGen different than what is happening in Weyburn, Canada?
A5: The FutureGen and the Weyburn projects are substantially different from each other. Further, extensive scientific research has been conducted at the Weyburn site and no results have been found that would support the recent claims that CO_2 injected as part of the enhanced oil recovery (EOR) project has migrated to the surface (Source: Petroleum Research Technology Center Response to Petro-Find Geochem Ltd , 2011). The phenomena, which was claimed to be a leak, can be explained by near surface processes including microbial generation of soil CO_2 and methane (PTRC, 2011) or other factors. The Alliance will continue to watch the Weyburn project closely. If there are any lessons-learned from it that we should apply to FutureGen 2.0, we will.

FutureGen 2.0 carbon storage is very different. It will take place in the Mt. Simon Sandstone, a deep saline reservoir more than three quarters of a mile beneath the surface. This rock formation is more than 850 feet thick and is overlain by multiple layers of impermeable shale, which act as seals for the stored CO_2. Very few wells have been drilled into the Mt. Simon Sandstone in Illinois due to the lack of fossil fuel resources in the formation. Oil and natural gas deposits in Illinois occur at much shallower depths in rocks that are hundreds of millions of years old. By contrast, the Weyburn-Midale CO_2 Monitoring & Storage Project is taking place in an active oil field using CO_2 for EOR. At the Weyburn site, there are over 800 oil wells and about 200 injection wells (not including over 150 horizontal wells), which have reached the oil-producing beds.