

For more information, please contact:
J. N. Strohbeck
Safety Coordinator
Phone: (618) 255-3689

Company Information:

The Equilon Enterprises LLC Wood River Refinery employs approximately 1,140 people that live in and around the River Bend communities in southern Illinois. In business at the same location since 1918, the company is a producer of quality petroleum products, such as gasoline, diesel fuel, and lubricating oils. Our products are used throughout the mid-west to keep cars, trucks, and other machinery operating. Our products are also used to fuel and lubricate personal vehicles and industrial equipment throughout the rest of the United States and in many foreign countries.

Risk Management Planning (RMP)

The Environmental Protection Agency (EPA) Risk Management Plan Rule requires companies that use or store more than a threshold quantity of certain EPA-listed toxic or flammable chemicals in a process, to submit information about such chemicals. This information includes the following: a five year accident history; the potential offsite impacts if an identified worst-case accidental release scenario (as defined by EPA) were to occur; and if the event occurred the prevention and emergency response programs that are in place to prevent, control and mitigate the potential offsite impacts.

Pursuant to the RMP Rule, the Equilon Enterprises LLC Wood River Refinery has twenty three (of the 140 identified by EPA) chemicals above threshold quantities or concentrations.

Equilon Enterprises LLC Wood River Refinery compiled its accident release history for the RMP listed chemicals for the past five years. According to the RMP rule, the accident release history must include all accidental releases from covered processes that resulted in death, injuries, significant property damage, evacuations, shelter-in-place or environmental damage. Accidental release, as defined by the EPA means an unanticipated emission of a regulated chemical into the ambient air from a stationary source. The five-year accident history, as defined by the RMP, for the Wood River Refinery is as follows:

YEAR	1994	1995	1996	1997	1998
Number or RMP Releases	0	0	0	0	1*

* Property damage only

The RMP rule requires the development of scenarios for the accidental release of a toxic and a flammable chemical. For this example, chlorine was selected as the toxic chemical and butane was selected as the flammable chemical because each has the greatest area of potential impact offsite.

Sharing of this information is intended to promote community understanding of local industries and promote informed dialogue on their chemical accident prevention practices. It is not a prediction of the probability that any of the identified scenarios or potential impacts discussed will ever occur. The information is based upon Risk Management Plans (RMPlans) that are being prepared for the Equilon Enterprises LLC Wood River Refinery. These plans may change from time-to-time. Descriptions in final RMPlans submitted in June 1999 may differ from these descriptions due to revisions. RMP information about other RMP listed chemicals is available upon request.

Wood River Refining Company
P O. Box 79
Wood River, IL 62095

DSW 138129

STLCOPCB4038086

Example RMP Accidental Release Scenarios for Equilon Enterprises LLC Wood River Refinery

The RMP Rule defines a Worst-Case Release to mean a release of the largest quantity of a RMP regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint as defined in the RMP Rule. The Rule includes detailed requirements for developing the worst-case accidental release scenario. For example, companies must assume that the hypothetical release is a rapid and complete release of the largest container of chemical under conditions that would maximize its potential impact. It also assumes that none of the sites mechanical controls or safety systems requiring energy or human intervention are operational.

Given the severe guidelines of a worst-case accidental release scenario, the RMP Rule provides for the development of alternative release case scenarios. These alternative scenarios assume a smaller quantity of an RMP listed chemical is released, and consider safety systems that are in place.

Chemical	About the Chemical	Accident Prevention in-Place	Example Event	Scenario	RMP Designated Distance of Concern (1)	Emergency Response Measures
Chlorine	Chlorine is a greenish-yellow gas with a pungent, irritating odor, similar to bleach. Chlorine exists as a gas at ambient temperature and pressure, but it is liquefied when kept under pressure in our process equipment. The Equilon Enterprises LLC Wood River Refinery uses chlorine for water treatment.	- Chlorine is transported, stored and dispensed from approved heavy-wall steel cylinders with fusible metal pressure relief devices. - Personnel are trained and qualified to use chlorine safely.	Worst-Case Toxic Release (2) Example	- Instantaneous failure of chlorine cylinder wall. - Total release of the entire contents of a full cylinder (2000 lbs.) in 10 minutes. - Worst possible weather conditions (no wind, low humidity).	1.30 miles	- Mobile fire protection equipment with water deluge systems. - Trained emergency responders (HAZMAT team). - In-Plant emergency notification system. - Communication link to off-site responders and residents of the community. - Response Drills
Chlorine	See above	See above	Alternative Case Toxic Release Example	- Failure of tubing (3-8") that transfers chlorine from the storage cylinder to the water chlorination system. - Total release of 660 lbs. in 10 minutes.	0.37 miles	See above
Butane	Butane is a flammable hydrocarbon that is produced and used in petroleum refining processes. Butane is a gas at ambient temperature and atmospheric pressure, but it may be liquefied under pressure. The Equilon Enterprises LLC Wood River Refinery uses butane in the processing of gasoline.	- Equipment is properly designed for storing and processing butane. - Equipment is protected by pressure relief valves. - Equipment is inspected and tested at regular intervals. - Safe operating procedures are in place. - Control instrumentation has alarms and emergency shutdown. - Personnel are trained and qualified.	Worst-Case Flammable Release (3) Example	- Catastrophic vessel failure. - Total release of the entire contents of the storage vessel (2,822 MM lbs.) followed by a vapor cloud explosion.	1.13 miles	- Area fire protection system, including water deluge systems on storage tanks. - Mobile fire protection equipment. - Trained emergency responders (Fire Brigade). - In-plant emergency notification system. - Communication link to off-site responders and residents of the community. - Response Drills
Propane Butane Pentane	- Propane and Pentane have properties similar to butane (described above), except that pentane is liquid at ambient conditions. - The Equilon Enterprises LLC Wood River Refinery uses these materials in the processing of gasoline.	See above	Alternative Case Flammable Release Example	3-4" valve leak that releases 12,200 lbs of flammable material followed by a vapor cloud explosion.	0.11 miles	See above

- (1) These distances are based upon an EPA-designated end point. (The chemical concentration in the air to which a person can be exposed for an hour without irreversible or serious health effects. The concentration levels that could impact health vary significantly by chemical.) For flammable chemicals, the distance represents the area that could be impacted by an explosion or fire. "Look up tables" developed by the EPA or computer models were used to simulate these conditions.

(2) For RMP, a "toxic chemical" is one of 77 listed chemicals that EPA has defined as acutely toxic. (ie. they can cause serious health effects or death from short-term exposures.)

(3) For RMP, a "flammable chemical" is one of 63 listed flammable gases or highly volatile flammable liquids. The flammable chemicals have the potential to form vapor clouds and explode or burn if released.

Revision 6, April 1999