Trouble brewing over safety of hydrofluoric acid

By The Associated Press

NEW ORLEANS — Spokesmen for the petrochemical industry say hydrofluoric acid is less dangerous than chlorine gas, but environmentalists say that still leaves a lot of room for disaster.

Four refineries in the New Orleans area — Marathon Oil Co. in Garyville, BP America in Alliance, Murphy Oil Corp. in Meraux and Mobil in Chalmette — use hydrofluoric acid in a process called alkylation to boost the octane of gasoline.

Another Louisiana plant, Allied Chemical in Geismar, produces about 100,000 tons of HF per year.

Fred Millar, director of the toxics project for Washington-based Friends of the Earth, said during appearances last week in St. John the Baptist and St. Bernard parishes that people living near refineries using HF “haven’t been told about its dangers.”

“Hydrofluoric acid is a lot more dangerous than anybody ever told you,” said Millar, who is part of a handful of people at a forum in Reserve.

But industry leaders and emergency planners said HF is just one of many hazardous chemicals used in a hazardous industry and can’t fairly be singled out.

“Really, how can you just single one out?” asked Bertrand Madere, St. John’s civil defense director. “We have to demand safety in all of them. We’re very well prepared to handle any accidents.”

“Chlorine is far more dangerous. It’s everywhere,” said George Love, manager of the Marathon Oil refinery in Garyville. “We know HF is dangerous. That’s why we’re so careful with it.”

HF vaporizes when released and carries small droplets of acid into the air. Millar says an HF release could become a lethal gas cloud, much as methyl isocyanate leaked from a pesticide plant in Bhopal, India, formed a cloud that killed 3,800 people in 1984.

Pressure from environmental advocates and public officials prompted Mobil Oil Co. to agree to study the use of hydrofluoric acid at its Torrance, Calif., refinery.

Mobil hasn’t promised the same study for its Chalmette refinery, even though the St. Bernard Parish Police Jury last December asked both Mobil and Murphy Oil to stop using the acid by 1997.

Marathon and BP plant managers said they have no plans to stop using HF in the Orleans area.

Industry officials say refineries are being singled out by critics although they account for only 5 percent of all HF use in the United States. The rest is used by the chlorofluorocarbon industry and in processing and producing certain metals, according to the American Petroleum Institute.

Marathon officials last week pointed out a number of safeguards — valve shutoffs, specialized training, isolation of the unit — aimed at keeping a spill, if one occurs, on the Garyville plant site.

“We’re always studying the mitigation side,” said Don Ring, manager of BP America’s Alliance refinery near Belle Chasse. “I don’t know of any incidents where someone has been fatally harmed by it.”

State figures, based on industry estimates, show Marathon emitted 140,000 pounds of hydrofluoric acid into the air in 1988. Mobil in Chalmette emitted 6,500 pounds, Murphy emitted 14,000 pounds, and BP America emitted 3,927 pounds, the figures show.

Marathon’s emissions are much higher than the others because it incinerates acid-soluble oil, a byproduct of the process, on site.

Statewide emissions, which include chemical plants and refineries, were 203,435 pounds.

Environmentalists say sulfuric acid is safer and is used in boosting octane at about half the refineries around the United States. Sulfuric acid doesn’t vaporize when spilled or leaked, Millar said.

“Sulfuric acid, it has its problems,” Ring said. “You’ve got to bring in huge quantities of the stuff. You’d have to store it, truck it in.”