file: Krummrich

Monsanto

Monsanto Chemical Company
500 Monsanto Ave.
Sauget, Illinois 62206-1198
Phone: (618) 271-5835

MARK

September 19, 1986

Leonard Drey
4961 Laclede
Apt. 204
St. Louis, MO 63108

Dear Mr. Drey:

Here are your questions and our answers:

1. How many stacks do you have at Sauget?
2. How many "lines"?

The Krummrich plant operates six chemical production units which have air permits issued by IEPA. The plant powerhouse also is regulated by IEPA.

3. Of the stacks, how many are fitted with anti-pollution devices and what types are they?

All of the vents are in compliance with existing Illinois and Federal EPA air pollution rules and regulations. The vast majority of these vents have air pollution control devices such as scrubbers, condensers, filters, electrostatic precipitators and demisters.

4. Relative to releases caused by leaks at pumps, compressors, etc. how significant is it in terms of mass or volume of organic chemicals released through the stacks?

Our experience indicates that equipment such as pumps, compressors, valves, etc. are not a significant source of air pollutants. Proper equipment selection, process design and maintenance practices keep leaks to a minimum. A good example is valve leakage. our plant uses ball and plug valves almost exclusively in chemical service and has demonstrated a very low leakage rate (0.1%). IEPA and the Illinois Pollution Control Board acknowledged this performance in the State's RACT III (Reasonably Available Control Technology) rulemaking for the synthetic, organic and chemical manufacturing industry in 1985 in which plug and ball valves were exempted from regulation. (This recognized that our standard was very good.)

DSW 136479

5. Have techniques such as gas chromatography or mass spectrography been used to i.d. organic chemicals coming through the stacks?

Gas chromatography and mass spectrography have been used where appropriate, to analyze air samples for specific organics.

6. Does Monsanto rely on the judgment of IEPA as to the safety of releases or leaks from the stacks or does it conduct its own research regarding carcinogenity or toxicity?

Monsanto has its own program underway to assess the impact of process emissions on employees and the surrounding community. This policy is in support of the Air Toxics Control Policy adopted by the Chemical Manufacturer's Association (CMA) in January of this year. Where appropriate, Monsanto will define and implement controls to reduce any potential human health risks which are identified. Monsanto's Environmental health lab provides in-house toxicology expertise to assist in this area.

7. The State of Illinois put into place a non-pollution program in 1983. Did Monsanto monitor for non-criteria pollutants before then?

Monsanto conducts and reports all applicable air sampling as required by IEPA regulations or the specific air permits held by this plant site. Monsanto has monitored air pollutants in addition to the traditional "criteria" pollutants since the 1970's.

8. How much do pollution devices cost Monsanto?
How much does it cost to monitor--in terms of manhours?

We have spent several million dollars to install such equipment at our plant. Regarding manhours--there are 3 to 5 people who work full-time in the Environmental area. Other staff members also have responsibilities in this area, but not on a full time basis.

9. How does Monsanto feel about IEPA and EPA?

We have a good working relationship with the IEPA and Federal EPA.

Sincerely,

Donna M. Vandiver
Communications and Public Relations Supervisor
William G. Krummrich Plant

bcc: Jack Molloy
Warren Smull
Dan Bishop
Mark Schannon

DSW 136480