

# DSAG may be charged

Alberta Environment has not made a decision so far on whether to charge Diamond Shamrock Alberta Gas (DSAG) with violation of the Clean Air Act, after DSAG accidentally released dangerous chemicals into the atmosphere.

The decision on whether or not DSAG would be charged would be based on two incidents, one on July 6, and the second on July 16 that Alberta Environment Air Quality Control engineer

Bill Macdonald called "two fairly major leaks."

On July 6, 12 tonnes (12,000 kilograms) of vinyl chloride monomer (VCM), a known carcinogen, were released into the atmosphere, after workmen tried to replace a control mechanism on a faulty reactor.

On July 16, 4,000 kilograms of VCM were released, but only 250 kilograms were released into the atmosphere. The remainder of the highly flammable chemical was

burned off in the plant's flare stack. The second incident occurred when employees, changing a filter, accidentally left open a valve, releasing the chemical into the plant's header system that leads to the incinerator and flare system.

Macdonald said a decision will not be made on charges until reports sent by DSAG to Alberta Environment have been investigated. Diamond Shamrock could face fines of \$1,000 to \$1,500.

According to the plant's monitoring stations, located around the plant, during the July 6 incident, over a 24-hour period, 0.4 parts per billion of VCM was recorded in the atmosphere by the monitoring station downwind of

the plant. The direction of the wind at the time of the incident was from the north-west and it was raining quite heavily. Macdonald said that would account for the low reading.

On July 16, 0.2 parts per billion of VCM was recorded in the air from two monitoring stations downwind of the plant over a 24-hour period. The wind at the time of the incident was at low speeds from the east-north-east, and shifting from the south-east.

Macdonald said there is no way for Alberta Environment to know the concentration of VCM in the atmosphere at the time of the incidents, and the plant's monitoring stations only take readings averaged over a 24-hour period.

R&S 004461

## VCM danger questioned

Whether or not employees were evacuated safely from the Diamond Shamrock Alberta Gas (DSAG) plant July 6, when a leak of vinyl chloride monomer (VCM) occurred, depends on who you talk to.

Plant Manager John Morum said employees were evacuated "in a matter of seconds" after the leak occurred.

Morum said the employees in the plant at the time of the leak face no danger of getting cancer from short term exposure to VCM, "even though concentrations of VCM were high." Morum said only concentrated ex-

posure over long periods of time pose any danger.

Ray Sentes, safety director for Alberta Federation of Labour, disagrees with Morum. Sentes said high concentrations of VCM over a short term have just as much potential for causing cancer as lower exposures over longer terms.

Sentes said the danger is that a threshold limit value has not been determined with VCM and other carcinogenic chemicals. New danger levels are being determined all the time. Sentes said the present danger level for VCM over a long period of exposure is 10

parts per million. That figure is becoming less and less, the more there is known about the chemical. He said there is a threshold limit value with toxic chemicals like ammonia, but not enough research has been done on carcinogenic (cancer causing) chemicals.

"There is always a danger when there is exposure to a cancer-causing agent," Sentes said.

Sentes said research into VCM indicate that exposure to the chemical, in both long and short term, can cause cancerous tumors in the liver, kidney, lung, stomach, and brain.