



Lincoln sewage no problem

Lincoln has no serious water pollution problem due to sewage disposal, although the city should significantly increase its sewage budget to continue liquid waste treatment.

"The main problem that we are facing is that our plant at 22nd and Theresa Street is overloaded — more sewage is being delivered to the plant than the plant was equipped to handle," said Lee Blocker, director of Lincoln Public Utilities.

He remarked that "people in the business are trying to get away from the term 'sewage' and prefer to say 'waste water.'"

He said that Lincoln's treatment is called a secondary treatment. "It is probably not the best type of waste water treatment, but it is one of the more refined treatment systems."

This treatment should be capable of removing 90 per cent of all impurities by a natural biological process in which micro-organisms digest sewage impurities, Blocker explained.

The liquid that remains after the water treatment is channeled into Salt Creek, Blocker continued. "This does not pollute the Creek since it is already polluted by a natural pollutant, salt," he said.

Salt Creek drains into the Platte River, then to the Missouri River, and eventually to the Gulf of Mexico, Blocker noted. "So, in that respect we are polluting the earth's water supply."

"In order to reuse this liquid water waste, it would have to be run through a water purifying process," he explained. "This sort of process is used in some parts of the country, although we don't use this because we have enough good water."

We have met the enemy and they are us

Air pollution . . .

Omaha leads in lead levels

Omaha has put Nebraska on the air pollution map with the highest lead concentrations in the air of any city in the nation according to a local pollution control officer.

Lancaster County air pollution control officer Lester A. Sanger said the Nebraskan attitude that "we don't have air pollution so why worry about it" was largely responsible.

"Omaha decided its air was clean enough and there was nothing to get excited about. When lead smelters moved in they weren't prepared," Sanger said.

"Nebraska's lucky, Lincoln's lucky. We don't have a serious problem with breathing the air. Our problem is still in the attitude of the people and that can be changed before it's too late," he added.

Air pollution in Lincoln is centered in geographical areas according to the pollution control officer. The grain elevators and auto salvage yards along Cornhusker highway and the sewage treatment plants in the Havelock area are notable examples, he said.

The state air pollution control division classifies pollutants in four main categories: suspendable particulates, settleable particulates, sulfur oxides and carbon monoxide and hydrocarbons.

"The area that everyone hears about is the carbon monoxide and exhaust fumes. Fortunately we don't have a serious problem with that here yet," according to zoology professor Gary L. Hergenrader.

Sanger said his office confirmed that. "We placed measuring devices on O St. during the busiest hours and the readings were well below the danger level."

Sanger said the biggest air pollution source in Nebraska is in the form of chaff from grain elevators. Then there

are the coal burning power plants, industrial incinerators and combustion engines.

"We can never get our air too clean," Sanger said, "but if we are willing to make sacrifices we can put pressure on these pollution sources to do something about it we can at least keep our air as clean as it is now."

Professor Hergenrader stressed the need for Nebraskans' concern about pollution in other parts of the nation. "If the air gets so bad people can't breathe it, or if companies have to move out of cities where will they go? Right here."

"If we are not prepared to handle the situation we'll be in trouble," the professor said.

He added to some other areas of concern. "If smog continues in Los Angeles and Chicago it can drift. We now think it is possible that this belt of air pollution can be raising the heat index in the world. If the polar ice cap melts air pollution will affect us in Nebraska."

Professor of plant pathology John L. Weithing is concerned with yet another affect of air pollution. "Our polluted air is suffocating plant life." According to Weithing plants killed by pollution are on a "three fold increase."

Unless this trend is stopped, the professor said, one of our main sources of oxygen will disappear.

Professor Hergenrader said Nebraskans' must be concerned about stopping pollution in all parts of the nation because "we will be affected and there is nothing sacred about Lincoln, Neb. either."

"It will take years to clean-up our environment and the young people that are concerned today will have to stick with it tomorrow because this job never ends," Sanger said, "but we can still save our resources."

Landwaste pollution . . .

Garbage--down in the dumps

Nebraska's 617 licensed dump areas are robbing the state of fresh air and clean streams.

"The problem with refuse dumps in Nebraska is more critical than most people think," according to Hugh Johnston, supervisor of Nebraska's Solid Waste Management Program.

Stream pollution, dumping raw garbage into waterways, is a "particular problem in Nebraska," Johnston explained. "For many years, it has been a common practice to wash garbage down streams," he said.

Most Nebraska communities, however, use what Johnston called a "land-fill operation," which involves digging a trench, filling the trench with refuse and covering the trench with dirt.

"To date, we have nothing better than the land fill method," he noted. The United States Public Health Service donates money to states and communities for research to find better ways of eliminating solid wastes, Johnson explained.

"The whole problem is bigger than Nebraska," he said. "We are definitely looking for more modern methods of disposing of garbage. What we need is a method of recycling solid wastes to make a substance that can be used elsewhere."

Johnston pointed out that many Nebraska dumps burn trash indiscriminately. He said that in a truly sanitary land-fill operation, nothing is burned.

"We've allowed burning because many communities find it necessary to burn trees to stop the spread of dutch elm disease. Eventually we hope to eliminate all burning in Nebraska," he explained.

It is difficult to determine exactly how much pollution is created by burning trash, Johnston said. Other undesirable side effects from burning trash are the odor and the increased fire hazard, Johnston added.

Used car bodies make dumps an eyesore and are taking more space each year, Johnston noted. Even if a city has a car crusher, "there is the problem of transporting the crushed cars to a foundry," Johnston said.

He noted that the city of Ogallala pays for crushing and transporting car bodies to a foundry in either Kansas City or Denver where the car bodies are melted.

Johnston remarked that many communities are complacent about solid waste disposal because of the cost involved.

"For 100 years, people in this state have gone out and found a roadside ditch for trash," he said. "This method cost them no money, so maybe that's why they're reluctant to spend money on it now."

National figures show that each American disposes of 5.3 pounds of solid waste per day — this figure does not include sewage, water or industrial waste, Johnston said.

A breakdown of 100 pounds of solid waste would be: paper, 48 pounds; garbage, 16 pounds; leaves, 9 pounds; wood, 2 pounds; synthetics, 2 pounds; and cloth, 1 pound.

The remainder of the 100 pounds would be noncombustible materials including glass, 6 pounds; metal, 8 pounds; and miscellaneous materials including ash and stone, 8 pounds.

The huge increase in packaging and the use of disposable bottles and cans can be largely accredited with the increase in per capita solid waste, Johnston said.

"By 1976, package consumption will have risen 50 per cent over the 1966 figure," he said.

The U.S. spends \$419 million on solid waste disposal yearly, Johnston said, and this figure should reach \$595 million by 1976.

Commercial operators may help remedy the solid waste disposal problem in Nebraska, Johnston said. Nineteen new commercial solid waste operators have been licensed in Nebraska in the last year and a half.

Thermal pollution . . .

"Hot" water--environmental threat?

Two nuclear power plants in Nebraska will soon be adding millions of gallons into the 50 trillion gallons of heated water discharged in U.S. waterways each year.

Thermal electric plants discharge heated water, "in some cases with devastating effects," according to Dr. J. I. Bregman, Deputy Asst. Secretary of the Dept. of the Interior for water pollution.

Nuclear power plants in Nebraska are being constructed at Brownville and Fort Calhoun.

In theory, water is taken into the plant from the river, then the water, always in constant movement, is used for its electrical value. The water then leaves the plant through pipes and returns to the river. The same water is not reused.

Conflict arises over the temperature difference of the water when it is returned to the river.

University of Nebraska asst. professor of Zoology and Physiology, G. L. Hergenrader, currently studying the probable effects from the power plants for the Nebraska Game and Parks Commission, said that it is possible that the warm water effluents might be harmful to biological life.

On the other hand, Supt. of the Nebraska Public Power owned Brownville plant, R. E. Buntain of Lincoln, said that the heated water will return to the river at approximately five degrees higher than when it was taken into the plant and will have no devastating effects.

"The temperature of the water that returns to the river dissipates very quickly, so we do not foresee damages occurring to the Missouri River," Buntain said.

Nevertheless, Buntain said that the power plant will conduct "thermal studies" of the river. Some of the studies have already been conducted but they will continue for years after the plant becomes operational.

In Nebraska, there seems to be a good deal of cooperation between the power plants and the state government.

But Hergenrader said that there are reasons to be cautious. For example, the state recently set up an air pollution control commission. Hergenrader pointed out that the commission is composed of a sizeable number of men who are in industry.

Hergenrader compares this situation to asking "a fox to guard the hens."

He sees the issue of who does the controlling as one that will be of particular concern with the possible expansion of nuclear power plants in Nebraska.

"For the people of Nebraska, it is a question of what they want the Missouri River to be," Hergenrader said. "I'm led to believe that most people would rather pay higher prices for electricity than destroy the environment," he added.

Concerning expenses, Buntain said that the Brownville plant will not use water coolant towers (i.e. safety devices which some conservationist advocate.) because for one reason, they are expensive. (Estimates run as high as 10 million dollars per tower). The expense would be borne by the consumer, Buntain said.

