Cliffs, Maryland. The AEC countered that it was sufficient to take the word of a state agency or the Environmental Protection Agency (EPA) that effluents would be within federal limits. A three-judge appeals court—denouncing the AEC for making a "mockery" of NEPA— ruled that, in every licensing action, the AEC must determine for itself the impact of a plant's effluents, then weigh these environmental "costs" against the plant's presumed benefits. In so doing, the AEC would not foreclose the possibility that it might have to apply even stricter standards in special circumstances.

Against the wishes of the utility industry and some members of the Joint

Sperm Banks Multiply as Vasectomies Gain Popularity

How do you make a deposit at a sperm bank? At Idant Corporation, a rapidly growing young company that opened a branch in suburban Baltimore, Maryland, a few weeks ago, the procedure is simple.

The customer need only have observed at least 48 hours of prior continence—to ensure a high sperm count—to qualify as a depositor. He strolls into Idant's small laboratory, which is manned only by a secretary and a laboratory biologist, fills out a form, and plunks down the $80 fee required for the processing and freezing of three semen specimens. He then retreats to a tiny room furnished with a comfortable armchair, two pornographic magazines, and an ashtray. (He may also drop off his sample on the way to work, providing it is less than 2 hours old at the time of deposit.) The ejaculate is examined, diluted with a glycerol preservative, and stored in 12 or 15 little plastic vials resembling ball-point pen refills. The vials are stored in three metal cannisters and submerged in stainless steel barrels filled with liquid nitrogen, which bubbles away at its boiling point of −196°C.

The customer, usually a man about to undergo a vasectomy, pays an annual storage fee of $18 until such time as he should change his mind or his wife, whereupon his semen is delivered to his wife's physician, who performs the artificial insemination. The average number of semen injections required to make a woman pregnant is 14. The chances of pregnancy are about 50 percent—somewhat lower than the 70 percent pregnancy rate when fresh sperm are used.

Idant, which set up a New York bank last December, is one of two new corporations that have sprung up to capitalize on the current surge of vasectomies. Last year 750,000 of the operations were performed, and 1 million are expected in 1972. The other corporation, Genetic Laboratories, Inc., of Minnesota, began in 1970 and now has banks in five major cities. The main function of these banks is to provide "fertility insurance" for men who have reservations about being sterilized. The service is also appropriate for men who anticipate being involuntarily sterilized, either through cancer treatment or hazardous jobs (Idant has a sample from a crewman on a nuclear submarine). In addition, the banks will also purchase sperm, at around $20 a shot, from donors for the impregnation of women whose husbands are sterile. The market looks so promising that both companies are planning rapid expansion—Idant envisions banks in 20 major cities by next year and intends to extend its operations to England and Japan.

While all this sounds like a fine way simultaneously to make money and add to the sum of human happiness, the advent of the commercial frozen sperm bank raises a number of disturbing questions. For one thing, the American Public Health Association's population council issued a statement in February warning that sufficient data did not exist to indicate that frozen sperm would retain potency after 16 months. Idant's 29-year-old vice president, pathologist Jerome Silbert, insists to the contrary that successful inseminations have been made with sperm frozen up to 10 years and there is no reason to believe it could not stay viable for centuries.

Much more serious, though, is the fact that there are virtually no regulations in any state governing this type of operation. Anyone with a few thousand dollars, some vials, and some liquid nitrogen can go into business.

The ethics of this enterprise is also in doubt. Biologist Mark Lappé of the Institute of Society, Ethics and the Life Sciences in Hastings-on-Hudson, New York, is disturbed that commercial outfits are the first to introduce large-scale sperm banking. If it is worthwhile, he says, the government should be taking the lead. Silbert responds that "it has to be done commercially" because the government, as well as private foundations, are afraid to touch so controversial an undertaking.

Lappé also feels that the promise of possible fatherhood in the future "plays on the basic anxieties of the male," and since most vasectomized depositors will never make a withdrawal, a sperm bank can supply just another way to parlay anxiety into money. Silbert puts things in a more charitable light—that the opportunity to freeze one's sperm "removes some of the psychological burden of the irreversibility of vasectomy."

The most perplexing ethical questions pop up around the insemination of women with the sperm of anonymous donors—a practice for which cryogenic sperm preservation opens up broad new vistas. Donor insemination "is functionally serving as fostering eugenic aims," says Lappé. That is, the availability of the service could promote an unhealthy preoccupation with "good genes," alter the nation's gene pool, produce unwitting consanguineous marriages in the next generation, and encourage women to line up for the sperm of some latter-day Einstein. All this is rather unlikely, but Americans do seem to feel that a new technology, once available, must be exploited. One unusual arrangement has already been reported. A prominent Minnesotan has laid away some sperm to be used to carry on the family line in the event his only son proves sterile.

As is often the case, private enterprise has leaped into an ethical and legal vacuum, and the price may be left for future generations to pay.—CONSTANCE HOLDEN