Fuqua Biotech Bill Sets Stage for Industry Debate

Legislation to regulate the release of genetically altered organisms into the environment has been introduced by Representative Don Fuqua (D–FL). Under the bill, the Environmental Protection Agency or the Department of Agriculture would have to issue a permit before an organism could be released or distributed outside containment areas.

Entitled "The Biotechnology Science Coordination Act of 1986," Fuqua says the bill is intended to establish a "clear and certain path from the laboratory to the marketplace" for biotechnology products. At the same time, the chairman of the House Science and Technology Committee notes that the government has the responsibility to "balance the enormous promise of biotechnology with the unique risk this technology may pose."

Findings of a General Accounting Office study done at the committee's request and testimony by agency officials, Fuqua says, shows that "there is no uniform, well-considered federal policy toward the deliberate release of genetically engineered organisms." The existing statutes, the congressman says, did not comptemplate dealing with genetically altered organisms—and as a result federal regulation of the technology has been "piecemeal." As evidence of the shortcomings, Fuqua cites EPA's failure to inspect the site for a field test proposed by Advanced Genetic Sciences.

The legislation calls for the Biotechnology Science Coordinating Committee under the Office of Science and Technology Policy to become a permanent body mandated by law. Its role would be much the same—to address the scientific problems related to the technology; set guidelines covering laboratory and manufacturing processes; and review agency regulatory policies.

A special Biotechnology Advisory Panel would be created within EPA under Fuqua's bill. It would be charged with reviewing applications for permits to test and later market products. Similarly, within Agriculture, a Recombinant DNA Advisory Committee would be created to advise the department's secretary and review permit requests. Under proposed revisions to the Toxic Substances Control Act, a three-tiered structure of permits would be established governing laboratory tests, fields tests, and product marketing.

Fuqua wants to set up a Biotechnology Science Research Program to advance cooperative research between industry participants and the government. One specific mission is to learn to better predict how genetically altered organisms will interact with the environment. But the overall aim of the research program, says Fuqua, is to conduct basic research and provide data for use by both government and industry. As Fuqua envisions the research program, it would be partly funded by the private sector, but operated by a board of governors independent of both government and industry. ■

MARK CRAWFORD

Don Fuqua

Abattoir-Turned-Museum Opens for Halley's Encounter

Paris

The timing was matchless. Last week's encounter between the European Space Agency's probe Giotto and Halley's Comet provided the perfect event to celebrate the inauguration of the world's largest science and technology museum, set in the Parc de la Villette on the northeast perimeter of Paris.

The Halley encounter also provided some light camouflage for the fact that the inauguration of what is properly known as "la Cité des Sciences et de l'Industrie" took place 2 days before the end of the campaign for France's parliamentary elections on 16 March.

President François Mitterrand, who cut the ribbon on opening night, had long made it clear that he intended the museum to be one of the landmarks both of his own 7-year period in office (which officially ends in 1988), and the 5 years of his socialist government, which ended last week.

For both Mitterrand and the government, the museum has come to symbolize France's new commitment to science, modernization, and high technology. For example, the official Socialist Party poster for the elections showed Prime Minister Laurent Fabius sitting with five cabinet colleagues in an office overlooking the museum's 100-foot diameter spherical cinema, La Géode.

Initial plans for the museum had been prepared in the late 1970's under the guidance of physicist Maurice Lévy, a former president of the National Centre for Space Studies, and approved in 1979 by then President Valery Giscard d'Estaing. The administration of the time was relieved to find a new use for a building that had become the center of a major political row, namely, a vast modern abattoir built at great expense by the City of Paris which proved outdated by new transportation technology in the meat trade even before it was opened (*Science*, 26 August 1983, p. 836).

However, there were no opposition figures to be seen at last week's inauguration. This was a five-and-a-half hour spectacular "la nuit de la comète" attended by 6000 guests and transmitted live on national television. The high point was planned to be the direct broadcast from ESA's control center in Darmstadt of Giotto's encounter with Halley's Comet.

Like the encounter itself, which suffered a temporary loss of radio contact during the closest moments between the probe and the comet, the inauguration was something of an anticlimax. Fewer than one-third of the exhibits were operating, and visitors spent most time admiring the spectacular interior architecture of a building whose main hall is 120 feet high, and whose total floor space is more than a quarter of a million square feet.

The remaining galleries will be opened to the public in stages over the next 6 months. The permanent and temporary exhibition halls will be complemented by an international conference center, a scientific reference library, a planetarium, and a range of other facilities which, the organizers hope, will make the museum both the subject of regular visits by school children from all over France and one of Paris's most popular tourist attractions.

Its use both as a didactic tool and a display case for French science and technology—major exhibits, for example, already include models of the Ariane rocket and the deep-sea submersible Nautilus—is hoped to justify the $650-million cost of converting the building and creating the collection of exhibits virtually from scratch.

Lévy, who was appointed director at the end of 1983 after the project had come in for some tough questioning from the scientific community, says the combination of pedagogy, spectacle, and entertainment represents the first of a new generation of science museums which he expects to see imitated in other countries in the future. ■

DAVID DICKSON