

Nuclear Latency (NL) Dataset
Country Coding Sheets

SPAIN

COW COUNTRY CODE: 230

List of Country's Enrichment and Reprocessing (ENR) Facilities

1. Juan Vigon Reprocessing Plant

Detailed Facility-Specific Information and Sources

1. Juan Vigon Reprocessing Plant

- a. ENR type (diffusion, centrifuge, EMIS, chemical and ion exchange, aerodynamic isotope separation, reprocessing).*

Reprocessing.

- b. Facility size (laboratory, pilot, commercial).*

Pilot. IAEA documents refer to this as the "M-1 pilot reprocessing plant." However, it may be more accurate to classify this as a laboratory-scale facility. Some sources refer to it as "small," and note that Spain had plans to build a larger reprocessing facility (but those plans were subsequently cancelled).

- c. Is the facility under construction or in operation? If under construction, list the construction years. If in operation, list the years of operation.*

Spain operated this plant from 1967 to 1971. It reportedly reprocessed spent MTR fuels.

- d. Was the facility developed covertly? If so, identify years that facility was covert.*

Spain did not engage in a concerted effort to keep this facility secret. Work at Juan Vigon was reported in multiple scientific journals as early as 1967 (see, for example, here: <http://www.osti.gov/scitech/biblio/4496078-juan-vigon-center-nuclear-energy-cies-pilot-plant-treatment-radioactive-liquid-waste-low-radioactivity-circuit>).

- e. Was the facility placed under IAEA safeguards? If so, identify the years that the facility was safeguarded.*

The facility is listed as safeguarded in INFCIRC/291 (February 1982). However, according to our sources, the plant stopped reprocessing plutonium in 1971. It therefore does not appear to have been safeguarded during the time that it operated, but it was afterwards.

- f. *Was the facility placed under regional safeguards? If so, identify the years that the facility was under regional safeguards.*

Euratom safeguards would have applied to this facility after Spain joined the organization in the 1980s. But this facility was not under Euratom safeguards while it operated.

- g. *Did the facility have a military purpose?*

Spain may have harbored bomb-related ambitions during the 1960s and 1970s. A formerly top secret CIA document from 1974 (37) concluded, "Spain is the one European country that is deserving of some attention as a possible proliferator in the years ahead." The document does not reference a nuclear weapons program existing during the time that the reprocessing plant operated. For now, we have coded this as a non-military plant. New information may emerge in the future, however, that causes us to alter this coding.

- h. *Was the facility multinational? If so, identify the other countries that were involved.*

No.

- i. *Was the facility built with foreign assistance? If so, list the supplier(s) and what they provided.*

There is no evidence of foreign assistance.

- j. *Sources.*

CIA. 1974. *Prospects for Further Proliferation of Nuclear Proliferation*. Special National Intelligence Estimate, 23 August.
<http://nsarchive.gwu.edu/NSAEBB/NSAEBB240/snle.pdf>.

Harmon, K.M. 1978. *Summary of National and International Radioactive Waste Management Programs*. Richland, WA: Pacific Northwest National Laboratory.

IAEA. 1982. "The Text of the Agreement of 1 April 1981 Between Spain and the Agency for the Application of Safeguards Relating to Four Nuclear Facilities." INFCIRC/291. February.

Mellinger, P.J., K.M. Harmon, and L.T. Lakey. 1984. *A Summary of Nuclear Fuel Reprocessing Activities Around the World*. Richland, WA: Pacific Northwest National Laboratory.

Moglewer, Sidney. 1981. "IAEA Safeguards and Nonproliferation," *Bulletin of the Atomic Scientists*, October, p. 27.

Additional Notes:

Zentner et al. include Spain as pursuing diffusion enrichment due to Spanish partnership in Eurodif (private correspondence). Because we code facilities based on their geographic location, Spain's contribution to Eurodif is recorded in the French dataset.