under Federal helium refining program to obtain loans and issue obligations to carry out program.

§ 167k. Violations; penalties

Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this chapter or any regulation or order issued or any terms of a license granted thereunder shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation, shall upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(Mar. 3, 1925, ch. 426, §13, as added Pub. L. 86–777, §2, Sept. 13, 1960, 74 Stat. 923.)

§ 1671. Injunctions

Whenever in the judgment of the Secretary any person has engaged or is about to engage in any act or practice which constitutes or will constitute a violation of any provision of this chapter, or any regulation or order issued or any term of a license granted thereunder, any such act or practice may be enjoined by any district court having jurisdiction of such person, and proper proceedings to this end may be instituted under the direction of the Attorney General of the United States.

(Mar. 3, 1925, ch. 426, §14, as added Pub. L. 86–777, §2, Sept. 13, 1960, 74 Stat. 923.)

§ 167m. Information

(a) Transparency

The Secretary, acting through the Bureau of Land Management, shall make available on the Internet information relating to the Federal Helium System that includes—

- (1) continued publication of an open market and in-kind price;
- (2) aggregated projections of excess refining capacity;
- (3) ownership of helium held in the Federal Helium Reserve:
- (4) the volume of helium delivered to persons through the Federal Helium Pipeline:
- (5) pressure constraints of the Federal Helium Pipeline;
- (6) an estimate of the projected date when 3,000,000,000 standard cubic feet of crude helium will remain in the Federal Helium Reserve and the final phase described in section 167d(c) of this title will begin;
- (7) the amount of the fees charged under section 167c of this title;
- (8) the scheduling of crude helium deliveries through the Federal Helium Pipeline; and
- (9) other factors that will increase transparency.

(b) Reporting

Not later than 90 days after October 2, 2013, to provide the market with appropriate and timely information affecting the helium resource, the Director of the Bureau of Land Management shall establish a timely and public reporting

process to provide data that affects the helium industry, including—

- (1) annual maintenance schedules and quarterly updates, that shall include—
- (A) the date and duration of planned shutdowns of the Federal Helium Pipeline;
- (B) the nature of work to be undertaken on the Federal Helium System, whether routine, extended, or extraordinary;
- (C) the anticipated impact of the work on the helium supply:
- (D) the efforts being made to minimize any impact on the supply chain; and
- (E) any concerns regarding maintenance of the Federal Helium Pipeline, including the pressure of the pipeline or deviation from normal operation of the pipeline;
- (2) for each unplanned outage, a description of—
 - (A) the beginning of the outage;
 - (B) the expected duration of the outage;
 - (C) the nature of the problem;
 - (D) the estimated impact on helium supply:
 - (E) a plan to correct problems, including an estimate of the potential timeframe for correction and the likelihood of plan success within the timeframe:
 - (F) efforts to minimize negative impacts on the helium supply chain; and
 - (G) updates on repair status and the anticipated online date;
- (3) monthly summaries of meetings and communications between the Bureau of Land Management and the Cliffside Refiners Limited Partnership, including a list of participants and an indication of any actions taken as a result of the meetings or communications; and
- (4) current predictions of the lifespan of the Federal Helium System, including how much longer the crude helium supply will be available based on current and forecasted demand and the projected maximum production capacity of the Federal Helium System for the following fiscal year.

(Mar. 3, 1925, ch. 426, §15, as added Pub. L. 113-40, §6(3), Oct. 2, 2013, 127 Stat. 541.)

PRIOR PROVISIONS

A prior section 167m, act Mar. 3, 1925, ch. 426, §15, as added Pub. L. 86–777, §2, Sept. 13, 1960, 74 Stat. 923; amended Pub. L. 104–273, §7, Oct. 9, 1996, 110 Stat. 3319, related to a National Academy of Sciences study and report on helium, prior to repeal by Pub. L. 113–40, §6(1), Oct. 2, 2013, 127 Stat. 540.

§ 167n. Helium gas resource assessment (a) In general

Not later than 2 years after October 2, 2013, the Secretary, acting through the Director of the United States Geological Survey, shall—

- (1) in coordination with appropriate heads of State geological surveys—
- (A) complete a national helium gas assessment that identifies and quantifies the quantity of helium, including the isotope helium-3, in each reservoir, including assessments of the constituent gases found in each helium resource, such as carbon dioxide, nitrogen, and natural gas; and

- (B) make available the modern seismic and geophysical log data for characterization of the Bush Dome Reservoir:
- (2) in coordination with appropriate international agencies and the global geology community, complete a global helium gas assessment that identifies and quantifies the quantity of the helium, including the isotope helium-3, in each reservoir;
- (3) in coordination with the Secretary of Energy, acting through the Administrator of the Energy Information Administration, complete—
 - (A) an assessment of trends in global demand for helium, including the isotope helium-3;
 - (B) a 10-year forecast of domestic demand for helium across all sectors, including scientific and medical research, commercial, manufacturing, space technologies, cryogenics, and national defense; and
 - (C) an inventory of medical, scientific, industrial, commercial, and other uses of helium in the United States, including Federal uses, that identifies the nature of the helium use, the amounts required, the technical and commercial viability of helium recapture and recycling in that use, and the availability of material substitutes wherever possible; and
- (4) submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report describing the results of the assessments required under this paragraph.

(b) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$1,000,000.

(Mar. 3, 1925, ch. 426, §16, as added Pub. L. 113-40, §6(3), Oct. 2, 2013, 127 Stat. 542.)

PRIOR PROVISIONS

A prior section 167n, act Mar. 3, 1925, ch. 426, \S 16, as added Pub. L. 86–777, \S 2, Sept. 13, 1960, 74 Stat. 923, directed the Secretary of the Interior to make annual reports to Congress, prior to repeal by Pub. L. 105–362, title IX, \S 901(q), Nov. 10, 1998, 112 Stat. 3291.

§ 1670. Low-Btu gas separation and helium conservation

(a) Authorization

The Secretary of Energy shall support programs of research, development, commercial application, and conservation (including the programs described in subsection (b))—

- (1) to expand the domestic production of low-Btu gas and helium resources:
- (2) to separate and capture helium from natural gas streams; and
- (3) to reduce the venting of helium and helium-bearing low-Btu gas during natural gas exploration and production.

(b) Programs

(1) Membrane technology research

The Secretary of Energy, in consultation with other appropriate agencies, shall support a civilian research program to develop ad-

vanced membrane technology that is used in the separation of low-Btu gases, including technologies that remove helium and other constituent gases that lower the Btu content of natural gas.

(2) Helium separation technology

The Secretary of Energy shall support a research program to develop technologies for separating, gathering, and processing helium in low concentrations that occur naturally in geological reservoirs or formations, including.

- (A) low-Btu gas production streams; and
- (B) technologies that minimize the atmospheric venting of helium gas during natural gas production.

(3) Industrial helium program

The Secretary of Energy, working through the Advanced Manufacturing Office of the Department of Energy, shall carry out a research program—

- (A) to develop low-cost technologies and technology systems for recycling, reprocessing, and reusing helium for all medical, scientific, industrial, commercial, aerospace, and other uses of helium in the United States, including Federal uses; and
- (B) to develop industrial gathering technologies to capture helium from other chemical processing, including ammonia processing.

(c) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$3,000,000.

(Mar. 3, 1925, ch. 426, §17, as added Pub. L. 113–40, §6(3), Oct. 2, 2013, 127 Stat. 542.)

PRIOR PROVISIONS

A prior section 17 of act Mar. 3, 1925, ch. 426, was redesignated section 20 and is set out as a Separability note under section 167 of this title.

§ 167p. Helium-3 separation

(a) Interagency cooperation

The Secretary shall cooperate with the Secretary of Energy, or a designee, on any assessment or research relating to the extraction and refining of the isotope helium-3 from crude helium and other potential sources, including—

- (1) gas analysis; and
- (2) infrastructure studies.

(b) Feasibility study

The Secretary, in consultation with the Secretary of Energy, or a designee, may carry out a study to assess the feasibility of—

- (1) establishing a facility to separate the isotope helium-3 from crude helium; and
- (2) exploring other potential sources of the isotope helium-3.

(c) Report

Not later than 1 year after October 2, 2013, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report that contains a description of the results of the assessments conducted under this section.