MAZ19620 S.L.C.

AMENDMENT NO._____ Calendar No._____

Purpose: To support carbon dioxide utilization and direct air capture research, to facilitate the permitting and development of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

IN THE SENATE OF THE UNITED STATES—116th Cong., 1st Sess.

S. 1790

AMENDMENT No. 0652

By Barrasso

To: S.1790

33

Page(s)

GPO: 2018 33-682 (mac)

or military
or military
ne Depart-
personnel
purposes.
_____ and
ed

AMENDMENT intended to be proposed by Mr. BARRASSO (for himself, Mr. WHITEHOUSE, Mrs. CAPITO, Mr. CARPER, Mr. CRAMER, Ms. SMITH, Mr. ROUNDS, Mr. COONS, Mr. HOEVEN, and Mr. MANCHIN)

Viz:

At the end of subtitle H of title X, add the following:

SEC. _____. UTILIZING SIGNIFICANT EMISSIONS WITH INNOVATIVE TECHNOLOGIES.

(a) SHORT TITLE.—This section may be cited as the "Utilizing Significant Emissions with Innovative Technologies Act" or the "USE IT Act".

(b) RESEARCH, INVESTIGATION, TRAINING, AND OTHER ACTIVITIES.—Section 103 of the Clean Air Act (42 U.S.C. 7403) is amended—

(1) in subsection (c)(3), in the first sentence of the matter preceding subparagraph (A), by striking "percursors" and inserting "precursors"; and

(2) in subsection (g)—

(A) by redesignating paragraphs (1) through (4) as subparagraphs (A) through (D), respectively, and indenting appropriately;

(B) in the undesignated matter following subparagraph (D) (as so redesignated)—

(i) in the second sentence, by striking "The Administrator" and inserting the following:

"(5) COORDINATION AND AVOIDANCE OF DUPLICATION.—The Administrator"; and

(ii) in the first sentence, by striking "Nothing" and inserting the following:

"(4) EFFECT OF SUBSECTION.—Nothing";

(C) in the matter preceding subparagraph (A) (as so redesignated)—

(i) in the third sentence, by striking "Such program" and inserting the following:

"(3) PROGRAM INCLUSIONS.—The program under this subsection";

(ii) in the second sentence—

(I) by inserting "States, institutions of higher education," after "scientists,"; and

(II) by striking "Such strategies and technologies shall be developed" and inserting the following:

"(2) PARTICIPATION REQUIREMENT.—Such strategies and technologies described in paragraph (1) shall be developed"; and

(iii) in the first sentence, by striking "In carrying out" and inserting the following:

"(1) IN GENERAL.—In carrying out"; and

(D) by adding at the end the following:

"(6) CERTAIN CARBON DIOXIDE ACTIVITIES.—

"(A) IN GENERAL.—In carrying out paragraph (3)(A) with respect to carbon dioxide, the Administrator shall carry out the activities described in each of subparagraphs (B), (C), (D), and (E).

"(B) DIRECT AIR CAPTURE RESEARCH.—

"(i) DEFINITIONS.—In this subparagraph:

"(I) BOARD.—The term 'Board' means the Direct Air Capture Technology Advisory Board established by clause (iii)(I).

"(II) DILUTE.—The term 'dilute' means a concentration of less than 1 percent by volume.

"(III) DIRECT AIR CAPTURE.—

"(aa) IN GENERAL.—The term 'direct air capture', with respect to a facility, technology, or system, means that the facility, technology, or system uses carbon capture equipment to capture carbon dioxide directly from the air.

"(bb) EXCLUSION.—The term 'direct air capture' does not include any facility, technology, or system that captures carbon dioxide—

"(AA) that is deliberately released from a natu-

rally occurring subsurface spring; or

"(BB) using natural photosynthesis.

"(IV) INTELLECTUAL PROPERTY.—The term 'intellectual property' means—

"(aa) an invention that is patentable under title 35, United States Code; and

"(bb) any patent on an invention described in item (aa).

"(ii) TECHNOLOGY PRIZES.—

"(I) IN GENERAL.—Not later than 1 year after the date of enactment of the USE IT Act, the Administrator, in consultation with the Secretary of Energy, shall establish a program to provide, and shall provide, financial awards on a competitive basis for direct air capture from media in which the concentration of carbon dioxide is dilute.

"(II) DUTIES.—In carrying out this clause, the Administrator shall—

"(aa) subject to subclause (III), develop specific requirements for—

"(AA) the competition process; and

"(BB) the demonstration of performance of approved projects;

"(bb) offer financial awards for a project designed—

"(AA) to the maximum extent practicable, to capture more than 10,000 tons of carbon dioxide per year; and

"(BB) to operate in a manner that would be commercially viable in the foreseeable future (as determined by the Board); and

"(cc) to the maximum extent practicable, make financial awards to geographically diverse projects, including at least—

"(AA) 1 project in a coastal State; and

"(BB) 1 project in a rural State.

"(III) PUBLIC PARTICIPATION.—In carrying out subclause (II)(aa), the Administrator shall—

"(aa) provide notice of and, for a period of not less than 60 days, an opportunity for public comment on, any draft or proposed version of the requirements described in subclause (II)(aa); and

"(bb) take into account public comments received in developing the final version of those requirements.

"(iii) DIRECT AIR CAPTURE TECHNOLOGY ADVISORY BOARD.—

"(I) ESTABLISHMENT.—There is established an advisory board to be known as the 'Direct Air Capture Technology Advisory Board'.

"(II) COMPOSITION.—The Board shall be composed of 9 members appointed by the Administrator, who shall provide expertise in—

"(aa) climate science;

"(bb) physics;

"(cc) chemistry;

"(dd) biology;

"(ee) engineering;

"(ff) economics;

"(gg) business management; and

"(hh) such other disciplines as the Administrator determines to be necessary to achieve the purposes of this subparagraph.

"(III) TERM; VACANCIES.—

"(aa) TERM.—A member of the Board shall serve for a term of 6 years.

"(bb) VACANCIES.—A vacancy on the Board—

"(AA) shall not affect the powers of the Board; and

"(BB) shall be filled in the same manner as the original appointment was made.

"(IV) INITIAL MEETING.—Not later than 30 days after the date on which all members of the Board have been appointed, the Board shall hold the initial meeting of the Board.

"(V) MEETINGS.—The Board shall meet at the call of the Chairperson or on the request of the Administrator.

"(VI) QUORUM.—A majority of the members of the Board shall constitute a quorum, but a lesser number of members may hold hearings.

"(VII) CHAIRPERSON AND VICE CHAIRPERSON.—The Board shall select a Chairperson and Vice Chairperson from among the members of the Board.

"(VIII) COMPENSATION.—Each member of the Board may be compensated at not to exceed the daily

equivalent of the annual rate of basic pay in effect for a position at level V of the Executive Schedule under section 5316 of title 5, United States Code, for each day during which the member is engaged in the actual performance of the duties of the Board.

"(IX) DUTIES.—The Board shall advise the Administrator on carrying out the duties of the Administrator under this subparagraph.

"(X) FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Board.

"(iv) INTELLECTUAL PROPERTY.—

"(I) IN GENERAL.—As a condition of receiving a financial award under this subparagraph, an applicant shall agree to vest the intellectual property of the applicant derived from the technology in 1 or more entities that are incorporated in the United States.

"(II) RESERVATION OF LICENSE.—The United States—

"(aa) may reserve a nonexclusive, nontransferable, irrevocable, paid-up license, to have practiced for or on behalf of the United States, in connection with any intellectual property described in subclause (I); but

"(bb) shall not, in the exercise of a license reserved under item (aa), publicly disclose proprietary information relating to the license.

"(III) TRANSFER OF TITLE.—Title to any intellectual property described in subclause (I) shall not be transferred or passed, except to an entity that is incorporated in the United States, until the expiration of the first patent obtained in connection with the intellectual property.

"(v) AUTHORIZATION OF APPROPRIATIONS.—

"(I) IN GENERAL.—Of the amounts authorized to be appropriated for the Environmental Protec-

tion Agency, $35,000,000 shall be available to carry out this subparagraph, to remain available until expended.

"(II) REQUIREMENT.—Research carried out using amounts made available under subclause (I) may not duplicate research funded by the Department of Energy.

"(vi) TERMINATION OF AUTHORITY.—The Board and all authority provided under this subparagraph shall terminate not later than 10 years after the date of enactment of the USE IT Act.

"(C) CARBON DIOXIDE UTILIZATION RESEARCH.—

"(i) DEFINITION OF CARBON DIOXIDE UTILIZATION.—In this subparagraph, the term 'carbon dioxide utilization' refers to technologies or approaches that lead to the use of carbon dioxide—

"(I) through the fixation of carbon dioxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria;

"(II) through the chemical conversion of carbon dioxide to a material or chemical compound in which the carbon dioxide is securely stored; or

"(III) through the use of carbon dioxide for any other purpose for which a commercial market exists, as determined by the Administrator.

"(ii) PROGRAM.—The Administrator, in consultation with the Secretary of Energy, shall carry out a research and development program for carbon dioxide utilization to promote existing and new technologies that transform carbon dioxide generated by industrial processes into a product of commercial value, or as an input to products of commercial value.

"(iii) TECHNICAL AND FINANCIAL ASSISTANCE.—Not later than 2 years after the date of enactment of the USE IT Act, in carrying out this subsection, the Administrator, in consultation with the Secretary of Energy, shall support research and infrastructure activities relating to carbon dioxide utilization by providing technical

assistance and financial assistance in accordance with clause (iv).

"(iv) ELIGIBILITY.—To be eligible to receive technical assistance and financial assistance under clause (iii), a carbon dioxide utilization project shall—

"(I) have access to an emissions stream generated by a stationary source within the United States that is capable of supplying not less than 250 metric tons per day of carbon dioxide for research;

"(II) have access to adequate space for a laboratory and equipment for testing small-scale carbon dioxide utilization technologies, with onsite access to larger test bays for scale-up; and

"(III) have existing partnerships with institutions of higher education, private companies, States, or other government entities.

"(v) COORDINATION.—In supporting carbon dioxide utilization projects under this paragraph, the Administrator shall

consult with the Secretary of Energy, and, as appropriate, with the head of any other relevant Federal agency, States, the private sector, and institutions of higher education to develop methods and technologies to account for the carbon dioxide emissions avoided by the carbon dioxide utilization projects.

"(vi) AUTHORIZATION OF APPROPRIATIONS.—

"(I) IN GENERAL.—Of the amounts authorized to be appropriated for the Environmental Protection Agency, $50,000,000 shall be available to carry out this subparagraph, to remain available until expended.

"(II) REQUIREMENT.—Research carried out using amounts made available under subclause (I) may not duplicate research funded by the Department of Energy.

"(D) DEEP SALINE FORMATION REPORT.—

"(i) DEFINITION OF DEEP SALINE FORMATION.—

"(I) IN GENERAL.—In this subparagraph, the term 'deep saline formation' means a formation of subsurface geographically extensive sedimentary rock layers saturated with waters or brines that have a high total dissolved solids content and that are below the depth where carbon dioxide can exist in the formation as a supercritical fluid.

"(II) CLARIFICATION.—In this subparagraph, the term 'deep saline formation' does not include oil and gas reservoirs.

"(ii) REPORT.—In consultation with the Secretary of Energy, and, as appropriate, with the head of any other relevant Federal agency and relevant stakeholders, not later than 1 year after the date of enactment of the USE IT Act, the Administrator shall prepare, submit to Congress, and make publicly available a report that includes—

"(I) a comprehensive identification of potential risks and benefits to project developers associated with increased storage of carbon dioxide captured from stationary sources in deep saline formations, using existing research;

"(II) recommendations, if any, for managing the potential risks identified under subclause (I), including potential risks unique to public land; and

"(III) recommendations, if any, for Federal legislation or other policy changes to mitigate any potential risks identified under subclause (I).

"(E) REPORT ON CARBON DIOXIDE NONREGULATORY STRATEGIES AND TECHNOLOGIES.—

"(i) IN GENERAL.—Not less frequently than once every 2 years, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and

Commerce of the House of Representatives a report that describes—

"(I) the recipients of assistance under subparagraphs (B) and (C); and

"(II) a plan for supporting additional nonregulatory strategies and technologies that could significantly prevent carbon dioxide emissions or reduce carbon dioxide levels in the air, in conjunction with other Federal agencies.

"(ii) INCLUSIONS.—The plan submitted under clause (i) shall include—

"(I) a methodology for evaluating and ranking technologies based on the ability of the technologies to cost effectively reduce carbon dioxide emissions or carbon dioxide levels in the air; and

"(II) a description of any nonair-related environmental or energy considerations regarding the technologies.

"(F) GAO REPORT.—The Comptroller General of the United States shall submit to Congress a report that—

"(i) identifies all Federal grant programs in which a purpose of a grant under the program is to perform research on carbon capture and utilization technologies, including direct air capture technologies; and

"(ii) examines the extent to which the Federal grant programs identified pursuant to clause (i) overlap or are duplicative.".

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the "Administrator") shall submit to Congress a report describing how funds appropriated to the Administrator during the 5 most recent fiscal years have been used to carry out section 103 of the Clean Air Act (42 U.S.C. 7403), including a description of—

(1) the amount of funds used to carry out specific provisions of that section; and

(2) the practices used by the Administrator to differentiate funding used to carry out that section,

as compared to funding used to carry out other provisions of law.

(d) INCLUSION OF CARBON CAPTURE INFRASTRUCTURE PROJECTS.—Section 41001(6) of the FAST Act (42 U.S.C. 4370m(6)) is amended—

(1) in subparagraph (A)—

(A) in the matter preceding clause (i), by inserting "carbon capture," after "manufacturing,";

(B) in clause (i)(III), by striking "or" at the end;

(C) by redesignating clause (ii) as clause (iii); and

(D) by inserting after clause (i) the following:

"(ii) is covered by a programmatic plan or environmental review developed for the primary purpose of facilitating development of carbon dioxide pipelines; or"; and

(2) by adding at the end the following:

"(C) INCLUSION.—For purposes of subparagraph (A), construction of infrastructure for carbon capture includes construction of—

"(i) any facility, technology, or system that captures, utilizes, or sequesters car-

bon dioxide emissions, including projects for direct air capture (as defined in paragraph (6)(B)(i) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g)); and

"(ii) carbon dioxide pipelines.".

(c) DEVELOPMENT OF CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION REPORT, PERMITTING GUIDANCE, AND REGIONAL PERMITTING TASK FORCE.—

(1) DEFINITIONS.—In this subsection:

(A) CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION PROJECTS.—The term "carbon capture, utilization, and sequestration projects" includes projects for direct air capture (as defined in paragraph (6)(B)(i) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g))).

(B) EFFICIENT, ORDERLY, AND RESPONSIBLE.—The term "efficient, orderly, and responsible" means, with respect to development or the permitting process for carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, a process that is completed in an expeditious manner while maintaining environmental, health, and safety protections.

(2) REPORT.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Chair of the Council on Environmental Quality (referred to in this section as the "Chair"), in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of the Interior, the Executive Director of the Federal Permitting Improvement Council, and the head of any other relevant Federal agency (as determined by the President), shall prepare a report that—

(i) compiles all existing relevant Federal permitting and review information and resources for project applicants, agencies, and other stakeholders interested in the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, including—

(I) the appropriate points of interaction with Federal agencies;

(II) clarification of the permitting responsibilities and authorities among Federal agencies; and

(III) best practices and templates for permitting;

(ii) inventories current or emerging activities that transform captured carbon dioxide into a product of commercial value, or as an input to products of commercial value;

(iii) inventories existing initiatives and recent publications that analyze or identify priority carbon dioxide pipelines needed to enable efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects at increased scale;

(iv) identifies gaps in the current Federal regulatory framework for the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines; and

(v) identifies Federal financing mechanisms available to project developers.

(B) SUBMISSION; PUBLICATION.—The Chair shall—

(i) submit the report under subparagraph (A) to the Committee on Environ-

ment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives; and

(ii) as soon as practicable, make the report publicly available.

(3) GUIDANCE.—

(A) IN GENERAL.—After submission of the report under paragraph (2)(B), but not later than 1 year after the date of enactment of this Act, the Chair shall submit guidance consistent with that report to all relevant Federal agencies that—

(i) facilitates reviews associated with the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines; and

(ii) supports the efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(B) REQUIREMENTS.—

(i) IN GENERAL.—The guidance under subparagraph (A) shall address requirements under—

(I) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(II) the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.);

(III) the Clean Air Act (42 U.S.C. 7401 et seq.);

(IV) the Safe Drinking Water Act (42 U.S.C. 300f et seq.);

(V) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

(VI) division A of subtitle III of title 54, United States Code (formerly known as the "National Historic Preservation Act");

(VII) the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.);

(VIII) the Act of June 8, 1940 (16 U.S.C. 668 et seq.) (commonly known as the "Bald and Golden Eagle Protection Act"); and

(IX) any other Federal law that the Chair determines to be appropriate.

(ii) ENVIRONMENTAL REVIEWS.—The guidance under subparagraph (A) shall include direction to States and other interested parties for the development of programmatic environmental reviews under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) for carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(iii) PUBLIC INVOLVEMENT.—The guidance under subparagraph (A) shall be subject to the public notice, comment, and solicitation of information procedures under section 1506.6 of title 40, Code of Federal Regulations (or a successor regulation).

(C) SUBMISSION; PUBLICATION.—The Chair shall—

(i) submit the guidance under subparagraph (A) to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives; and

(ii) as soon as practicable, make the guidance publicly available.

(D) EVALUATION.—The Chair shall—

(i) periodically evaluate the reports of the task forces under paragraph (4)(E) and, as necessary, revise the guidance under subparagraph (A); and

(ii) each year, submit to the Committee on Environment and Public Works of the Senate, the Committee on Energy and Commerce of the House of Representatives, and relevant Federal agencies a report that describes any recommendations for legislation, rules, revisions to rules, or other policies that would address the issues identified by the task forces under paragraph (4)(E).

(4) TASK FORCE.—

(A) ESTABLISHMENT.—Not later than 18 months after the date of enactment of this Act, the Chair shall establish not less than 2 task forces, which shall each cover a different geographical area with differing demographic, land use, or geological issues—

(i) to identify permitting and other challenges and successes that permitting authorities and project developers and operators face; and

(ii) to improve the performance of the permitting process and regional coordination for the purpose of promoting the efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(B) MEMBERS AND SELECTION.—

(i) IN GENERAL.—The Chair shall—

(I) develop criteria for the selection of members to each task force; and

(II) select members for each task force in accordance with subclause (I) and clause (ii).

(ii) MEMBERS.—Each task force—

(I) shall include not less than 1 representative of each of—

(aa) the Environmental Protection Agency;

(bb) the Department of Energy;

(cc) the Department of the Interior;

(dd) any other Federal agency the Chair determines to be appropriate;

(ee) any State that requests participation in the geographical area covered by the task force;

(ff) developers or operators of carbon capture, utilization, and sequestration projects or carbon dioxide pipelines; and

(gg) nongovernmental membership organizations, the primary mission of which concerns protection of the environment; and

(II) at the request of a Tribal or local government, may include a representative of—

(aa) not less than 1 local government in the geographical

area covered by the task force; and

(bb) not less than 1 Tribal government in the geographical area covered by the task force.

(C) MEETINGS.—

(i) IN GENERAL.—Each task force shall meet not less than twice each year.

(ii) JOINT MEETING.—To the maximum extent practicable, the task forces shall meet collectively not less than once each year.

(D) DUTIES.—Each task force shall—

(i) inventory existing or potential Federal and State approaches to facilitate reviews associated with the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, including best practices that—

(I) avoid duplicative reviews;

(II) engage stakeholders early in the permitting process; and

(III) make the permitting process efficient, orderly, and responsible;

(ii) develop common models for State-level carbon dioxide pipeline regulation and oversight guidelines that can be shared with States in the geographical area covered by the task force;

(iii) provide technical assistance to States in the geographical area covered by the task force in implementing regulatory requirements and any models developed under clause (ii);

(iv) inventory current or emerging activities that transform captured carbon dioxide into a product of commercial value, or as an input to products of commercial value;

(v) identify any priority carbon dioxide pipelines needed to enable efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects at increased scale;

(vi) identify gaps in the current Federal and State regulatory framework and in existing data for the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines;

(vii) identify Federal and State financing mechanisms available to project developers; and

(viii) develop recommendations for relevant Federal agencies on how to develop and research technologies that—

(I) can capture carbon dioxide; and

(II) would be able to be deployed within the region covered by the task force, including any projects that have received technical or financial assistance for research under paragraph (6) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g)).

(E) REPORT.—Each year, each task force shall prepare and submit to the Chair and to the other task forces a report that includes—

(i) any recommendations for improvements in efficient, orderly, and responsible issuance or administration of Federal permits and other Federal authorizations required under a law described in paragraph (3)(B)(i); and

(ii) any other nationally relevant information that the task force has collected in carrying out the duties under subparagraph (D).

(F) EVALUATION.—Not later than 5 years after the date of enactment of this Act, the Chair shall—

(i) reevaluate the need for the task forces; and

(ii) submit to Congress a recommendation as to whether the task forces should continue.