SENATE BILL NO. 468

May 20, 2021, Introduced by Senators OUTMAN, BAYER, HORN, DALEY, WOJNO, ZORN, VICTORY and CHANG and referred to the Committee on Environmental Quality.

A bill to amend 1994 PA 451, entitled "Natural resources and environmental protection act," by amending sections 31502, 31503, 31509, 31517, 31518, and 31523 (MCL 324.31502, 324.31503, 324.31509, 324.31517, 324.31518, and 324.31523), sections 31502, 31503, 31517, 31518, and 31523 as added by 1995 PA 59 and section 31509 as amended by 2004 PA 325, and by adding sections 31506a and 31517a.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Sec. 31502. (1) "Abandonment" means after the owner

- 1 permanently eliminates all hazards or potential hazards associated
- 2 with a dam, the owner takes an affirmative act on the part of an
- 3 owner to discontinue maintenance or operation of a dam.
- 4 (2) "Administrative procedures act of 1969" means Act No. 306
- 5 of the Public Acts of 1969, being sections 24.201 to 24.328 of the
- 6 Michigan Compiled Laws.the administrative procedures act of 1969,
- 7 1969 PA 306, MCL 24.201 to 24.328.
- 8 (3) "Alteration" means a change in the design of an existing
- 9 dam that directly affects or may directly affect the structural
- 10 integrity of a dam.
- 11 (4) "Appurtenant works" means the structure or machinery
- 12 incident to or annexed to a dam that is built to operate and
- 13 maintain a dam, including spillways, either in a dam or separate
- 14 from the dam; low level outlet works; and water conduits such as
- 15 tunnels, pipelines, or penstocks, located either through the dam or
- 16 through the abutments of the dam.
- 17 (5) "Auxiliary spillway" means a secondary spillway which that
- 18 is operational at all times and does not require stoplog removal or
- 19 gate manipulation.
- 20 (6) "Dam" means an artificial barrier, including dikes,
- 21 embankments, and appurtenant works, that impounds, meets all of the
- 22 following requirements:
- 23 (a) Impounds, diverts, or is designed to impound or divert
- 24 water or a combination of water and any other liquid or material in
- 25 the water. ; that is
- 26 (b) Is or will be when complete 6 feet or more in height. +
- 27 and that has
- 28 (c) Has or will have an 1 of the following:
- 29 (i) An impounding capacity at design flood elevation of 5

- 1 surface acres or more.
- 2 (ii) An impounding capacity at design flood elevation of 15 acre-feet or more.
- 4 (7) Dam does not include a storage or processing tank or
 5 standpipe constructed of steel or concrete, a roadway embankment
 6 not designed to impound water, or a dug pond where there is no
 7 impoundment of water or waste materials containing water at levels
 8 above adjacent natural grade levels.
- 9 (8) (7) "Days" means calendar days, including Sundays and 10 holidays.
- (9) (8) "Design flood" means the design flow rate for spillwaycapacity and dam height design.
- (10) (9)—"Design flood elevation" means the maximum flood
 elevation that is considered in the design of the spillway capacity
 and freeboard for a dam.
- 16 (11) (10)—"Downstream toe elevation" means the elevation of
 17 the lowest point of intersection between the downstream slope of an
 18 earthen embankment and the natural ground.
- Sec. 31503. (1) "Emergency action plan" means a plan developed by the owner that establishes procedures for notification of the department, public off-site authorities, and other agencies of the emergency actions to be taken prior to before and following after an impending or actual failure of a dam.
- (2) "Enlargement" means any change in or addition to an
 existing dam which that raises or may raise the design flood
 elevation of the water impounded by the dam.
- 27 (3) "Failed dam" means a dam not capable of impounding water28 at its intended level due to a structural deficiency.
- 29 (4) "Failure" means an incident resulting in an unplanned or

- 1 uncontrolled release of water from a dam.
- 2 (5) "Flood of record" means the greatest flow rate determined3 by the department to have occurred at a particular location.
- 4 (6) "Freeboard" means the vertical distance between the design5 flood elevation and the lowest point of the top of the dam.
- 6 (7) "Half probable maximum flood" means the largest flood that
 7 may reasonably occur over a watershed, and is derived from the
 8 combination of hydrologic runoff parameters and the half probable
 9 maximum storm that produces the maximum runoff.
- (8) "Half probable maximum storm" means the spatial and
 temporal distribution of the probable maximum precipitation,
 divided by 2, that produces the maximum volume of precipitation
 over a watershed.
- 18 (10) "Height" means the difference in elevation measured
 19 vertically between the natural bed of a stream or watercourse at
 20 the downstream toe of the dam, or, if it is not across a stream
 21 channel or watercourse, from the lowest elevation of the downstream
 22 toe of the dam, to the design flood elevation or to the lowest
 23 point of the top of the dam, whichever is less.
- 24 (11) "High hazard potential dam" means a dam located in an
 25 area where a failure may cause serious damage to inhabited homes,
 26 agricultural buildings, campgrounds, recreational facilities,
 27 industrial or commercial buildings, public utilities, main
 28 highways, or class I carrier railroads, or where environmental
 29 degradation or natural resource damage would be significant, or

- 1 where danger to individuals exists with the potential for loss of
- 2 life.
- 3 Sec. 31506a. If a dam or impoundment was previously licensed
- 4 under the federal power act, 16 USC 791a to 793, 796 to 797, 798 to
- 5 818, 820 to 824a, and 824b to 825r, and the dam or impoundment
- 6 subsequently comes under the jurisdiction of this state, the owner
- 7 shall provide the department with an inventory of information that
- 8 was previously provided to the Federal Energy Regulatory Commission
- 9 as part of the requirement for licensure under the federal power
- 10 act, 16 USC 791a to 793, 796 to 797, 798 to 818, 820 to 824a, and
- 11 824b to 825r.
- Sec. 31509. (1) Except as otherwise provided in this part or
- 13 as authorized by a permit issued by the department pursuant to
- 14 under part 13, a person shall not undertake any of the following
- 15 activities:
- 16 (a) Construction of a new dam.
- 17 (b) Enlargement of a dam or an impoundment.
- 18 (c) Repair of a dam.
- 19 (d) Alteration of a dam.
- 20 (e) Removal of a dam.
- 21 (f) Abandonment of a dam.
- 22 (q) Reconstruction of a failed dam.
- 23 (2) An application for a permit shall must include proof of
- 24 financial responsibility and any information that the department
- 25 determines is necessary for the administration of this part. If a
- 26 project includes activities at multiple locations, 1 application
- 27 may be filed for the combined activities.
- 28 (3) An application for a permit for construction of a new dam,
- 29 reconstruction of a failed dam, or enlargement of a dam shall must

- 1 be accompanied by the following fees:
- 2 (a) For a dam with a height of 6 feet or more but less than 10
- **3** feet, \$500.00.
- **4** (b) For a dam with a height of 10 feet or more but less than
- 5 20 feet, \$1,000.00.
- 6 (c) For a dam with a height of 20 feet or more, \$3,000.00.
- 7 (4) An application for a permit for the repair, alteration,
- 8 removal, or abandonment of a dam shall must be accompanied by a fee
- 9 of \$200.00, and an application for a permit for a minor project
- 10 pursuant to under section 31513(1) shall must be accompanied by a
- **11** fee of \$100.00.
- 12 (5) An application for a permit for the abandonment of a dam
- 13 must be accompanied by an abandonment plan prepared under section
- 14 31517a. The department shall approve the abandonment plan before a
- 15 permit is issued under this section.
- 16 (6) (5) The department shall waive the fees under this section
- 17 for applications from state agencies, department sponsored projects
- 18 located on public lands, and organizations of the type described in
- 19 section $\frac{31508(2)}{(a)}$ through (c).31508(2).
- 20 (7) (6)—The department shall forward fees collected under this
- 21 section to the state treasurer for deposit in the land and water
- 22 management permit fee fund created in section 30113.
- 23 Sec. 31517. (1) Except for minor projects authorized pursuant
- 24 to under section 31513, the owner shall do both of the following:
- 25 (a) Within 10 days after the completion of a new,
- 26 reconstructed, enlarged, repaired, or altered dam, notify the
- 27 department of its completion.
- 28 (b) Within 20 days after submitting the notice of completion,
- 29 file with the department as-built plans and a statement signed by a

- 1 licensed professional engineer certifying that the project was
- 2 constructed in conformance with plans and specifications approved
- 3 by the department.
- 4 (2) The department shall inspect conduct 2 inspections of the
- 5 project. and One inspection must be conducted during construction
- 6 of the project, and 1 inspection must be conducted after the
- 7 project is completed. The department shall provide the owner with
- 8 written notice of final approval after the project is completed if
- 9 the project is determined to have been completed in accordance with
- 10 approved plans, specifications, and permit conditions.
- 11 (3) If the project is determined not to be completed in
- 12 accordance with approved plans, and specifications, approved by the
- 13 department and permit conditions as described under subsection (2),
- 14 the department shall provide notice to the permittee as to the
- 15 specific reasons the department determines the project not to be
- 16 completed in accordance with those the approved plans,
- 17 specifications, or **permit** conditions. The department may then take
- 18 enforcement action as provided in this part.
- 19 Sec. 31517a. (1) An owner shall prepare and keep current
- 20 operations and maintenance records for each dam owned by the owner.
- 21 The operations and maintenance records must, at minimum, contain
- 22 all of the following:
- 23 (a) A brief description of the major elements of the dam.
- 24 (b) Operation procedures during normal and high flows.
- 25 (c) Emergency action plans.
- 26 (d) Copies of recent inspection reports submitted to the
- 27 department under section 31518.
- 28 (e) Maintenance work order procedures.
- 29 (f) Sample maintenance and inspections forms.

- 1 (g) Key contact information.
- 2 (2) An owner shall prepare a first-filling plan for each dam
- 3 owned by the owner. A first-filling plan prepared under this
- 4 subsection must be submitted to the department for approval.
- 5 (3) An owner shall prepare and keep current a surveillance and
- 6 monitoring plan for each high hazard or significant hazard dam
- 7 owned by the owner.
- 8 (4) If an owner applies for a permit for the abandonment of a
- 9 dam under section 31509, the owner shall prepare and submit to the
- 10 department an abandonment plan.
- 11 (5) An owner shall maintain all of the records described under
- 12 this section and make the records available to the department on
- 13 request.
- 14 Sec. 31518. (1) An owner shall submit to the department
- 15 inspection reports prepared by a licensed professional engineer
- 16 that evaluate the condition of the dam. The inspection report shall
- 17 must be submitted as follows:
- 18 (a) Not less than once every 3 years year for high hazard
- 19 potential dams.
- 20 (b) Not less than once every 4-2 years for significant hazard
- 21 potential dams.
- (c) Not less than once every 5 years for low hazard potential
- 23 dams.
- 24 (2) The department shall determine the hazard potential
- 25 classification of for all dams and shall establish an inspection
- 26 schedule. The department shall notify the owner of each dam's
- 27 hazard potential classification, the effective date of each hazard
- 28 potential classification, and each dam's hazard potential
- 29 classification history. Within 30 days after the department

- 1 provides notice of a dam's hazard potential classification under
- 2 this subsection, the owner shall provide the department with
- 3 information regarding how the owner will meet the requirements of
- 4 the dam's hazard potential classification including, but not
- 5 limited to, spillway capacity, emergency action plan, inundation
- 6 mapping requirements, and an inspection schedule. An inspection
- 7 schedule shall developed under this subsection must require annual
- 8 submission of inspection reports for approximately 1/3 of all high
- 9 hazard potential dams, $\frac{1}{4}$ of all significant hazard potential
- 10 dams, and 1/5 of all low hazard potential dams. The department
- 11 shall notify owners in writing when inspection reports are due. The
- 12 department may order additional inspection reports following an
- 13 event or change in condition that could threaten a dam.
- 14 (3) An inspection report required by this section shall must
- 15 include, at a minimum, all of the following:
- 16 (a) An evaluation of the dam's condition, spillway capacity,
- 17 operational adequacy, and structural integrity.
- 18 (b) A determination of whether deficiencies exist that could
- 19 lead to the failure of the dam.
- 20 (c) Recommendations for maintenance, repair, and alterations
- 21 of a dam as are necessary to eliminate any deficiencies.
- 22 (d) A review of any emergency action plan.
- 23 (e) An assessment of the appropriateness of the current hazard
- 24 potential classification established under subsection (1) taking
- 25 into consideration the current conditions that exist downstream of
- 26 the dam. An assessment under this subdivision must consider
- 27 conditions related to damage as identified under a significant
- 28 potential hazard dam classification and serious damage as
- 29 identified under a high potential hazard dam classification that

- might have changed since the effective date of the current hazard
 potential classification established under subsection (1).
- 3 (f) An assessment of operations and maintenance based on the 4 requirements of the current operations and maintenance records 5 prepared under section 31517a.
- 6 (g) An evaluation of the risks or changes in risks of
 7 significant potential hazard and low potential hazard dams, if
 8 applicable.

- (h) A review of the original design, construction,
 maintenance, repair, and probable failure of high potential hazard
 and significant potential hazard dams, if applicable.
- (4) Instead of engaging a licensed professional engineer to prepare an inspection report, local units of government or an organization of the type described in section 31508(2)(a) through (c) 31508(2) may request the department to conduct a visual inspection of a dam owned by that local unit of government and prepare a report on the condition of the dam in accordance with subsection (3). The department shall notify a requesting local unit of government as to when the inspection is to occur.
- (5) If an inspection report discloses the need for a more detailed investigation or evaluation of certain dam features for the purpose of determining the condition of the dam, the department may order the completion and submission of that detailed investigation or evaluation at the expense of the owner. An investigation or evaluation required under this subsection shall must be conducted under the supervision of a licensed professional engineer.
- (6) If an owner does not submit an inspection report asrequired by subsection (1) or conduct additional investigations if

- 1 required by subsection (5), the department or any person who that
- 2 would have life or property threatened by a breach of the dam may
- 3 have a report prepared and recover the costs of preparing the
- 4 report in a civil action commenced in a court. of competent
- 5 jurisdiction. This subsection does not limit the right of any
- 6 person to bring a cause of action in a court of proper jurisdiction
- 7 to compel an owner to comply with the requirements of this part.
- **8** (7) If, based on the findings and recommendations of the
- 9 inspection report and an inspection by the department, the
- 10 department finds that a condition exists which endangers a dam, it
- 11 shall order the owner to take actions that the department considers
- 12 necessary to alleviate the danger.
- Sec. 31523. (1) An owner shall prepare, and keep current, on a
- 14 form and in a manner prescribed by the department, emergency action
- 15 plans for all high and significant hazard potential dams owned by
- 16 that person. An owner shall annually review any emergency action
- 17 plans and prepare and submit, on a form and in a manner prescribed
- 18 by the department, updated and accurate emergency action plans.
- 19 (2) Emergency action plans shall—prepared or updated under
- 20 this section must be submitted to the department, local emergency
- 21 management, and all local entities with zoning approval authority
- 22 located within the inundated zone.
- 23 (3) The applicable county or local emergency management
- 24 coordinators shall review for consistency any emergency action
- 25 plans prepared or updated under subsection (1) with the county or
- 26 local emergency operations plan prior to submission of before
- 27 submitting those plans to the department.
- 28 (4) An emergency action plan shall prepared or updated under
- 29 this section must be consistent with the applicable provisions of

- 1 the affected county or local emergency operations plans and the
- 2 Michigan emergency preparedness plan as developed pursuant to under
- 3 the emergency preparedness act, Act No. 390 of the Public Acts of
- 4 1976, being sections 30.401 to 30.420 of the Michigan Compiled
- 5 Haws.management act, 1976 PA 390, MCL 30.401 to 30.421.
- 6 (5) Emergency An emergency action plans shall plan prepared or 7 updated under this section must include, but not be limited to, the 8 all of the following:
- 9 (a) The name, address, and telephone number of the person, and 10 of an alternate person, responsible for operation of the dam. ; the
- (b) The name and telephone number of the local emergency
 management coordinators. ; and a
- (c) A listing of occupied facilities, buildings, and
 residences that may be threatened with flooding due to a failure of the dam.
- 16 (6) If a high hazard potential or significant hazard potential
 17 dam is operating in a river system with multiple water control
 18 structures, the owner shall coordinate to prepare or update any
 19 emergency action plans under this section.
- 20 (7) An owner shall periodically exercise an emergency action 21 plan prepared or updated under this section.
- Enacting section 1. This amendatory act does not take effect unless Senate Bill No. 470 of the 101st Legislature is enacted into law.