ENERGY AND ENVIRONMENT CABINET

Steven L. Beshear
Governor

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
300 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-2150
FAX (502) 564-4245
www.dep.ky.gov

Leonard K. Peters
Secretary

Valerie Hudson
Acting Commissioner

February 10, 2009

U.S. Representative Jim Costa, Chairman
Subcommittee on Energy and Mineral Resources
1324 Longworth House Office Building
Washington, DC 20515-0520

Re: Hearing on H.R. 493, the Coal Ash Reclamation, Environment, and Safety Act of 2009

Dear Chairman Costa,

Thank you for this opportunity for the Commonwealth of Kentucky to share its experience and perspective regarding the regulation of coal ash impoundments. As you know, Kentucky is a coal mining state that relies heavily on coal-fired power plants for its energy production. A 2006 study by the U.S. Department of Energy and U.S. Environmental Protection Agency states that Kentucky leads the nation in coal ash production, producing approximately 14.5 million tons in 2004. Nationally, and in Kentucky, approximately 70 percent of the material is handled as a dry waste while the remainder is handled in a wet form. Safe and effective management of this material must remain a priority in order to protect the Commonwealth's natural resources and the health and safety of its citizens.

Kentucky has statutes and regulations that were developed to protect the environment, and public safety and health from potential threats associated with the management and disposal of coal combustion waste. The regulatory requirements are implemented by Kentucky's Department for Environmental Protection, which is part of the Energy and Environment Cabinet. Within the Department for Environmental Protection, the Division of Waste Management is responsible for regulating the ultimate disposal in a landfill, or beneficial reuse of coal ash material, while the Division of Water is responsible for regulating the design, construction and inspection of coal ash impoundment dams, as well as the discharge of pollutants to surface water or ground water. Some of the risks associated with coal ash management and disposal are catastrophic in nature, as in the case of a dam failure, while other risks are more chronic in nature, such as the potential impact to human health and the environment from exposure of toxic pollutants originating in the material. I understand that the interest of the Subcommittee on Energy and Mineral Resources is the potential catastrophic risks of a structural failure of an impoundment, therefore my comments will focus on these aspects of Kentucky's regulations.

Since approximately 1975, Kentucky has regulated ash ponds that have an embankment in the same manner as we regulate any dam. The Division of Water implements a dam safety program, and we have many years of experience permitting and inspecting these structures. As director of the Division of Water, the Dam Safety Program is under my supervision. There are 967 active dams in Kentucky that the Division inspects. This inventory does not include coal slurry impoundments, which are subject to the Surface Mining Control and

Reclamation Act (SMCRA) and are regulated by Kentucky's Department for Natural Resources, also within the Energy and Environment Cabinet.

A dam is defined by KRS 151 as any structure that is 25 feet in height, measured from the downstream toe to the crest of the dam, or has a maximum impounding capacity of 50 acre-feet or more at the top of the structure. Structures that fail to meet these criteria, but that have the potential to cause significant property damage or pose a threat to life in the downstream area are regulated in the same manner as dams. Of the 967 dams within the division's inventory, 18 are coal ash impoundments and 11 of those are identified as high-hazard or moderate-hazard dams. The hazard classification is based on potential impacts if the dam were to fail according to the following definitions:

- **High Hazard** structures are located such that failure may cause loss of life or serious damage to houses, industrial or commercial buildings, important public utilities, main highways or major railroads.
- **Moderate Hazard** structures are located such that failure may cause significant damage to property and project operation, but loss of human life is not envisioned or poses a threat to relatively important public utilities
- **Low Hazard** structures are located such that failure would cause loss of the structure itself but little or no additional damage to other property.

High- and moderate-hazard dams are inspected every two years. Low-hazard dams are inspected every five years. Inspectors search for signs of distress on the structure such as cracks, slides, or seepage. They also look for trees, woody vegetation and animal burrows. Inspectors check the spillways to ensure that they are neither clogged nor showing signs of deterioration. If the structure meets all the necessary requirements as outline in KRS 151.293 and KRS 151.295(Attachments 1 and 2), a Certificate of Inspection is issued to the owner. Otherwise, the owner is notified of any deficiencies. All of the coal ash impoundments in Kentucky are operated and maintained according to standards and have good compliance histories.

The review of designs and permitting of dams and hazardous impoundments is required as set forth in KRS 151.100 and 401 KAR 4:030 (Attachments 3and 4) and Design Criteria for Dams - Engineering Memorandum #5 available at http://www.water.ky.gov/NR/rdonlyres/EA39D4C4-9645-4D73-B90D-7AFC20DA86FD/0/WRMEMO_5.doc . All such structures except federal dams and coal slurry impoundments (which are permitted through Department for Natural Resources) must be reviewed, and a construction permit issued by the Division of Water. Design criteria, hazard classification information and submittal requirements can be found in this publication.

After the construction permit is issued, the division performs inspections during critical stages of the work. Upon completion of construction, the owner submits a notice of completion along with as-built drawings. When as-built drawings are received, a final inspection is conducted. If all work is satisfactory, the owner is granted permission to impound water and the completed dam is placed on the inventory of dams maintained by the division. In the case of coal ash impoundments, it is important to note that the waste is not disposed of within the impoundment, rather the material settles in the impoundment, then is removed for beneficial reuse or disposal in a landfill. If the material is disposed of in the impoundment, then it must be closed as a landfill, which requires an engineered cap and groundwater monitoring.

Currently there is not a national criterion for dam safety, therefore there are significant variations in programs from state to state. Dam safety is an inter-jurisdictional concern, therefore consistency in standards across jurisdictions is appropriate. Recently the National Committee on Levee Safety proposed a national levee safety program with consistent standards and requirement for levees nationwide. The committee's draft report is currently under review by the Office of Management and Budget and is available at http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report_012009_DRAFT.pdf. The draft Recommendations for a National Levee Safety Program may provide additional insights for your consideration.

The December spill at the Tennessee Valley Authority's Kingston Plant in Harriman, Tennessee has brought into sharper focus concerns regarding an aspect of dam safety that Kentucky currently does not regulate, that being the development of emergency action plans (EAPs) for dam failures. In October, 2000 Kentucky experienced its own disastrous spill, a coal slurry impoundment operated by Martin County Coal Company released 300 million gallons of coal slurry waste into subsurface mine shafts, which then inundated local streams, destroying property, impacting water supplies, and smothering aquatic organisms. It resulted in a massive cleanup and extensive stream restoration work. Although the spill was not a result of a dam failure, this catastrophic release demonstrated the need for the development of EAPs that identify risks and guide emergency response in the case of a dam failure.

Currently, and for the third consecutive year, there is proposed legislation before the Kentucky General Assembly that would mandate the development of emergency action plans (EAPs) for high hazard potential impoundments (Attachment 5). The legislation, if passed, will require the Energy and Environment Cabinet to develop regulations requiring the development, submission for approval, and implementation of EAPs for high hazard potential impoundments. The plans will be based on guidance published by the Federal Emergency Management Agency (FEMA) and take into account the characteristics of the impounded material in establishing requirements for breach analysis and inundation mapping.

The Energy and Environment Cabinet met in January 2009 with the Utilities Information Exchange of Kentucky, an association that represents the coal–fired power generation industry, to discuss EAPs and other regulatory approaches under evaluation for managing coal combustion waste. The industry representatives indicated that they are preparing for regulations regarding EAP development, and recognize the potential development of other regulations regarding the chronic risks associated with managing coal combustion waste. They stated the importance of maintaining the ability to beneficially reuse the material and they expressed their desire to work with the Division of Waste Management and the Division of Water on any new regulations that may be implemented.

Kentucky's challenge now is to evaluate our current regulatory programs and identify areas of weakness with respect to managing the variety of risks associated with coal combustion waste, whether that risk be contamination of waters of the Commonwealth, human exposure, or catastrophic failure. There are a variety of factors that must be considered when a coal fired power plant is deciding to manage its coal combustion waste as a wet or dry material, including site limitations, as well as environmental and public safety concerns . Another challenge facing Kentucky is to evaluate its regulatory programs to ensure that there are no impediments to choosing the approach that is in the best interest of protecting human health and the environment.

Please do not hesitate to contact me if I can be of further assistance. I can be reached at (502) 564-3410 or at sandy.gruzesky@ky.gov.

Sincerely,

E-Signed by Sandy Guzesky
VERIFY authenticity with ApproveIt

Sandra Gruzesky, P.E., Director
Division of Water

151.293 Certificates of inspection.

(1) Within sixty (60) days of completion of an on-site inspection of an existing dam, the cabinet may either grant a certificate of inspection, or deny the certificate of inspection and notify the owner in writing, stating the reasons for denial.

(2) In deciding whether or not a certificate of inspection should be issued, the cabinet shall take into account all pertinent facts and conditions, but shall not issue a certificate unless the following conditions have been met:

(a) The proposed action in the judgment of the cabinet will be conducted in such a way that the safety of the public is adequately provided for;

(b) All information requested by the cabinet has been provided; and

(c) The changed flow of the stream or level of the reservoir will not significantly interfere with a beneficial use by other water users.

(3) In granting a certificate of inspection, the cabinet may impose such conditions relating to the inspection, operation, maintenance, alteration, repair, use, or control of a dam or reservoir as it determines are necessary for the protection of public health, safety or welfare.

(4) The cabinet may establish hazard categories for dams based on downstream floodplain use, size, or type of dam, or other criteria, and may impose different conditions or types of conditions on the approval of dams or reservoirs in the different categories. The hazard categories in all cases shall be based only on the actual risk imposed by the dam.

(5) The cabinet may utilize the results and information provided by or for the United States Army Corps of Engineers pursuant to the provisions of Public Law 92-367 if the information is not more than one (1) year old at the time of use.

(6) Certificates of inspection shall be for a definite period of time, not to exceed five (5) years, as determined by the cabinet and stated on the certificate. In determining the period of inspection, the cabinet may take account of any circumstances pertinent to the situation, including, but not limited to, the size and type of dam, topography, geology, soil conditions, hydrology, climate, use of the reservoir, the lands lying in the floodplain downstream from the dam, and the hazard category of the dam.

(7) The cabinet may modify a certificate of inspection or the conditions attached to it. Such modification shall become effective ninety (90) days following issuance by the cabinet of a revised certificate, except when the cabinet finds that a state of emergency exists and that life or property would be endangered by delay. In case of an emergency declared by the cabinet, the new conditions shall be effective immediately.

(8) Specific guidelines for issuance and renewal of certificate of inspection for earth embankment dams shall be provided by administrative regulations which shall address at least the following areas:

(a) The hydraulic capacity requirements for each category of dam shall be provided. The probable maximum precipitation as determined by the United States Weather Service shall be used only where it can be clearly demonstrated that failure of the dam by overtopping would result in greater

loss of life than would occur if the dam did not exist and only for small watersheds, since such large rainfall events are not expected to occur over large areas. The cabinet shall provide a table of factors that reduce this rainfall appropriately for larger watersheds;

(b) Minimum criteria for the embankment stability of the dam, including consideration of such factors as steepness of slopes, strength of materials, and earthquake loadings shall be specified;

(c) Variance procedures for applicable hydraulic and stability considerations shall be included for, but not limited to, variances to hydraulic criteria where only a small number of persons are at risk and where a reliable, effective emergency preparedness system will be installed; where a risk analysis demonstrates that at rainfall levels less than that specified in the administrative regulation there is no risk that actually results from the dam; where an owner can demonstrate that the dam substantially conforms to the criteria in the administrative regulation; and, for dams that pose a risk of economic damages only, where the owner provides indemnification against potential damages;

(d) Before any variance is issued, the affected public shall be notified of the cabinet's intended action and allowed to make known any objections or concerns that it might have;

(e) Whenever the owner of a dam has requested a variance and the request has not been granted or has not been granted in the manner requested, the owner or aggrieved party may petition the cabinet to have the variance request and the cabinet's preliminary decision on it reviewed by an unbiased, three (3) person panel of qualified experts to be named by the Environmental Quality Commission in consultation with the Kentucky Water Research Institute. The panel shall make nonbinding recommendations to the cabinet with regard to these matters. After reviewing the recommendations, the cabinet will make a final determination on the variance. If not satisfied by the finding of the panel or the determination of the cabinet, the party may seek administrative remedy from the cabinet under the provisions of KRS 151.182;

(f) Items of general maintenance of a dam shall include provisions for at least the following: dams shall be mowed regularly; dams shall be free of trees and brush; animal burrows shall not be allowed on dams; slides, erosion and cracks that could pose problems to dams shall be properly repaired; action shall be taken to alleviate excessive wetness and abnormal seepage; appurtenances that are necessary for the proper operation and maintenance of the dam shall be kept in proper working condition;

(g) Provisions shall be made whereby the cabinet will allow for staged renovation of dams that do not meet the criteria of the administrative regulations and shall clearly identify the circumstances under which staging is allowable and set a maximum time limit that may be allowed for bringing the dam into compliance. Other provisions shall require the owner to develop and maintain an emergency action plan, to provide interim insurance, bonding or other indemnification, and on a frequent basis as specified by the cabinet, to inspect

the dam and report to the cabinet the status of any facilities or conditions of concern; and

(h) If the cabinet has previously required a dam to be upgraded to meet a certain dam safety standard, it shall not require that the dam be upgraded again because of a change in the administrative regulation with regard to that same standard. However, if the owner proposes substantial construction on the dam or if the dam must be repaired due to indications of distress or to partial failure, the cabinet may require the owner to bring the dam into full compliance with current standards.

(9) The cabinet shall establish guidelines on a case-by-case basis for gravity dams and other types of dams that are unusual to the Commonwealth, and shall follow recognized engineering practice.

(10) Plans and specifications submitted to the cabinet shall be the responsibility of and signed by an engineer licensed by the Commonwealth and experienced in the design and construction of dams, as determined by the cabinet.

Effective: July 15, 1988

History: Amended 1988 Ky. Acts ch. 405, sec. 2, effective July 15, 1988. -- Amended 1978 Ky. Acts ch. 206, sec. 1, effective June 17, 1978. -- Created 1974 Ky. Acts ch. 285, sec. 8.

151.295 Regular inspections of dams and reservoirs.

The public safety and welfare requiring it, the secretary shall conduct a program of regular inspections of dams and reservoirs within the state. The frequency of such inspections shall be as determined by the secretary, who may establish different inspection intervals.

History: Amended 1974 Ky. Acts ch. 74, Art. III, sec. 13(9). -- Created 1974 Ky. Acts ch. 285, sec. 9.

151.100 Definitions.

As used in KRS 151.110 to 151.460 and 151.990, the words listed herein shall have the following respective meanings, unless another or different meaning or intent shall be clearly indicated by the context:

(1) The word "authority" shall mean the Water Resources Authority of Kentucky;

(2) The word "cabinet" shall mean the Environmental and Public Protection Cabinet;

(3) The word "stream" or "watercourse" shall mean any river, creek or channel, having well defined banks, in which water flows for substantial periods of the year to drain a given area, or any lake or other body of water in the Commonwealth;

(4) The word "diffused surface water" shall mean that water which comes from falling rain or melting snow or ice, and which is diffused over the surface of the ground, or which temporarily flows vagrantly upon or over the surface of the ground as the natural elevations and depressions of the surface of the earth may guide it, until such water reaches a stream or watercourse;

(5) The word "ground water" or "subterranean water" shall mean all water which fills the natural openings under the earth's surface including all underground watercourses, artesian basins, reservoirs, lakes, and other bodies of water below the earth's surface;

(6) The word "floodway" shall mean that area of a stream or watercourse necessary to carry off flood water as determined by the secretary;

(7) The word "floodplain" shall mean the area in a watershed that is subject to inundation;

(8) The word "watershed" shall mean all the area from which all drainage passes a given point downstream;

(9) The word "domestic use" shall mean the use of water for ordinary household purposes, and drinking water for poultry, livestock, and domestic animals;

(10) The word "water resources project" or "project" shall mean any structural or nonstructural study, plan, design, construction, development, improvement or any other activity including programs for management, intended to conserve and develop the water resources of the Commonwealth and shall include all aspects of water supply, flood damage abatement, navigation, water-related recreation, and land conservation facilities and measures;

(11) The word "withdraw" or "withdrawal of water" shall mean the actual removal or taking of water from any stream, watercourse or other body of public water;

(12) The word "dam" shall mean any artificial barrier, including appurtenant works, which does or can impound or divert water, and which either:

(a) Is or will be twenty-five (25) feet or more in height from the natural bed of the stream or watercourse at the downstream toe of the barrier, as determined by the cabinet; or

(b) Has or will have an impounding capacity at maximum water storage elevation of fifty (50) acre-feet or more;

(13) "Embankment dam" shall mean any dam constructed of excavated natural materials or of industrial waste materials;

(14) "Gravity dam" shall mean a dam constructed of concrete or masonry that relies on its weight for stability;

(15) The word "person" shall mean any individual, public or private corporation, political subdivision, government agency, municipality, copartnership, association, firm, trust, estate, or other entity whatsoever;

(16) "Secretary" shall mean the secretary of the Environmental and Public Protection Cabinet;

(17) "Authorized representative" shall mean an individual specifically authorized by the secretary to act in his behalf;

(18) The word "reservoir" shall mean any basin which contains or will contain the water impounded by a dam; and

(19) "Owner" shall mean any person who owns an interest in, controls, or operates a dam.

Effective: July 15, 1988

History: Amended 1988 Ky. Acts ch. 405, sec. 1, effective July 15, 1988. -- Amended 1984 Ky. Acts ch. 111, sec. 84, effective July 13, 1984; and ch. 216, sec. 1, effective July 13, 1984. -- Amended 1982 Ky. Acts ch. 214, sec. 1, effective July 15, 1982. -- Amended 1974 Ky. Acts ch. 74, Art. III, sec. 13(9); and ch. 285, sec. 1. -- Created 1966 Ky. Acts ch. 23, sec. 1.

Legislative Research Commission Note (6/20/2005). 2005 Ky. Acts chs. 11, 85, 95, 97, 98, 99, 123, and 181 instruct the Reviser of Statutes to correct statutory references to agencies and officers whose names have been changed in 2005 legislation confirming the reorganization of the executive branch. Such a correction has been made in this section.

401 KAR 4:030. Design criteria for dams and associated structures.

RELATES TO: KRS 151.250
STATUTORY AUTHORITY: KRS 151.125, 224.01-110(6)(b), 224.10-100(17)
NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation is necessary to establish minimum design criteria for dams and associated structures constructed in Kentucky.

Section 1. This administrative regulation applies to all dams as defined by KRS 151.100 and to all other impounding obstructions which might create a hazard to life or property.

Section 2. Except as modified in this administrative regulation, the procedures outlined by the latest edition of "Design of Small Dams" (Second Edition, 1973), available from the U.S. Government Printing Office and the Department of Reclamation, herein filed by reference, shall be the minimum criteria.

Section 3. The Division of Water Engineering Memorandum No. 5 (2-1-75) outlined as follows: Section A. Definitions; Section B. Structure Classification; Section C. Hydrologic Criteria; Section D. Sediment Storage; Section E. Principal Spillways; Section F. Emergency Spillways; Section G. Earth Embankments; and Section H. Utilities Under Embankments; is hereby incorporated by reference and made a part of this administrative regulation as if fully set out herein. Copies are available from the Division of Water upon request.

Section 4. Structure types not generally used in Kentucky, i.e. gravity, buttress, steel, timber, etc., will be considered on an individual basis and reviewed in accord with prevailing practices that are currently accepted by the engineering profession.

Section 5. In all cases the safety of the structure, the water and/or other material impounded therein, property and human life will be the principal governing factors. Under no circumstances will the proposed use of the structure and its contents, or the cost of providing an unquestionably safe structure be allowed to assume precedence over the possible hazard involved.

Section 6. Structures which are to be repaired or reconstructed must be made to conform to the criteria established by this administrative regulation.

Section 7. Each of the following stated criteria indicates whether the limit is a maximum or minimum limit and is not to be construed as being satisfactory design criteria at all sites. Professional judgment, state laws and administrative regulations, investigations, or analysis may dictate more conservative criteria.

Section 8. (1) Approval of all plans and specifications shall be divided into two (2) distinct parts:
(a) Issuance of a construction permit pursuant to KRS 151.250 shall constitute approval of the final engineering documents to allow construction to be started; and
(b) Final written approval by the cabinet upon receipt of the "as-built" plans and specifications will constitute approval to impound.
(2) No approval to impound water and/or other material is implied or is in any way granted until the "as-built" plans and specifications have been approved, an on-site inspection has been made, and a written statement of approval issued. It is recommended that the owner and/or his engineer contact this division before initiation of final design for a predesign conference.

Section 9. All plans and specifications submitted for consideration must bear the seal and signature of the responsible engineer as defined in KRS 322.010(2), except officers and employees of the United States Government while engaged in engineering for the government. Each sheet of the drawings shall bear the seal and signature of the engineer or engineers responsible for its preparation.

Section 10. All structures, other than Class A as defined in Engineering Memorandum No. 5 (2-1-75) shall have a complete subsurface investigation and soil analysis submitted as an integral part of the drawings.

Section 11. (1) Elevation area capacity data and elevation discharge data must be submitted as a part of the plans for each structure. This elevation area capacity data shall give the area and capacities from the elevation of the lowest point in the impoundment area to at least the elevation at the top of the dam. When the configuration of the structure will not allow the elevation discharge relationship to be developed by methods accepted as standard by the engineering profession, the structure must provide the storage necessary to contain the entire storm run-off without probable damage to the structure or creating an unacceptable hazard to life or property.
(2) When this required basic information is furnished by the responsible design engineer, the Division of Water will upon request assist the engineer in preparing the flood routings required by Engineering Memorandum No. 5 (2-1-75).
(3) In the event that the elevation area capacity data is not furnished or the flood routings show that insufficient floodwater storage has been provided, the plans will be returned to the design engineer without being approved.

Section 12. All information concerning elevations shall refer to mean sea level and the use of assumed elevations for any purpose is prohibited. Should an error in either the horizontal control or vertical control become known during construction, the necessary information to correct the distances and the elevations shall be referred to on the first sheet of the "as-built" drawing or referred to in the index. Clearly marked reference points and bench marks shall be maintained at the job site by the responsible engineer until final written approval is received.

Section 13. Unless waived in writing by the cabinet, no structure shall be approved unless a positive means is provided to pass water through the structure in sufficient quantity to satisfy the needs of downstream users and to empty the reservoir within a reasonable length of time. Conditions considered in determining downstream water requirements and required minimum time to empty the impoundment shall be determined by the responsible engineer and referred to on the drawings.

Section 14. Construction supervision and inspection must be performed by or under the direction of the design engineer. Unless otherwise directed by the cabinet the engineer shall submit monthly progress reports on forms to be supplied by the cabinet. Copies of all testing reports shall be submitted with the progress reports.

Section 15. All "as-built" documents shall be submitted by the responsible engineer in the form of permanent type drawings of a standard and uniform size. Variations in size will be permitted for federal agencies in order that they may use their standard drawings. Drawings that do not conform to standard practices or drawings that are not easily legible will not be accepted.

Section 16. Because of the cabinet's statutory duty to review federal projects for the Commonwealth under KRS 151.220, the United States Army Corps of Engineers is exempt from the provisions of this administrative regulation and KRS 151.250. (DOW-Rg-2; 1 Ky.R. 759; eff. 6-11-75.)

A JOINT RESOLUTION relating to Emergency Action Plans for high hazard potential dams.

WHEREAS, there exist numerous impoundments in the Commonwealth that are classified as "high" hazard potential structures, the failure of which could pose a hazard to life; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has published "Emergency Action Planning Guidelines for Dams," that defines the need for, and provides guidance for preparation and implementation of Emergency Action Plans (EAPs) for such high hazard potential impoundments; and

WHEREAS, according the most recent report of FEMA to Congress under the National Dam Safety Program Act, only a fraction of state-regulated dams in Kentucky have developed EAPs; and

WHEREAS, since 1994 the development of EAPs has been recommended by the Mine Safety and Health Administration for coal mine waste impoundments; and

WHEREAS, the Environmental and Public Protection Cabinet has enabling authority pursuant to KRS 151.125 to develop, after notice and comment, such administrative regulations as are deemed necessary or useful for the safe construction, enlargement, repair, alteration, maintenance, and operation of dams or reservoirs, and the authority is broad enough to encompass a requirement for development and submission of EAPs to the Division of Water or the Division of Mine Reclamation and Enforcement, as applicable under KRS 151.250(3); and

WHEREAS, the protection of life and property and maintenance of an appropriate level of emergency preparedness is in the best interests of the owner of high hazard potential impounding structures and downstream populations alike;

NOW, THEREFORE,

Be it resolved by the General Assembly of the Commonwealth of Kentucky:

➔Section 1. The Environmental and Public Protection Cabinet is directed to file

with the Legislative Research Commission, within one hundred eighty (180) days of the effective date of this Resolution, proposed regulations requiring development, submission for approval, and implementation of Emergency Action Plans (EAPs) for all high hazard potential impoundments regulated under KRS Chapters 151 and 350. The regulations:

(a) Shall be based on the requirements of this Resolution and guidance published by the Federal Emergency Management Agency (FEMA) for development of EAPs and shall take into account the characteristics of the impounded material in establishing requirements for breach analysis and inundation mapping;

(b) Shall provide a reasonable time frame for development and submission of the EAPs by owners of high hazard potential impoundments, as that term is defined by FEMA;

(c) May include tiered filing deadlines consistent with construction, age, or volume of material impounded by the high hazard potential impounding structures and the resources available to the agency for program development and implementation;

(d) Shall, to the extent such information is available and sufficient to support development of the EAP, allow use of geographic information systems and aerial mapping data for preparation of inundation maps and breach analyses; and

(e) Shall be promulgated in consultation with other agencies with jurisdiction over certain types or classes of impoundments during regulation development in order to assure consistency in reporting and inspection requirements and to minimize unnecessary costs in development and implementation of EAPs. In the event that either the federal Office of Surface Mining or the Mine Safety and Health Administration adopts regulations requiring development and approval of EAPs for coal mine related impoundments, the cabinet shall revise its regulations in order to maintain consistency in the development, reporting and monitoring requirements for such plans.