Indiana Department of Homeland Security

Radioactive Materials Control Program

Draft Request for

US Nuclear Regulatory Commission

Agreement State Status

Date Submitted: XX/XX/XXXX

1.0 Preface

Formal Request for an Agreement
State of Indiana

This document is prepared as the submittal for the State of Indiana's request to become an Agreement State as authorized by the Atomic Energy Act (AEA) of 1954, as amended. This Agreement will provide for the State of Indiana's assumption of regulatory authority over radioactive materials not involved in energy production used in the State of Indiana from the United States Nuclear Regulatory Commission (NRC).

2.0 Introduction

On June 11, 2021, Governor Eric J. Holcomb sent NRC Chairman Honorable Christopher T. Hanson a letter of intent for Indiana to enter into an Agreement with the NRC. Since that time, the Indiana Department of Homeland Security Radioactive Materials Control Program has been granted authority by the Indiana General Assembly for entering into an Agreement and establishing a regulatory program for Radioactive Materials, promulgated regulations for purposes of entering into an Agreement, trained and qualified staff for licensing and inspection responsibilities to be assumed under the Agreement, and developed this Request with the procedures, forms, and other content to meet the criteria and information needs in the NRC's Handbook for Processing an Agreement. References to the content are provided throughout this request. Key documents are available here in their entirety:

- Indiana Code Title 10, Article 19, Chapter 12 (2022), the enabling legislation found in Appendix 4.1-1
- The Radioactive Materials Rule (regulations) found in Appendix 4.1-2

3.0 Overview

This document is prepared using the guidance in the NRC Office of Nuclear Material Safety and Safeguards *Handbook for Processing an Agreement* dated April 1, 2021. The Information Needed and Evaluation Criteria specified in Section 4.0 of the Handbook are addressed herein to ensure that the State of Indiana has a compliant and compatible program for the control of licensees who possess, use, store, transfer, and dispose of radioactive materials in the State of Indiana.

The State of Indiana seeks to enter into an Agreement with the NRC assuming regulatory authority over byproduct materials, source materials, special nuclear materials in quantities not sufficient to form a critical mass, in addition, the State seeks to regain regulator authority over those materials transferred to the NRC by the Energy Policy Act of 2005. The following information is provided in support of this application to become an Agreement State.

4.0 Information Needed and Evaluation Criteria

This section addresses the information that the NRC requires, to review and Agreement request and the evaluation criteria that the NRC staff will use as a baseline. This is based on *Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement*, known as the Criteria Policy Statement, and described in Section 4.0 of the *Handbook for Processing an Agreement*. The Handbook criteria are in bold, and the content to meet the criteria follows.

4.1 Legal Elements

In this section is found the information needed to meet the evaluation criteria in the *Handbook for Processing an Agreement* Subsections:

4.1.1 Authority to Establish a Program and Enter into an Agreement

4.1.2 Organization of the Proposed Program; and

4.1.3 Content of the Proposed Agreement

The handbook criteria are in bold, and the content to meet the criteria follows.

4.1.1 Authority to Establish a Program and Enter into an Agreement.

4.1.1.1 Information Needed

For all categories of materials for which the state is requesting authority, the State should submit State law that:

4.1.1.1.a Establishes the Agreement materials program, defines its structure, and authorizes the Governor to enter into an Agreement with the Commission.

The Indiana Department of Homeland Security Radioactive Materials Control Program (hereinafter "the Department") statutory authority to establish the Agreement State program and define its structure is provided in IC 10-19-12-11

The governor, on behalf of the state, is authorized to enter into agreements with the U.S. Nuclear Regulatory Commission under Section 274b of the Atomic Energy Act of 1954, as amended, providing for discontinuance of certain of commission's licensing and related regulatory authority with respect to byproduct, source, and special nuclear materials and the assumption of regulatory authority therefore by this state.

The structure of the Agreement Materials Program is provided below in Section 4.1.2.

4.1.1.1.b Authorizes the program to issue licenses, including the following:

IC 10-19-12-6 authorizes the program to issue licenses:

> *Sec. 6. (a) The department shall adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses.*

4.1.1.1.b.1 Authorizes the program to impose additional license requirements;

IC 10-19-12-6(a)( ) (2) and (4) states: ~~provides such authority by specifically stating the department shall have the authority to "...at any time after the filing of the application, and before the expiration of the license, require further written statements and may make such inspections as the department may deem necessary in order to determine whether the license should be modified, suspended, or revoked.~~"

(2) Each license shall be in such form and contain such terms and conditions as the department may by rule or regulation prescribe.

(4) The terms and conditions of all licenses shall be subject to amendment, revision, or modification by rules, regulations, or orders issued in accordance with the provisions of this chapter.

4.1.1.1.b.2 Authorizes the program to give exemptions from licensing requirements;

10-19-12-6(c) authorizes the program to:

...exempt certain sources of radiation or kinds of uses or users from the licensing or registration requirements set forth in this section when the department makes a finding that the exemption of such sources of radiation or kinds of uses or users will not constitute a significant risk to the health and safety of the public.

4.1.1.1.b.3 Authorizes the program to recognize the licenses of other jurisdictions (that is reciprocity);

10-19-12-6(d) provides such authority to the program:

Rules and regulations promulgated under this chapter may provide for recognition of other state or federal licenses as the department shall deem desirable, subject to such registration requirements as the department may prescribe.

4.1.1.1.b.4 Makes it unlawful to acquire, possess, store, use, transfer or dispose of materials without a valid license, or to violate the conditions of a license;

IC 10-19-12-16 defines prohibited acts related to radiation and radioactive materials:

It shall be unlawful for any person to use, manufacture, produce, distribute, sell, transport, transfer, install, repair, receive, acquire, own, or possess any source of radiation unless licensed by or registered with the department in conformance with rules and regulations, if any, promulgated in accordance with the provisions of this chapter.

4.1.1.1.b.5 Authorizes the program to recognize licenses transferred from the NRC under the Agreement as State licenses.

10-19-12-6(d) provides such authority to the program:

Rules and regulations promulgated under this chapter may provide for recognition of other state or federal licenses as the department shall deem desirable, subject to such registration requirements as the department may prescribe.

4.1.1.1.c Authorizes the program to adopt regulation.

IC 10-19-12-6 authorizes the program to:

adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses. The rules must also provide the following:

(1) Each application for a specific license shall be in writing and shall state such information as the department, by rule or regulation, may determine to be necessary to decide the technical and financial qualifications or any other qualifications of the applicant as the department may deem reasonable and necessary to protect the occupational health and safety and public health and safety. The department may at any time after the filing of the application, and before the expiration of the license, require further written statements and may make such inspections as the department may deem necessary in order to determine whether the license should be modified, suspended, or revoked. All applications and statements shall be signed by the applicant or licensee. The department may require any applications or statements to be made under oath or affirmation.

(2) Each license shall be in such form and contain such terms and conditions as the department may by rule or regulation prescribe.

(3) No license issued under the authority of this chapter and no right to possess or use sources of radiation granted by any license shall be assigned or in any manner disposed of unless the department shall, after securing full information, find that the transfer is in accordance with the provisions of this chapter, and shall give its consent in writing.

(4) The terms and conditions of all licenses shall be subject to amendment, revision, or modification by rules, regulations, or orders issued in accordance with the provisions of this chapter.

4.1.1.1.c.1 Specifies the procedures and requirements for adoption of regulations, including public participation.

IC 10-19-12-5 (c) provides such requirements:

(c) The department shall, for the protection of the occupational health and safety, public health and safety, and environment, do the following:

(1) Develop programs for evaluation and control of hazards associated with use of sources of radiation.

(2) Develop programs with due regard for compatibility with federal programs for regulation of byproduct, source, and special nuclear materials.

(3) Adopt rules and regulations, which may provide for licensing and registration, relating to control of sources of radiation with due regard for compatibility with the regulatory programs of the federal government.

(4) Issue such orders or modifications thereof as may be necessary in connection with proceedings under this chapter.

IC 10-19-12-5 (e) (1) and (2) provides such requirements:

1) Consult with and review regulations and procedures of a state agency or department that regulates, in part, radiation or radiation generating equipment to prevent unnecessary duplication, inconsistencies, or gaps in regulatory requirements.

(2) Review, before and after, the holding of any public hearing required under the provisions of this chapter prior to promulgation, the proposed rules and regulations of any state agencies that relate to the use and control of

radiation, to assure that the rules and regulations are consistent with other agencies. Proposed rules and regulations are not effective until thirty (30) days after submission to the department, unless either the governor or the department waives all or part of the thirty (30) day period. The waiting period runs concurrently with any other waiting period required by state law.

IC 4-22-2-23(a) and (a)(1) provides such requirements:

(a) An agency shall provide notice in the Indiana Register of the first public comment period required by this section. To publish notice of the first public comment period in the Indiana Register, the agency must submit the following to the publisher:

(1) A statement of the date, time, and place at which the hearing required by section 26 of this chapter will be convened, including information for who to attend the public hearing remotely.

4.1.1.1.c.2 Allows the program to impose requirements in the form of other generic legally binding requirements, such as license conditions or orders.

IC 10-19-12-6(a) provides such authority to the program:

The department shall adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocations of licenses. The rules must also provide the following:

(2) Each license shall be in such form and contain such terms and conditions as the department may by rule or regulation prescribe.

(4) The terms and conditions of all licenses shall be subject to amendment, revision, or modification by rules, regulations, or orders issued in accordance with the provisions of this chapter

4.1.1.1.d Authorizes representatives of the program to enter premises and conduct inspections.

IC 10-19-12-9 provides such authority to the program: :

The department or its duly authorized representatives shall have the power to enter at all reasonable times upon any private or public property for the purpose of determining whether or not there is compliance with or violation of the provisions of this chapter and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the federal government shall be effected only with the concurrence of the federal government or its duly designated representative.

4.1.1.1.e Authorizes the program to require compliance with regulatory requirements by both licensees and unlicensed individuals.

IC 10-19-12-4 provides the definition:

(12) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, state agency other than the department, political subdivision of this state, any other state or political subdivision or agency thereof, and any legal successor, representative, agent, or agency of the foregoing, but not including federal government agencies.

Using this definition of "person", IC 10-19-12-16 describes prohibited acts for both licensed and unlicensed individuals to ensure compliance with regulatory requirements (emphasis added):

Sec. 16. It shall be unlawful for any person to use, manufacture, produce, distribute, sell, transport, transfer, install, repair, receive, acquire, own, or possess any source of radiation unless licensed by or registered with the department in conformance with rules and regulations, if any, promulgated in accordance with the provisions of this chapter.

~~IC 10-19-12-9 states "The department or its duly authorized representatives shall have the power to enter at all reasonable times upon any private or public property for the~~

~~purpose of determining whether or not there is compliance with or violation of the provisions of this chapter and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the federal government shall be effected only with the concurrence of the federal government or its duly designated representative."~~

4.1.1.1.f Authorizes the program to impose sanctions for violations of the regulations, orders, or license conditions.

IC 10-19-12-6 authorizes the program to:

adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses.

IC 10-19-12-15 defines injunctions proceedings:

Whenever, in the judgment of the department, any person has engaged in or is about to engage in any acts or practices that constitute or will constitute a violation of any provision of this chapter, or any rule, regulation, or order issued thereunder, the department may, in lieu of issuing an administrative order, apply for an order from a circuit or superior court in the county in which the person takes a substantial step toward violating a law, or a violation occurs. Upon a showing by the department that such person has engaged or is about to engage in any such acts or practices, a permanent or temporary injunction, a restraining order, or other order may be granted.

IC 10-19-12-17 authorizes the program to:

in the event of an emergency to impound or order the impounding of sources of radiation in the possession of any person who is not equipped to observe or fails to observe the provisions of this chapter or any rules or regulations issued thereunder.

IC 10-19-12-18(a) gives the program authority to impose civil penalties:

Any person who violates any licensing or registration provision of this chapter or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license or registration certificate issued thereunder, or commits any violation for which a license or registration certificate may be revoked under rules or regulations issued under this chapter may be subject to a civil penalty, to be imposed by the department, not to exceed then thousand dollars ($10,000).

4.1.1.1.g Establishes conflict of interest and ethics regulations or procedures applicable to those portions of the State Radioactive Materials Control Program covered by the Agreement.

~~IC 10-19-12-13 states "Ordinances, resolutions, or regulations, now or hereafter in effect, of the governing body of a municipality or county or of state agencies, other than the department under section 5 of this chapter, relating to byproduct, source, and special nuclear materials shall be superseded by this chapter."~~

IC 4-2-6 establishes ethics and conflicts of interest for state employees, officers and special state appointees. State employees, state officers and special state appointees are defined in IC 4-2-6-1. IC 4-2-6-6 mentions disclosure of confidential information by addressing that, "No state officer or employee, former state officer or employee, special state appointee, or former special state appointee shall accept any compensation from any employment, transaction, or investment which was entered into or made as a result of material information of a confidential nature."

IC 4-2-6-5.5(a) provides that:

A current state officer, employee, or special state appointee may not knowingly do any of the following:

(1) Accept other employment involving compensation of substantial value if the responsibilities of that employment are inherently incompatible with the responsibilities of public office or require the individual's recusal from matters so central or critical to the performance of the individual's official duties that the individual's ability to perform those duties would be materially impaired.

(2) Accept employment or engage in business or professional activity that would require the individual to disclose confidential information that was gained in the course of state employment.

(3) Use or attempt to use the individual's official position to secure unwarranted privileges or exemptions that are:

(A) of substantial value; and

(B) not properly available to similarly situated individuals outside state government.

Rules promulgated under IC 4-2-6 are outlined in 42 IAC 1-5.

4.1.1.2 Evaluation Criteria

4.1.1.2.a State law must authorize the Governor to enter into an Agreement. It must also designate a radiation control agency and provide it the necessary legal authority to be effective.

IC 10-19-12-11(a) states:

The governor, on behalf of the state, is authorized to enter into agreements with the U.S. Nuclear Regulatory Commission under Section 274b of the Atomic Energy Act of 1954, as amended, providing for discontinuance of certain of the commission’s licensing and related regulatory authority therefore by this state.

IC 10-19-12-5(a) states:

The Indiana Department of Homeland Security is designated as the state agency responsible for carrying out the duties of this chapter.

4.1.1.2.b State law must not create duplications, gaps, or conflicts in regulation. This includes duplications, gaps, or conflicts between the State and the NRC, State agencies, or State and local agencies. The law must not seek to regulate materials or activities reserved to the NRC.

The State of Indiana is incorporating the required parts of 10 CFR by reference to eliminate the possibility of duplications, gaps, or other conflicts in regulation, including duplications, gaps, or conflicts between the State and the NRC, State agencies, or State and local agencies.

Preventing duplications, gaps, and conflicts between State agencies is addressed at IC 10-19-12-13 which states that "Ordinances, resolutions, or regulations, now or hereafter in effect, of the governing body of a municipality or country or of state agencies, other than the department under section 5 of this chapter, relating to byproduct, source, and special nuclear materials shall be superseded by this chapter."

IC 10-19-12-5 prescribes procedures to identify duplications, gaps, and conflicts stating the following (emphasis added):

(c) The department shall, for the protection of the occupational health and safety, public health and safety, and environment, do the following: …

(e) The department shall coordinate the registration, regulation, and use of radiation generating equipment under subsection (d). The department shall do the following in carrying out the duties of this subsection: . . .

(1) Consult with and review regulations and procedures of a state agency or department that regulates, in part, radiation or radiation generating equipment to prevent unnecessary duplication, inconsistencies, or gaps in regulatory requirements.

(2) Review, before and after, the holding of any public hearing required under the provisions of this chapter prior to

promulgation, the proposed rules and regulations of any state agencies that relate to the use and control of radiation, to assure that the rules and regulations are consistent with other agencies**.** Proposed rules and regulations are not effective until thirty (30) days after submission to the department, unless either the governor or the department waives all or part of the thirty (30) day period. The waiting period runs concurrently with any other waiting period required by state law.

(3) Consult with state agencies in an effort to resolve inconsistencies if the department determines that a proposed rule or regulation is inconsistent with an existing rule or regulation.

(4) Notify the governor if an inconsistency under subdivision (3) has not been resolved. Upon notification, the governor may find that the proposed rules and regulations or parts thereof are inconsistent with the rules and regulations of other agencies of the state and may issue an order to that effect in which event the proposed rules or regulations or parts thereof shall not become effective. The governor may, in the alternative, upon a similar determination, direct the appropriate agency or agencies to amend or repeal existing rules or regulations to achieve consistency with the proposed rules or regulations.

4.1.1.2.c State law must authorize issuing licenses as the means of giving the authority to possess and use Agreement materials. It should also authorize the reciprocal recognition of specific licenses issued by the NRC or other Agreement States.

IC 10-19-12-6(a) authorizes the program to:

adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses.

IC 10-19-12-6(d) allows for:

Rules and regulations promulgated under this chapter may provide for recognition of other state or federal licenses as the department shall deem desirable, subject to such registration requirements as the department may prescribe.

4.1.1.2.d State law should authorize the use of license conditions to address matters unique to the licensee. The law should allow license conditions to impose additional requirements when required to protect public health and safety. If the law restricts the use of license conditions, the State should show that they can provide adequate protection under the restrictions. The protection should be at least equivalent to using license conditions and orders.

IC 10-19-12-6(a) authorizes the program to:

adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses.

IC 10-19-12-6(a) (1) states:

Each application for a specific license shall be in writing and shall state such information as the department, by rule or regulation, may determine to be necessary to decide the technical and financial qualifications or any other qualifications of the applicant as the department may deem reasonable and necessary to protect the occupational health and safety and public health and safety. The department may at any time after the filing of the application, and before the expiration of the license, require further written statements and may make such inspections as the department may deem necessary in order to determine whether the license should be modified, suspended, or revoked. All applications and statements shall be signed by the applicant or licensee. The department may require any applications or statements to be made under oath or affirmation.

4.1.1.2.e The law should permit exemptions from licensing requirements if the exemptions do not adversely affect public health and safety. This should include exemption(s) from licensing substantially equivalent to the following (or such exemptions must be included in the State's regulations).

10-19-12-6(c) states:

The department is authorized to exempt certain sources of radiation or kinds of uses or users from the licensing or registration requirements set forth in this section when the department makes a finding that the exemption of such sources of radiation or kinds of uses or users will not constitute a significant risk to the health and safety of the public.

Because Indiana is incorporating relevant parts of 10 CFR by reference, as is the case for the NRC, Indiana will authorize exemptions from licensing substantially equivalent to the requirement of *Handbook for Processing an Agreement* Section 4.1.1.2(e)1. through 4., below:

1. Prime contractors working for the U.S. Department of Energy (DOE) at U.S. Government-owned or controlled sites.
2. Prime contractors researching, developing, manufacturing, storing, testing, or transporting atomic weapons or components.
3. Prime contractors using or operating nuclear reactor or other nuclear devices in a U.S. Government-owned vehicle or vessel; and
4. Any other prime contractor (or subcontractors) of DOE or NRC when the State and NRC jointly determine (i) that the terms of the contract provide adequate assurance that the contractor can accomplish the work without undue risk to public health and safety and (ii) that the law authorizes exemptions.

The particular sections of 10 CFR the State of Indiana are incorporating by reference relevant to exempting the above contractors among other are 10 CFR 30.12, 40.11, and 70.11.

4.1.1.2.f The law must authorize the Agreement materials program to enforce regulations or generic legally binding requirements other than regulations. The law may authorize another agency (such as a board of health) to adopt the regulations. When appropriate, the law should provide for public participation.

~~IC 10-19-12-9 states:~~

~~The department of its duly authorized representatives shall have the power to enter at all reasonable times upon any private or public property for the purpose of determining whether or not there is compliance with or violation of the provisions of this chapter and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the federal government shall be effected only with the concurrence of the federal government or its duly designated representative.~~

IC 10-19-12-18 (a) states:

Any person who violates any licensing or registration provision of this chapter or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license or registration certificate issued thereunder, or commits any violation for which a license or registration certificate may be revoked under rules or regulations issued under this chapter may be subject to a civil penalty, to be imposed by the department, not to exceed ten thousand dollars ($10,000). If any violation is a continuing one, each day of such violation shall constitute a separate violation for the purpose of computing the applicable civil penalty. The department shall have the power to compromise, mitigate, or remit such penalties.

IC 10-19-12-5 (e) (2) and (3) states:

(2) Review, before and after, the holding of any public hearing required under the provisions of this chapter prior to promulgation, the proposed rules and regulations of any state agencies that relate to the use and control of radiation,

to assure that the rules and regulations are consistent with other agencies. Proposed rules and regulations are not effective until thirty (30) days after submission to the department, unless either the governor or the department waives all or part of the thirty (30) day period. The waiting period runs concurrently with any other waiting period required by state law.

(3) Consult with state agencies in an effort to resolve inconsistencies if the department determines that a proposed rule or regulation is inconsistent with an existing rule or regulation

4.1.1.2.g The law must authorize inspections of licensee operations to ensure compliance with regulatory requirements. It should authorize inspections of unlicensed facilities to assess the risk resulting from accidents or environmental releases of materials. The law should permit access at all reasonable times.

IC 10-19-12-9 provides for inspection and entry upon any private or public property at all reasonable times:

The department or its duly authorized representatives shall have the power to enter at all reasonable times upon any private or public property for the purpose of determining whether or not there is compliance with or violation of the provisions of this chapter and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the federal government shall be effected only with the concurrence of the federal government or its duly designated representative.

4.1.1.2.h The law must provide authority to take prompt enforcement action and should provide a variety of legal sanctions. The law should provide authority to suspend licenses and to impound materials. In cases of an imminent threat to public health and safety, the

law should authorize immediate suspension without prior hearing.

IC10-19-12-14(f) states:

Whenever the department finds that an emergency exists requiring immediate action to protect the public health and safety, the department may adopt emergency rules under IC 4-22-2-37.1 or issue emergency orders under IC 4-21.5-4 to address the emergency.

IC 10-19-12-15 provides the authority:

Whenever, in the judgment of the department, any person has engaged in or is about to engage in any acts or practices that constitutes or will constitute a violation of any provision of this chapter, or any rule, regulation, or order issued thereunder, the department may, in lieu of issuing an administrative order, apply for an order from a circuit or superior court in the county in which the person takes a substantial step toward violating a law, or a violation occurs. Upon a showing by the department that such person has engaged or is about to engage in any such acts or practices, a permanent or temporary injunction, a restraining order, or other order may be granted.

IC 10-19-12-17 authorizes the program:

in the event of an emergency to impound or order the impounding of sources of radiation in the possession of any person who is not equipped to observe or fails to observe the provisions of this chapter, or any rules or regulations issued thereunder.

4.1.1.2.i The law should authorize suspension or revocation of a license for repeated or continued noncompliance. The authority to suspend or revoke a license may be conditioned on a prior administrative or judicial hearing. The program should also have authority to seek injunctive relief and refer licensees for criminal prosecution. The program should also consider authority to impose civil or administrative monetary penalties.

IC 10-19-12-15 states:

> Whenever, in the judgment of the department, any person has engaged in or is about to engage in any acts or practices that constitutes or will constitute a violation of any provision of this chapter, or any rule, regulation, or order issued thereunder, the department may, in lieu of issuing an administrative order, apply for an order from a circuit or superior court in the county in which the person takes a substantial step toward violating a law, or a violation occurs. Upon a showing by the department that such person has engaged or is about to engage in any such acts or practices, a permanent or temporary injunction, a restraining order, or other order may be granted.

IC 10-19-12-17 states:

> The department shall have the authority in the event of an emergency to impound or order the impounding of sources of radiation in the possession of any person who is not equipped to observe or fails to observe the provisions of this chapter, or any rules or regulations issued thereunder.

IC10-19-12-18(a) states in part:

> Any person who violates any licensing or registration provision of this chapter or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license or registration certificate issued there under, or commits any violation for which a license or registration certificate may be revoked under rules or regulations issued under this chapter may be subject to a civil penalty, to be imposed by the department, …

4.1.1.3 Additional Criteria for Low Level Waste Agreements

The law must authorize appropriate restrictions on land ownership and use of sites used for disposal of LLRW for an indefinite period after closure.

The State of Indiana is not requesting regulatory authority on land ownership and the use of sites used for the disposal of

low-level radioactive waste depositories in the state of Indiana for an indefinite period after the closure of the site.

4.1.1.4 Additional Evaluation Criteria for 11e.(2) Byproduct Material Agreements

The law should clearly authorize the Agreement Materials program to carry out the requirements of the Uranium Mill Tailings Radiation Control Act of 1978, as amended (UMTRCA).

The State of Indiana is not requesting regulatory authority for the requirements of the Uranium Mill Tailings Radiation Control Act of 1968, as amended (UMTRCA)

Attachment 4.1-1 – Indiana Code, Title 10, Article 19, Chapter 12

IC 10-19-12-1 Nuclear regulatory agreement

Sec. 1. This agreement shall be effective immediately upon:
(1) approval by the U.S. Nuclear Regulatory Commission; and
(2) signing by the governor and the chairman of the U.S. Nuclear Regulatory Commission.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-2 Public policy

Sec. 2. It is the policy of the state in furtherance of its responsibility to protect the occupational health and safety, public health and safety, and environment to:
(1) institute and maintain a regulatory program for sources of ionizing radiation and nonionizing radiation so as to provide for compatibility and equivalency with the standards and regulatory programs of the federal government, an integrated effective system of regulation within the state, and a system consonant insofar as possible with those of other states;
(2) institute and maintain a program to permit development and use of sources of radiation for peaceful purposes consistent with the health and safety of the public; and
(3) provide for the availability of capacity either within or outside Indiana for the disposal of low-level radioactive waste generated within Indiana except for waste generated as a result of defense or federal research and development activities and to recognize that such radioactive waste can be most safely and efficiently managed on a regional basis.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-3 Purpose

Sec. 3. It is the purpose of this chapter to provide:

(1) a program of effective regulation of sources of radiation for the protection of the occupational health and safety and public health and safety;

(2) a program to promote an orderly regulatory pattern within Indiana, among the states, and between the federal government and Indiana, and facilitate intergovernmental cooperation with respect to use and regulation of sources of radiation to the end that duplication of regulation may be minimized;

(3) a program to establish procedures for assumption and performance of certain regulatory responsibilities with respect to byproduct, source, and special nuclear materials; and

(4) a program to permit use of sources of radiation consistent with the health and safety of the public.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-4 Definitions

Sec. 4. As used in this chapter:

(1) "Byproduct material" means:

(A) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

(B) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content;

(C) any discrete source of radium-226 that is produced, extracted, or converted after extraction for use for a commercial, medical, or research activity;

(D) any material that has been made radioactive by use of a particle accelerator and is produced, extracted, or converted after extraction for use for a commercial, medical, or research activity; and

(E) any discrete source of naturally occurring radioactive material, other than source material, that is extracted or converted after extraction for use in a commercial, medical, or research activity, if the governor, after determination by the NRC, declares by order that the source would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety.

(2) "Civil penalty" means any monetary penalty levied on a licensee or registrant because of violations of statutes, regulations, licenses, or registration certificates, but does not include criminal penalties.

(3) "Closure" or "site closure" means all activities performed at a waste disposal site, such as stabilization and contouring, to assure that the site is in a stable condition so that only minor custodial care, surveillance, and monitoring are necessary at the site following termination of a licensed operation.

(4) "Decommissioning" means final operational activities at a facility to dismantle site structures, to decontaminate site surfaces and remaining structures, to stabilize and contain residual radioactive material, and to carry out any other activities to prepare the site for post operational care.
(5) "Department" means the Indiana department of homeland security established by IC 10-19-2-1.
(6) "Disposal of low-level radioactive waste" means the isolation of such waste from the biosphere by emplacement in a land burial facility.
(7) "General license" means a license effective under regulations promulgated by the department without the filing of an application with the department or the issuance of licensing documents to particular persons to transfer, acquire, own, possess, or use quantities of, or devices or equipment utilizing, radioactive material.
(8) "High-level radioactive waste" means:
(A) irradiated reactor fuel;
(B) liquid wastes resulting from the operation of the first cycle solvent extraction system, or equivalent, and the concentrated wastes from subsequent extraction cycles, or equivalent, in a facility for reprocessing irradiated reactor fuel; and
(C) solids into which such liquid wastes have been converted.
(9) "Ionizing radiation" means gamma rays and x-rays, alpha and beta particles, high-speed electrons, neutrons, protons, and other nuclear particles; but not sound or radio waves, or visible, infrared, or ultraviolet light.
(10) "Low-level radioactive waste" means radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material.
(11) "Nonionizing radiation" means the following:
(A) Any electromagnetic radiation, other than ionizing electromagnetic radiation.
(B) Any sonic, ultrasonic, or infrasonic wave.
(12) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, state agency other than the department, political subdivision of this state, any other state or political subdivision or agency thereof, and any legal successor, representative, agent, or agency of the foregoing, but not including federal government agencies.
(13) "Radiation" means ionizing radiation and nonionizing radiation.
(14) "Radiation generating equipment" means any manufactured product or device, or component part of such a product or device, or any machine or system that during operation can generate or emit radiation except those that emit radiation only from radioactive material.
(15) "Radioactive material" means material (solid, liquid, or gas) that emits ionizing radiation spontaneously. It includes accelerator produced, byproduct, naturally occurring, source, and special nuclear materials.

(16) "Registration" means registration with the department in accordance with rules and regulations adopted pursuant to this chapter.

(17) "Source material" means uranium or thorium, or any combination thereof, in any physical or chemical form, or ores which contain by weight one-twentieth of one percent (0.05%) or more of uranium, thorium, or any combination thereof. Source material does not include special nuclear material.

(18) "Source material mill tailings" means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from underground solution extraction processes, but not including underground ore bodies depleted by such solution extraction processes.

(19) "Source material milling" means any processing of ore, including underground solution extraction of unmined ore, primarily for the purpose of extracting or concentrating uranium or thorium that results in the production of source material mill tailings.

(20) "Sources of radiation" means collectively, radioactive material and radiation generating equipment.

(21) "Special nuclear material" means plutonium, uranium 233, and uranium enriched in the isotope 233 or in the isotope 235, but does not include source material; or any material artificially enriched by any of the foregoing, but does not include source material.

(22) "Specific license" means a license, issued to a named person upon application filed under the regulations promulgated under this chapter, to use, manufacture, produce, transfer, receive, acquire, or possess quantities of, or devices or equipment utilizing, radioactive material.

(23) "Spent nuclear fuel" means irradiated nuclear fuel that has undergone at least one (1) year's decay since being used as a source of energy in a power reactor. Spent fuel includes the special nuclear material, byproduct material, source material, and other radioactive material associated with fuel assemblies.

(24) "Transuranic waste" means radioactive waste containing alpha emitting transuranic elements, with radioactive half-lives greater than five (5) years, in excess of ten (10) nanocuries per gram.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-5 Duties; registration, regulation, and use of radiation generating equipment

Sec. 5. (a) The Indiana department of homeland security is designated as the state agency responsible for carrying out the duties of this chapter.

(b) The executive director of the department may use the authority granted under IC 10-19-3-4 and IC 10-19-3-5 to carry out the duties of this chapter.

(c) The department shall, for the protection of the occupational health and safety, public health and safety, and environment, do the following:

(1) Develop programs for evaluation and control of hazards associated with use of sources of radiation.

(2) Develop programs with due regard for compatibility with federal programs for regulation of byproduct, source, and special nuclear materials.
(3) Adopt rules and regulations, which may provide for licensing and registration, relating to control of sources of radiation with due regard for compatibility with the regulatory programs of the federal government.
(4) Issue such orders or modifications thereof as may be necessary in connection with proceedings under this chapter.
(5) Advise, consult, and cooperate with other state agencies, the federal government, other states and interstate agencies, political subdivisions, and other organizations concerned with control of sources of radiation.
(6) Have the authority to accept and administer grants, or other funds or gifts, conditional or otherwise, in furtherance of its functions, from the federal government and from other sources, public or private.
(7) Encourage, participate in, or conduct studies, investigations, training, research, and demonstrations relating to control of sources of radiation.
(8) Collect and disseminate information relating to control of sources of radiation, including maintenance of a file of:
(A) all license applications, issuances, denials, amendments, transfers, renewals, modifications, suspensions, and revocations;
(B) registrants possessing sources of radiation requiring registration under the provisions of this chapter and any administrative or judicial action pertaining thereto; and
(C) all of the department's rules and regulations relating to regulation of sources of radiation, pending or promulgated, and proceedings thereon.

(d) Registration of radiation generating equipment and regulations regarding the use of radiation generating equipment shall be in accordance with IC 16-41-35.

(e) The department shall coordinate the registration, regulation, and use of radiation generating equipment under subsection (d). The department shall do the following in carrying out the duties of this subsection:
(1) Consult with and review regulations and procedures of a state agency or department that regulates, in part, radiation or radiation generating equipment to prevent unnecessary duplication, inconsistencies, or gaps in regulatory requirements.
(2) Review, before and after, the holding of any public hearing required under the provisions of this chapter prior to promulgation, the proposed rules and regulations of any state agencies that relate to the use and control of radiation, to assure that the rules and regulations are consistent with other agencies. Proposed rules and regulations are not effective until thirty (30) days after submission to the department, unless either the governor or the department waives all or part of the thirty (30) day period. The waiting period runs concurrently with any other waiting period required by state law.
(3) Consult with state agencies in an effort to resolve inconsistencies if the department determines that a proposed rule or regulation is inconsistent with an existing rule or regulation.

(4) Notify the governor if an inconsistency under subdivision (3) has not been resolved. Upon notification, the governor may find that the proposed rules and regulations or parts thereof are inconsistent with the rules and regulations of other agencies of the state and may issue an order to that effect in which event the proposed rules or regulations or parts thereof shall not become effective. The governor may, in the alternative, upon a similar determination, direct the appropriate agency or agencies to amend or repeal existing rules or regulations to achieve consistency with the proposed rules or regulations.

(f) The agencies of the state shall keep the department fully and currently informed as to their activities relating to development and regulation of sources of radiation.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-6 General and specific licensing

Sec. 6. (a) The department shall adopt rules under IC 4-22-2 for general and specific licensing of radioactive material, or devices or equipment utilizing such material. The rules must provide for the amendment, suspension, or revocation of licenses. The rules must also provide the following:

(1) Each application for a specific license shall be in writing and shall state such information as the department, by rule or regulation, may determine to be necessary to decide the technical and financial qualifications or any other qualifications of the applicant as the department may deem reasonable and necessary to protect the occupational health and safety and public health and safety. The department may at any time after the filing of the application, and before the expiration of the license, require further written statements and may make such inspections as the department may deem necessary in order to determine whether the license should be modified, suspended, or revoked. All applications and statements shall be signed by the applicant or licensee. The department may require any applications or statements to be made under oath or affirmation.

(2) Each license shall be in such form and contain such terms and conditions as the department may by rule or regulation prescribe.

(3) No license issued under the authority of this chapter and no right to possess or use sources of radiation granted by any license shall be assigned or in any manner disposed of unless the department shall, after securing full information, find that the transfer is in accordance with the provisions of this chapter, and shall give its consent in writing.

(4) The terms and conditions of all licenses shall be subject to amendment, revision, or modification by rules, regulations, or orders issued in accordance with the provisions of this chapter.

(b) The department is authorized to require registration or licensing of other sources of radiation.

(c) The department is authorized to exempt certain sources of radiation or kinds of uses or users from the licensing or registration requirements set forth in this

section when the department makes a finding that the exemption of such sources of radiation or kinds of uses or users will not constitute a significant risk to the health and safety of the public.

(d) Rules and regulations promulgated under this chapter may provide for recognition of other state or federal licenses as the department shall deem desirable, subject to such registration requirements as the department may prescribe.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-7 Fees

Sec. 7. (a) The department shall prescribe and collect such fees as may be established by regulation for radiation protection services provided under this chapter. Fees collected under this section shall be deposited in the fire and building services fund established under IC 22-12-6-1. Services for which fees may be established include the following:

(1) Registration of sources of radiation.

(2) Issuance, amendment, and renewal of licenses for radioactive materials.

(3) Inspections of registrants or licensees.

(4) Environmental surveillance activities to assess the radiological impact of activities conducted by licensees.

(b) In determining rates of such fees, the department shall, as an objective, obtain sufficient funds therefrom to reimburse the state for all or a substantial portion of the direct and indirect costs of the radiation protection services specified in subsection (a). The department shall take into account any special arrangements between the state and a registrant, a licensee, another state, or a federal agency whereby the cost of the services is otherwise partially or fully recovered.

(c) The department may, upon application by an interested person, or on its own initiative, grant such exemptions from the requirements of this section as it determines are in the public interest. Applications for exemption under this subsection may include activities such as, but not limited to, the use of licensed materials for educational or noncommercial displays or scientific collections.

(d) When a registrant or licensee fails to pay the applicable fee, the department may suspend or revoke the registration or license or may issue an appropriate order.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-8 Surety requirements; radiation funds; site surveillance and care

Sec. 8. (a) For licensed activities involving disposal of low-level radioactive waste, the department shall, and for other classes of licensed activity the department may, establish by rule or regulation standards and procedures to ensure that the licensee will provide an adequate surety or other financial arrangement to permit the completion of all requirements established by the

department for the decontamination, closure, decommissioning, and reclamation of sites, structures, and equipment used in conjunction with such licensed activity, in case the licensee should default for any reason in performing such requirements.

(b) All sureties required under subsection (a) that are forfeited shall be paid to the department for deposit by the state treasurer in a special fund called the radiation site closure and disposal fund. All money in this fund is hereby appropriated and may be expended by the department as necessary to complete such requirements on which licensees have defaulted. Money in this fund shall not be used for normal operating expenses of the department. Money in the fund shall not revert back to the state general fund.

(c) For licensed activities involving the disposal of low-level radioactive waste the department shall, and for other classes of licensed activity when radioactive material that will require surveillance or care is likely to remain at the site after the licensed activities cease, the department may, establish by rule or regulation standards and procedures to ensure that the licensee, before termination of the license, will make available such funding arrangements as may be necessary to provide for long-term site surveillance and care.

(d) All funds collected from licensees under subsection (c) shall be paid to the department for deposit by the state treasurer in a special fund called the radiation long-term care fund. All funds accrued as interest on money deposited in this fund are hereby appropriated and may be expended by the department for the continuing long-term surveillance, maintenance, and other care of facilities from which such funds are collected as necessary for protection of the public health and safety and the environment. Money in the fund shall not revert back to the state general fund. Notwithstanding any other provisions of this subsection, if title to and custody of any radioactive material and its disposal site are transferred to the United States upon termination of any license for which funds have been collected for such long-term care, the collected funds and interest accrued thereon shall be transferred to the United States.

(e) The sureties or other financial arrangements and funds required by subsections (a) and (c) shall be established in amounts sufficient to ensure compliance with those standards, if any, established by the U.S. Nuclear Regulatory Commission pertaining to closure, decommissioning, reclamation, and long-term site surveillance and care of such facilities and sites.

(f) In order to provide for the proper care and surveillance of sites subject to subsection (c), the department, on behalf of the state, may acquire by gift or transfer from another government agency or private person any land and appurtenances necessary to fulfill the purposes of this section. Any such gift or transfer is subject to approval and acceptance by the department.

(g) The department may by contract, agreement, lease, or license with any person, including another state agency, provide for the decontamination, closure, decommissioning, reclamation, surveillance, or other care of a site subject to this section as needed to carry out the purposes of this section.

(h) In the event that a person licensed by any governmental agency other than the department desires to transfer a site to the state for the purpose of

administering or providing long-term care, a lump sum deposit shall be made to the radiation long-term care fund. The amount of such deposit shall be determined by the department taking into account the factors in subsections (c) and (e).

(i) All state, local, or other governmental agencies, shall be exempt from the requirements of subsections (a) and (c).

As added by P.L.28-2022, SEC.2.

IC 10-19-12-9 Inspection and compliance

Sec. 9. The department or its duly authorized representatives shall have the power to enter at all reasonable times upon any private or public property for the purpose of determining whether or not there is compliance with or violation of the provisions of this chapter and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the federal government shall be effected only with the concurrence of the federal government or its duly designated representative.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-10 Record keeping

Sec. 10. The department is authorized to require by rule, regulation, or order the keeping of such records with respect to activities under licenses and registration certificates issued under this chapter as may be necessary to effectuate the purposes of this chapter. These records shall be made available for inspection by, or copies thereof shall be submitted to, the department on request.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-11 Federal-state agreements; assumption of regulatory authority

Sec. 11. (a) The governor, on behalf of the state, is authorized to enter into agreements with the U.S. Nuclear Regulatory Commission under Section 274b of the Atomic Energy Act of 1954, as amended, providing for discontinuance of certain of the commission's licensing and related regulatory authority with respect to byproduct, source, and special nuclear materials and the assumption of regulatory authority therefore by this state.

(b) Any person who, on the effective date of an agreement under subsection (a), possesses a license issued by the U.S. Nuclear Regulatory Commission for radioactive materials subject to the agreement shall be deemed to possess a like license issued under this chapter, which shall expire either ninety (90) days after receipt from the department of a notice of expiration of such license, or on the date of expiration specified in the U.S. Nuclear Regulatory Commission license, whichever is earlier.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-12 Federal-state agreements; inspection and training programs

Sec. 12. (a) The department is authorized to enter into an agreement or agreements with the U.S. Nuclear Regulatory Commission under Section 274i of the Atomic Energy Act of 1954, as amended, other federal government agencies as authorized by law, other states or interstate agencies, whereby this state will perform on a cooperative basis with the commission, other federal government agencies, other states, or interstate agencies, inspections or other functions relating to control of sources of radiation.

(b) The department may institute training programs for the purpose of qualifying personnel to carry out the provisions of this chapter, and may make said personnel available for participation in any program or programs of the federal government, other states, or interstate agencies in furtherance of the purposes of this chapter.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-13 Conflicting laws

Sec. 13. Ordinances, resolutions, or regulations, now or hereafter in effect, of the governing body of a municipality or county or of state agencies, other than the department under section 5 of this chapter, relating to byproduct, source, and special nuclear materials shall be superseded by this chapter.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-14 Administrative procedure; public notice and hearing

Sec. 14. (a) Rules shall be promulgated under this chapter in accordance with IC 4-22-2.

(b) Orders shall be issued under this chapter in accordance with IC 4-21.5.

(c) In any proceeding for licensing ores processed primarily for their source material content and disposal of byproduct material or for licensing disposal of low-level radioactive waste, the department shall provide:

(1) an opportunity, after public notice, for written comments and a public hearing, with a transcript;

(2) an opportunity for cross-examination; and

(3) a written determination of the action to be taken, which is based upon findings included in the determination and upon evidence presented during the public comment period.

(d) In any proceeding for licensing ores processed primarily for their source material content and disposal of byproduct material or for licensing disposal of low-level radioactive waste, the department shall prepare, for each licensed activity that has a significant impact on the human environment, a written analysis of the impact of such licensed activity on the environment. The analysis shall be available

to the public before the commencement of hearings held pursuant to subsection (c) and shall include the following:

(1) An assessment of the radiological and nonradiological impacts to the public health.

(2) An assessment of any impact on any waterway and groundwater.

(3) Consideration of alternatives, including alternative sites and engineering methods, to the activities to be conducted.

(4) Consideration of the long-term impacts, including decommissioning, decontamination, and reclamation of facilities and sites associated with the licensed activities and management of any radioactive materials that will remain on the site after such decommissioning, decontamination, and reclamation.

(e) The department shall prohibit any major construction with respect to any activity for which an environmental impact analysis is required by subsection (d) prior to completion of such analysis.

(f) Whenever the department finds that an emergency exists requiring immediate action to protect the public health and safety, the department may adopt emergency rules under IC 4-22-2-37.1 or issue emergency orders under IC 4-21.5-4 to address the emergency.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-15 Injunction proceedings

Sec. 15. Whenever, in the judgment of the department, any person has engaged in or is about to engage in any acts or practices that constitute or will constitute a violation of any provision of this chapter, or any rule, regulation, or order issued thereunder, the department may, in lieu of issuing an administrative order, apply for an order from a circuit or superior court in the county in which the person takes a substantial step toward violating a law, or a violation occurs. Upon a showing by the department that such person has engaged or is about to engage in any such acts or practices, a permanent or temporary injunction, a restraining order, or other order may be granted.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-16 Prohibited uses of sources of radiation

Sec. 16. It shall be unlawful for any person to use, manufacture, produce, distribute, sell, transport, transfer, install, repair, receive, acquire, own, or possess any source of radiation unless licensed by or registered with the department in conformance with rules and regulations, if any, promulgated in accordance with the provisions of this chapter.

As added by P.L.28-2022, SEC.2.

IC 10-19-12-17 Impounding sources of radiation

Sec. 17. The department shall have the authority in the event of an emergency to impound or order the impounding of sources of radiation in the possession of any person who is not equipped to observe or fails to observe the provisions of this chapter or any rules or regulations issued thereunder.
As added by P.L.28-2022, SEC.2.

IC 10-19-12-18 Civil penalties

Sec. 18. (a) Any person who violates any licensing or registration provision of this chapter or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license or registration certificate issued thereunder, or commits any violation for which a license or registration certificate may be revoked under rules or regulations issued under this chapter may be subject to a civil penalty, to be imposed by the department, not to exceed ten thousand dollars ($10,000). If any violation is a continuing one, each day of such violation shall constitute a separate violation for the purpose of computing the applicable civil penalty. The department shall have the power to compromise, mitigate, or remit such penalties.

(b) Whenever the department proposes to subject a person to the imposition of a civil penalty under the provisions of this section, it shall issue an order in accordance with IC 4-21.5.

(c) The department is authorized to institute a civil action to collect a penalty imposed pursuant to this section. The department shall have the exclusive power to compromise, mitigate, or remit such civil penalties as are referred to the department for collection.

(d) All money collected from civil penalties under this section shall be deposited in the fire and building services fund established by IC 22-12-6-1.
As added by P.L.28-2022, SEC.2.

Attachment 4.1-2 – Indiana Radioactive Materials Rules

Enter when received from NRC

4.1.2 Organization of the Proposed Program

The organization of an agreement materials program provides the basic organizational structure and resources to conduct the program activities. The Agreement materials program organization thus influences the ability of the program to protect public health and safety against radiation hazards.

4.1.2.1 Information Needed. The State should submit a concise narrative description of the materials program.

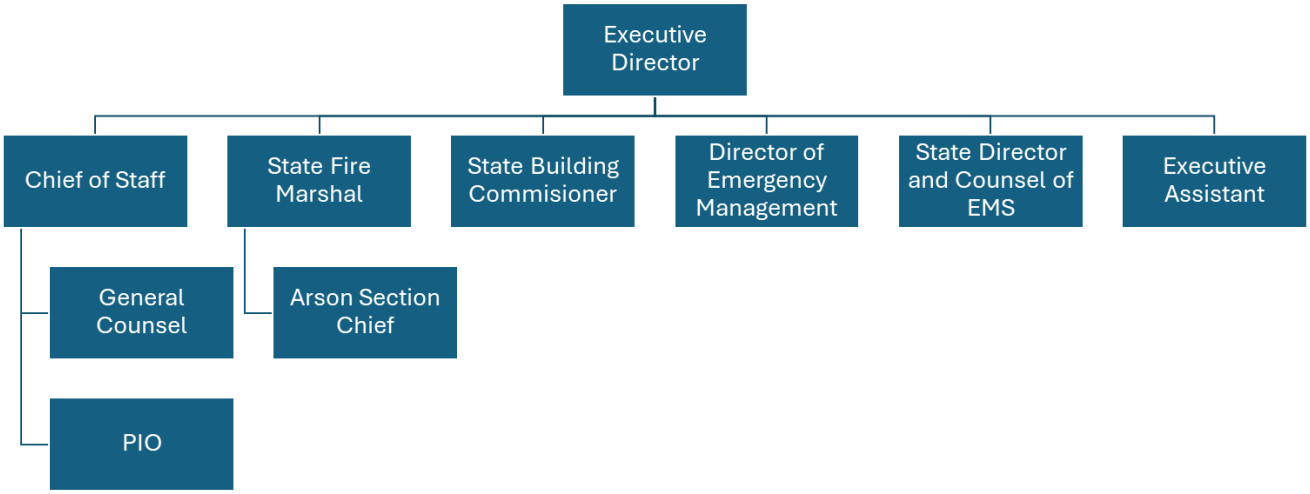
4.1.2.1.a A brief history of radiation control in the State

Radiation based control programs in the State of Indiana started in the late 1970s/early 1980s, with the Radiological Emergency Preparedness Program. At this time the authority for radiological issues was housed with the Indiana State Department of Health (ISDH). ISDH also performed inspection when radioactive materials were found in the public sector, such as scrap yards and landfills. In 2014, the responsibility was split between ISDH and the Indiana Department of Homeland Security (IDHS). IDHS received the responsibility for issues related to radioactive materials and all response and preventative measures related to radiation, while ISDH retained responsibility for electronically produced radiation. IDHS's radiation control programs included the Radiological Emergency Preparedness Program, the Radiological Transportation Program, the Preventative Radiological/Nuclear Detection Program, and the orphan sources program for radioactive materials found in the public sector. In 2021, Governor Eric Holcomb signed legislation indicating the intention for the State of Indiana to develop a radioactive materials control program and subsequently acquire the responsibility for regulating the use of radioactive materials in the State of Indiana.

4.1.2.1.b A description of the current structure of the program, including regional offices.

The State of Indiana seeks to enter into an Agreement with the NRC for assuming regulatory authority over byproduct radioactive materials, source materials, special nuclear materials in quantities not sufficient to form a critical mass, and those materials transferred to the NRC by the Energy Policy Act of 2005. This authority will reside in the Indiana Department of Homeland Security for the State of Indiana. Staff administering the program are part of the Radioactive Materials Control Program (RMCP). Essentially all required regulatory elements of the RMCP are carried out by the staff

within the Indiana Department of Homeland Security. The RMCP is within the Indiana Department of Homeland Security and falls under the Arson Section Chief as shown in Figure 1.



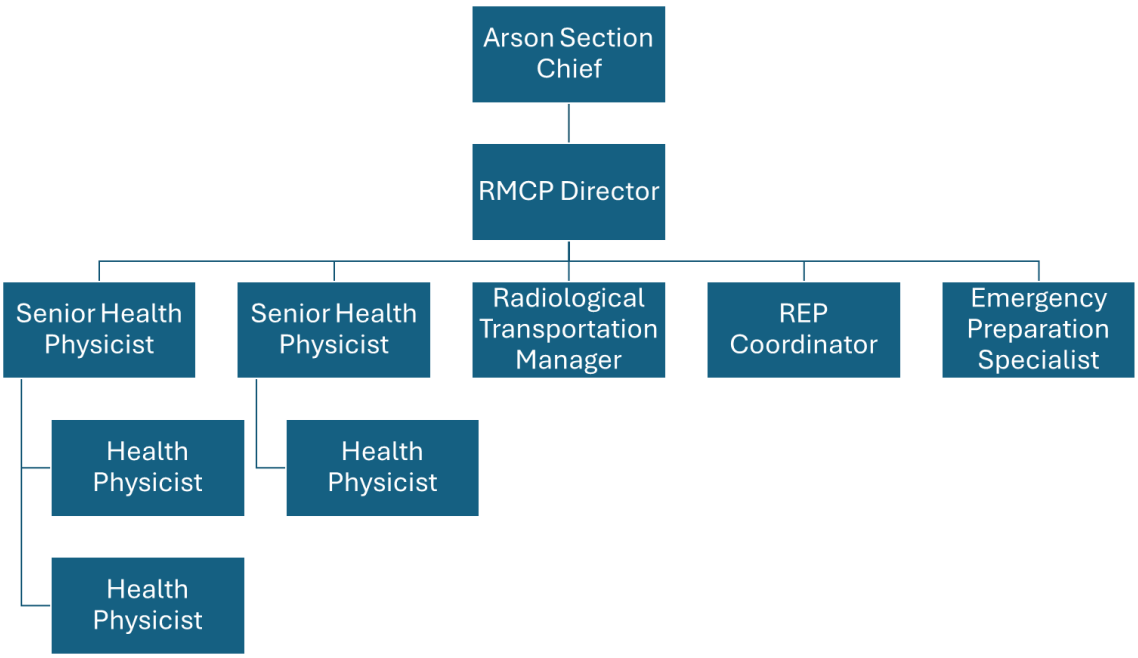


Figure 1: Indiana Department of Homeland Security Organization Chart

4.1.2.1.c Individual discussions of each of the program elements in Section 4.0 of the Handbook

Legal Elements of the Agreement State Radioactive Materials Control Program

The Radioactive Materials Control Program is founded in the statute described in the Indiana Code Chapter 10-19-12. The statute designates the Indiana Department of Homeland Security as the radiation control agency and, among other duties, provides radioactive materials licensing, inspection, and regulatory compliance enforcement authority to IDHS. In accordance with IC 4-22-2, IDHS makes rules to regulate radioactive materials licensees. All statutory information needed to address the evaluation criteria in the Handbook for

Processing and Agreement is provided in Section 4.1.1 of this application.

The Indiana Department of Homeland Security has chosen to incorporate parts of Title 10 Chapter I of the Code of Federal Regulations (10 CFR) by reference, rather that create separate compatible rules. The RMCP's rules are found in Indiana Code, Title 10 Public Safety, Article 19 Department of Homeland Security, Chapter 12 Nuclear Regulatory Commission. The current version of the Radioactive Materials Rule is attached as Appendix 4.1-2.

Legal elements of the RMCP are understood by the staff of the RMCP for administrative and operational purposes. When legal assistance is needed, for example with revising statues or regulations, or for routine or escalated enforcement actions, the Office of General Counsel may provide official policy and legal advice. The Office of General Counsel is shown in Figure 6.

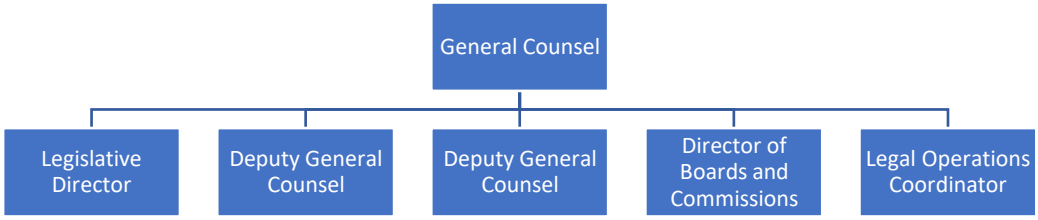


Figure 6: Office of General Counsel

The Office of General Counsel assists the RMCP with rulemaking, provides legal counsel to RMCP staff, and conducts legal review and interpretation for the RMCP staff. The General Counsel provides legal counsel for the RMCP. The Office of General Counsel can assist in the legal matters

that arise between Department staff and programs, other state agencies, local agencies, federal agencies, business entities and the public.

For the Agreement State application process, the office of the Office of General Counsel have worked with RMCP staff in revising Indiana Statute to ensure there exists authority to enter into an Agreement, revising the Radioactive Materials Control Rules to ensure compatibility with NRC regulations and to meet the requirements of Indiana Code Chapter 10-19-12, and reviewed this Request for an Agreement for legal purposes. The Radiation Program Director has direct access to the Office of General Counsel and staff of attorneys and policy advisors.

4.1.2.1.d For each program element, cross references to the pertinent portions of the States Supporting documentation for the application.

Table 2 provides a cross-reference from each of the elements in the Handbook for Processing an Agreement to Indiana references.

Table 2

Cross Reference of Program Elements 4.1 Through 4.7 to Indiana and NRC References

Section	Program Element	Information from Indiana	Criteria Number	References
4.1	**Legal Elements**			
4.1.1	Statutory Authority	Indiana Statutes Title 290. Department of Homeland Security Article 3. Standards for Protection Against Radiation	1, 2, 9b, 12, 13, 14, 17, 19, 21, 23, 24, 25, 27, 28, 29, 30, and 31	Criteria Policy Statement; Suggested State Legislation; Statement of Principles and Policy for the Agreement State Program
4.1.2	Program Organization	Application text in Section 4.1.2	1,24 and 33	Criteria Policy Statement; Program descriptions of existing Agreement States from IMPEP reports; MD 5.9; SA-200
4.1.3	Content of Agreement	Application text in Section 4.1.3, including Proposed Agreement.	27	Criteria Policy Statement MD 5.8
4.2	**Regulatory Requirements Program Elements**			

4.2.1	Regulations or Legally Binding Requirements	Incorporation of 10 CFR 20 by reference with exceptions	1, 2, 3, 4, 5, 6, 7, 8, 9a, 10, 11, 22, 23, and 32	Criteria Policy Statement MD 5.9; SA-200; 10 CFR Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 61, 70, 71, and 150.
4.3	**Licensing Program Elements**			
4.3.1	Materials Licensing	RMCPP 1.1 *Review of Initial Application for License or an Amendment Request* RMCPP 1.2 *Renewal of Licenses* RMCPP 1.3 *License Termination/Revocation* RMCPP 1.4 *NRC Licenses Affected by Agreement States* RMCPP 4.1 *Renewal Notices, Receipt, and Tracking of Licensing Actions.* The Department is incorporating by reference specific licensing procedures and licensing guidance of the NRC including the NUREG 1556 Series.	1, 7, 8, 9a, 13, 14, 15, 20, and 23	Criteria Policy Statement; MD 5.6; SA-104; NUREG-1556 series; NUREG-1757; NUREG-1575 (MARSSIM).

4.3.2	Sealed Source & Device Safety Evaluations	N/A	13 and 23	Criteria Policy Statement; NUREG-1556, Volume 3; MD 5.6
4.3.3	Low-Level Waste Site Licensing	N/A	9b and 13	Criteria Policy Statement; NUREG-1199; NUREG 1200; NUREG-1300; NUREG-1274; MD 5.6; SA-109.
4.3.4	Uranium or Thorium Mill Licensing	N/A	29, 30, 31, 32, 33, 34, and 35	Criteria Policy Statement; Uranium Recovery Regulations, Guidance and Communications; MD 5.6; SA-110.
4.3.5	Licensing Quality Assurance	RMCPP 1.2 *Renewal of Licenses* RMCPP 1.3 *License Termination/Revocation* RMCPP 1.4 *NRC Licenses Affected by Agreement States* RMCPP 4.1 *Renewal Notices, Receipt, and Tracking of Licensing Actions.* The Department is incorporating by reference specific licensing procedures and licensing guidance	1 and 13	Criteria Policy Statement; MD 5.6; SA-104.

		of the NRC including the NUREG 1556 Series.		
4.3.6	Licensing Administrative Procedures	RMCPP 1.2 *Renewal of Licenses* RMCPP 1.3 *License Termination/Revocation* RMCPP 1.4 *NRC Licenses Affected by Agreement States* RMCPP 4.1 *Renewal Notices, Receipt, and Tracking of Licensing Actions.* The Department is incorporating by reference specific licensing procedures and licensing guidance of the NRC including the NUREG 1556 Series.	1, 13, and 25	Criteria Policy Statement.
4.4	**Inspection Program Elements**			
4.4.1	Procedures for Inspecting Facilities Where Radioactive Material Is Stored or Used	RMCPP 2.1 *Scheduling of Inspections* RMCPP 2.2 *Inspection Preparations* RMCPP 2.3 *Performance-Based Inspections*	1, 16, 18, and 36	Criteria Policy Statement; MD 5.6; SA-101; SA-102; IMC 1220; IMC 2800; IMC 2801; NRC Inspection Procedures in the IP 8XXXX series.

		RMCPP 2.4 *Documentation of Inspection Results* RMCPP 2.5 *Enforcement, Escalated Enforcement and Administrative Actions* RMCPP 2.6 *Materials Inspection Checklist and Definitions* RMCPP 2.7 *Assuring the Technical Quality of Inspections* RMCPP 4.2 *Tracking Inspections* The Department is incorporating by reference specific inspection procedures and guidance of the NRC including NUREG-1556.		
4.4.2	Procedures for Assuring the Technical Quality of Inspections and Inspection Reports	RMCPP 2.7 *Assuring the Technical Quality of Inspections* The Department is incorporating by reference specific inspection procedures and guidance of the NRC including NUREG-1556.	1 and 16	Criteria Policy Statement; MD 5.6; SA-102; IMC 2800; IMC 2801.

4.4.3	Administrative Procedures for Inspections	RMCPP 2.1 *Scheduling of Inspections* RMCPP 2.2 *Inspection Preparations* RMCPP 2.3 *Performance-Based Inspections* RMCPP 2.4 *Documentation of Inspection Results* RMCPP 4.2 *Tracking Inspections* The Department is incorporating by reference specific inspection procedures and guidance of the NRC including NUREG-1556.	1	Criteria Policy Statement; IMC 2800; IMC 2801.
4.5	**Enforcement Program Elements**			
4.5.1	Routine Enforcement Procedures	RMCPP 2.5 *Enforcement, Escalated Enforcement and Administrative Actions* It is attached in Section 4.5.2.	18, 19 and 23	Criteria Policy Statement; NRC Enforcement Policy; IMC 2800; IMC 2801.
4.5.2	Escalated Enforcement Procedures	RMCPP 2.5 *Enforcement, Escalated Enforcement and Administrative Actions*	18, 19 and 23	Criteria Policy Statement; NRC Enforcement Policy; IMC 2800; IMC 2801.

4.6	**Technical Staff and Training**			
4.6.1	Organization	RMCPP 5.1 *Qualifications and Training* Attachment 5.1-1 *Health Physicist Qualification Journal* It is attached in Section 4.6.2	20 and 34	Criteria Policy Statement; MD 5.6; SA-103
4.6.2	Qualification Program	RMCPP 5.1 *Qualifications and Training* Attachment 5.1-1 *Health Physicist Qualification Journal*	2, 20 and 34	Criteria Policy Statement; MD 5.6; IMC 1248; NRC/OAS Training Work Group "Recommendations for Agreement State Training Programs".
4.6.3	Current Staff Qualification Program	Table 4.6-4 *Current Staff Training Completion* Appendix 4.6-1 *Letter of Current Staff Qualification* Appendix 4.6-2 *Current Staff Qualification Journals* Appendix 4.6-3 *Resumes of Current Staff*	20 and 34	Criteria Policy Statement; MD 5.6; IMC 1248.

4.7	**Event and Allegation Response Program Elements**			
4.7.1	Procedures for Responding to Events and Allegations	RMCPP 3.1 *Management of Allegations* RMCPP 3.2 *Incident Response* RMCPP 3.3 *Scrap Yard Incident Response*	1 and 11	Criteria Policy Statement; MD 5.6; MD 8.8; IMC 1301; IMC 1302; IMC 1303; IMC 1330; SA-105; SA-300; SA-400.
4.7.2	Procedures for Identifying Significant Events and Submittals for Entry into the Nuclear Material Event Database	RMCPP 3.4 *Nuclear Materials Event Database (NMED) Input*	1 and 11	Criteria Policy Statement; SA-300.

4.1.3 Content of the Proposed Agreement

Indiana is applying for a limited Agreement transferring to the State the authority to regulate byproduct materials as defined in 42 U.S.C. § 2014(e)(1), (3), and (4); source materials; and special nuclear materials, in quantities not sufficient to form a critical mass. The proposed Agreement follows below, and is formatted in accordance with, and with the content from, the Exhibit in NRC Management Directive 5.8. Indiana is not applying for an Agreement transferring to the State authority to regulate byproduct materials as defined in 42 U.S.C. § 2014(e)(2); for the regulation of the land disposal of byproduct, source, or special nuclear waste received from other persons; or for the evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided in the regulations or orders of the Commission.

The State of Indiana is requesting regulatory authority for 42 U.S.C. § 2014(e)(1)

42 U.S.C. § 2014(e)(1) defines byproduct material as "any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or using special nuclear material".

The State of Indiana is requesting regulatory authority for 42 U.S.C. § 2014(e)(3).

Byproduct materials as defined in 42 U.S.C. § 2014(e)(3) is "any discrete source of radium-226 that is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; or any material that has been made radioactive by use of a particle accelerator and is produced, extracted, or converted after extraction, before, on, or after the date of enactment of the EPAct for use for a commercial, medical, or research activity."

The State of Indiana is requesting regulatory authority for 42 U.S.C. § 2014(e)(4).

The definition in 42 U.S.C. § 2014(e)(4) is “any discrete source of naturally occurring radioactive material, other than source material, that the Commission, in consultation with the Administrator of the Environmental Protection Agency (EPA), the Secretary of the Department of Energy (DOE), the Secretary of the Department of Homeland Security (DHS), and the head of any other appropriate Federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security; and is extracted or converted after extraction before, on, or after the date of enactment of the EPAct for use in a commercial, medical, or research activity.”

The State of Indiana is requesting regulatory authority for source materials, and special nuclear materials, in quantities not sufficient to form critical mass.

AN AGREEMENT

BETWEEN

THE UNITED STATES NUCLEAR REGULATORY COMMISSION

AND

THE STATE OF INDIANA

FOR THE

DISCONTNUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY

AND

RESONSIBILITY WITHIN THE STATE OF INDIANA PURSUANT TO

SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMNDED

WHEREAS, The United Sates Nuclear Regulatory Commission (hereinafter referred to as the Commission) is authorized under Section 274 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § et seq. (hereinafter referred to as the Act), to enter into an agreement with the Governor of the State of Indiana (hereinafter referred to as the State) providing for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8, and Section 161 of the Act with respect to byproduct materials as defined in 42 U.S.C. § 2014(e)(1), (3) and (4); source material; and special nuclear material in quantities not sufficient to form a critical mass; and

WHEREAS, The Governor of the State is authorized under IC 10-19-12-11 to enter into this Agreement with the Commission; and

WHEREAS, The Governor of the State of Indiana certified on [DATE] that the State has a program for the control of radiation hazards adequate to protect public health and safety with respect to the materials within the State covered by this Agreement, and that the State desires to assume regulatory responsibility for such materials; and,

WHEREAS, The Commission found on [DATE] that the program of the State for the regulation of the materials covered by this Agreement is compatible with the Commission's program for the regulation of such materials and is adequate to protect public health and safety; and

WHEREAS, The State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuming that State and Commission programs for protection against hazards of radiation will be coordinated and compatible; and,

WHEREAS, The Commission and the State recognize the desirability of the reciprocal recognition of licenses, and of the granting of limited exemptions form licensing of those materials subject to this Agreement; and

WHEREAS, This Agreement is entered into pursuant to the provisions of the Atomic Energy Act of 1954, as amended;

NOW, THEREFORE, it is hereby agreed between the Commission and the Governor of Indiana Acting on behalf of the State as Follows:

ARTICLE I

Subject to the exceptions provided in Articles II, IV, and V, the Commission shall discontinue, as of the effective date of this Agreement, the regulatory authority of the Commission in the State of Indiana under Chapters 6, 7, and 8, and Section 161 of the Act with respect to the following materials:

A. Byproduct material as defined in 42 U.S.C. § 2014(e)(1);
B. Byproduct material as defined in 42 U.S.C. § 2014(e)(3);
C. Byproduct material as defined in 42 U.S.C. § 2014(e)(4);
D. Special nuclear material, in quantities not sufficient to form a critical mass.

ARTICLE II

This Agreement does not provide for discontinuance of any authority, and the Commission shall retain authority and responsibility with respect to:

1. The regulation of the construction, operation, and decommissioning of any production or utilization facility or any uranium enrichment facility;

2. The regulation of the export from or import into the United States of byproduct, source, or special nuclear material, or any production or utilization facility.
3. The regulation of the disposal into the ocean or sea of byproduct, source, or special nuclear material waste as defined in the regulations or orders of the Commission.
4. The regulation of the disposal of such other byproduct material as the Commission from time to time determines by regulation or order should, because of the hazards thereof, not to be disposed without a license from the Commission.
5. The evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear material and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission.
6. The regulation of activities not exempt from Commission regulation as stated in 10 CFR Part 150;
7. The extraction or concentration of source material from source material ore and the management and disposal of the resulting byproduct material;
8. The regulation of the land disposal of byproduct, source, or special nuclear waste materials received from other persons.

ARTICLE III

With the exception of those activities identified in Article II, paragraphs one through four, this Agreement may be amended, upon application by the State and approval by the Commission, to include the additional areas specified in Article II, paragraphs five, seven and eight, whereby the State can exert regulatory authority and responsibility with respect to those activities and materials.

ARTICLE IV

Notwithstanding this Agreement, the Commission may from time to time by rule, regulations, or order, require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license or an exemption from licensing issued by the Commission.

ARTICLE V

This Agreement shall not affect the authority of the Commission under Section 161b or 161i of the Act to issue rules, regulations, or orders to protect the common defense and security, to protect restricted data, or to guard against the loss or diversion of special nuclear material.

ARTICLE VI

The Commission will cooperate with the State and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that Commission and State programs for protection against hazards of radiation will be coordinated and compatible. The state agrees to cooperate with the Commission and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that the State's program will continue to be compatible with the program of the Commission for the regulation of materials covered by this Agreement.

The State and the Commission agree to keep each other informed of proposed changes in their respective rules and regulations, and to provide each other the opportunity for early and substantive contribution to the proposed changes.

The State and the Commission agree to keep each other informed of events, accidents, and the licensee performance that may have generic implication or otherwise be or regulatory interest.

ARTICLE VII

The Commission and the State agree that it is desirable to provide reciprocal recognition of licenses for the materials listed on Article I licensed by the other party or by any other Agreement State.

Accordingly, the Commission and the State agree to develop appropriate rules, regulations, and procedures by which reciprocity will be accorded.

ARTICLE VIII

The commission, upon its own initiative after reasonable notice and opportunity for hearing to the State, or upon request of the Governor of Indiana may terminate or suspend all or part of this agreement and reassert the licensing and regulatory authority vested in it under the Act, if the Commission finds that (1) such termination or suspension is required to protect health and safety, or (2) the State of Indiana has not complied with one or more of the requirements of Section 274 of the Act. The Commission may also, pursuant to Section 274j of the Act, temporarily suspend all or part of this agreement if, in the judgment of the Commission, an emergency situation exists requiring immediate action to protect public health and safety and the State has failed to take necessary steps. The Commission shall periodically review actions taken by the State under this Agreement to ensure compliance with Section 274 of the Act which requires a State program to be adequate to protect public health and safety with respect to the materials covered by this Agreement and to be compatible with the Commission's program.

ARTICLE IX

This Agreement shall become effective on [DATE] and shall remain in effect unless and until such time as it is terminated pursuant to Article VII.

Done at Rockville, Maryland this [DATE] day of [MONTH], [YEAR]

FOR THE UNITED STATE NUCLEAR REGULATORY COMMISSION

_____, Chairman

Done at Indianapolis, Indiana this [DATE] day of [MONTH], [YEAR]

FOR THE STATE OF INDIANA

_____, Governor

4.2 Regulatory Requirements Program Elements

A State may adopt regulatory requirements in a State specific format or adopt the NRC regulations by reference. Alternatively, the State may use the Suggested State Regulations (SSR), published by the Conference of Radiation Control Program Directors, as a model for its regulations.

The State of Indiana is incorporating the required and relevant Parts of the Code of Federal Regulations (CFR) by reference to maintain compatibility with NRC regulations. The Indiana Radioactive Material Rules refers to the Parts incorporated by Reference, and the exceptions to incorporation. A complete copy of the Indiana Radioactive Material Rules is attached as Appendix 4.2-1. Parts 19, 20,30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 61, 70, 71, 150 and 170 of the CFR are incorporated by reference with the exception of those sections reserved to the NRC or otherwise states in the rule.

By incorporating these Parts of the CFR by reference, the State of Indiana will remain compatible in Compatibility Categories A, B, and C, as well as all program elements identified as having a health and safety role.

Indiana Standards for Protection Against Radiation are based on those of 10 CFR 20, including the dose limits for occupationally exposed persons and members of the public; limits on the concentration and quantity of materials released to the environment; and technical definitions and terminology, units of radioactivity and radiation dose, radiation symbols, labels, and warning signs.

Indiana has adopted those regulatory requirements designated by the NRC with significant transboundary implications. These provide the requirements that affect the movement of materials across State borders, provide certain other regulations, such as the concentrations of materials where the end user is exempt from licensing, and other requirements where a consistent nationwide approach is necessary.

By incorporating Parts of the CFR by reference, Indiana's regulations will provide what is needed for an orderly pattern of regulation, avoiding conflict, duplication, gaps, or other conditions that would jeopardize an orderly pattern in the regulations of agreement material on a nationwide basis and will not result in undesirable consequences.

Indiana's regulations cover all categories of material being requested under the Agreement, and do not claim any intent to regulate materials or activities over which the NRC retains jurisdiction.

4.2.1 Regulations or Legally Binding Requirements

Indiana has adopted those NRC requirements designated as Compatibility Category A as defined in the Handbook to Management Directive 5.9. The NRC program elements in Category A are those that are basic radiation protection standards and scientific terms and definitions that are necessary to understand radiation protection concepts. The program elements adopted by the State of Indiana are identical to those of the NRC and provide uniformity in the regulation of agreement material. This is because the State is incorporating by reference Parts 19, 20, 30, 31, 32, 33, 34, 35, 37, 39, 40, 61 70, 71, 150, and 170 of the Code of Federal Regulations (CFR), except for those sections exclusively reserved for the NRC.

The State of Indiana has incorporated by reference, the applicable section of 10 CFR 20, regarding Standards for Protection Against Radiation. Future amendments are incorporated by reference in accordance with IC 10-19-12-5(c)(3) whenever the NRC's regulations change.

Indiana has adopted those regulatory requirements that satisfy the criteria for Compatibility Category B as defined in the Handbook to Management Directive 5.9. The NRC program elements in Category B are those that apply to activities that have direct and significant transboundary implications. The program elements adopted by the state of Indiana are identical to those of the NRC and provide uniformity in the regulation of agreement material.

Indiana has adopted those regulatory requirements that satisfy the criteria for Compatibility Category C as defined in the Handbook to Management Directive 5.9. The NRC program elements in Category C are those that do not meet the criteria of Category A or B, but the essential objectives of which an Agreement State should adopt to avoid conflict, duplication, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide

basis. The program elements adopted by the State of Indiana are identical to those of the NRC and provide uniformity in the regulation of agreement material. This is because the State is incorporating by reference Parts 19, 20,30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 61, 70, 71, 150, and 170 of the Code of Federal Regulations (CFR), except for those sections exclusively reserved for the NRC.

The State of Indiana is incorporating the required parts of 10 CFR by reference to eliminate the possibility of duplications, gaps, or other conflicts in regulation, including duplications, gaps, or conflicts between the State and the NRC, State agencies, or State and local agencies. NRC staff has reviewed the State of Indiana regulations for adequacy and compatibility categories as identified in NRC's MD 5.9. Duplications, gaps, and conflicts between the State and the NRC or other states are reduced through section IC 10-19-12-5 of Indiana code:

(c) The department shall, for the protection of the occupational health and safety, public health and safety, and environment, do the following:

(5) **Advise, consult, and cooperate with other state agencies, the federal government, other states and interstate agencies, political subdivisions, and other organizations concerned with control of sources of radiation.**

Indiana authority to implement regulations is found in IC which requires regulations to be compatible with NRC [emphasis added]:

Preventing duplications, gaps, and conflicts between State agencies is addressed at IC 10-19-12-13 which states that "Ordinances, resolutions, or regulations, now or hereafter in effect, of the governing body of a municipality or country or of

state agencies, other than the department under section 5 of this chapter, relating to byproduct, source, and special nuclear materials shall be superseded by this chapter." Duplications, gaps, and conflicts between the State and other State agencies, or State and local agencies are reduced through IC 10-19-12-5:

(e) The department shall coordinate the registration, regulation, and use of radiation generating equipment under subsection (d). The department shall do the following in carrying out the duties of this subsection:

(1) **Consult with and review regulations and procedures of a state agency or department that regulates, in part, radiation or radiation generating equipment to prevent unnecessary duplication, inconsistencies, or gaps in regulatory requirements.**

(2) Review, before and after, the holding of any public hearing required under the provisions of this chapter prior to promulgation, the proposed rules and regulations of any state agencies that relate to the use and control of radiation, to assure that the rules and regulations are consistent with other agencies. Proposed rules and regulations are not effective until thirty (30) days after submission to the department, unless either the governor or the department waives all or part of the thirty (30) day period. The waiting period runs concurrently with any other waiting period required by state law.

(3) **Consult with state agencies in an effort to resolve inconsistencies if the department determines that a proposed rule or regulation is inconsistent with an existing rule or regulation.**

Indiana, in requesting an Agreement to regulate byproduct and/or source material as provided in the Atomic Energy Act, as amended, shall not have jurisdiction over areas under NRC jurisdiction on the date that the Agreement becomes effective. An orderly pattern of regulation ensures a transfer of regulatory authority to the State of Indiana from the Nuclear Regulatory

Commission, on the date the Agreement becomes effective. IC Codes 10-19-12-13 and 10-19-12-5 ensure that state programs and regulations avoid conflict, duplication, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis, and that, if not adopted, would result in undesirable consequences.

Indiana has adopted those regulations that satisfy the criteria for the health and safety category as defined in the Handbook to Management Directive 5.9. These are NRC program elements that are not required for compatibility (i.e., Category D), but that have been identified as having a health and safety role (i.e., adequacy) in the regulation of agreement material within the State. Failures could lead to an exposure to an individual in excess of the basic radiation protection standard in Category A if its essential objectives were not adopted.

Although not required for compatibility, Indiana adopts program elements in this category, based on those of NRC, because of particular health and safety considerations. The State of Indiana incorporates health and safety elements that are identical to those of the NRC because the State of Indiana is incorporating by reference Parts 19, 20,30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 61, 70, 71, 150 and 170 of the Code of Federal Regulations (CFR), except for those sections exclusively reserved for the NRC. Incorporation is found in the Indiana Radioactive Material Rules. The Rule in its entirety is attached as Appendix 4.2-1.