SUBSTITUTE FOR

HOUSE BILL NO. 5923

A bill to amend 1994 PA 451, entitled

"Natural resources and environmental protection act,"

by amending sections 3112, 11132, 11504, and 11514b (MCL 324.3112, 324.11132, 324.11504, and 324.11514b), section 3112 as amended by 2018 PA 667, section 11132 as added by 2018 PA 688, section 11504 as amended by 2022 PA 244, and section 11514b as amended by 2022 PA 245, and by adding section 11514d.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 3112. (1) A person shall not discharge any waste or waste effluent into the waters of this state unless the person is in possession of a valid permit from the department **for the discharge of that waste or waste effluent. However, a permit shall not authorize the discharge of waste or waste effluent into the waters**

of this state if the waste or waste effluent consists of or includes low-activity radioactive waste.

(2) An application for a permit under subsection (1) shall be submitted to the department. Within 30 days after an application for a new or increased use is received, the department shall determine whether the application is administratively complete. Within 90 days after an application for reissuance of a permit is received, the department shall determine whether the application is administratively complete. If the department determines that an application is not complete, the department shall notify the applicant in writing within the applicable time period. If the department does not make a determination as to whether the application is complete within the applicable time period, the application shall be considered to be complete.

(3) The department shall condition the continued validity of a permit upon the permittee's meeting the effluent requirements that the department considers necessary to prevent unlawful pollution by the dates that the department considers to be reasonable and necessary and to ensure compliance with applicable federal law. If the department finds that the terms of a permit have been, are being, or may be violated, it may modify, suspend, or revoke the permit or grant the permittee a reasonable period of time in which to comply with the permit. The department may reissue a revoked permit upon a showing satisfactory to the department that the permittee has corrected the violation. A person who has had a permit revoked may apply for a new permit.

(4) If the department determines that a person is causing or is about to cause unlawful pollution of the waters of this state, the department may notify the alleged offender of its determination

and enter an order requiring the person to abate the pollution or may refer the matter to the attorney general for legal action, or both.

(5) A person who is aggrieved by an order of abatement of the department or by the reissuance, modification, suspension, or revocation of an existing permit of the department executed pursuant to this section may file a sworn petition with the department setting forth the grounds and reasons for the complaint and requesting a contested case hearing on the matter pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328. A petition filed more than 60 days after action on the order or permit may be rejected by the department as being untimely.

(6) All oceangoing vessels engaging in port operations in this state shall obtain a permit from the department. The department shall issue a permit for an oceangoing vessel only if the applicant can demonstrate that the oceangoing vessel complies with 33 CFR 151.1510 as then in effect or the oceangoing vessel will utilize environmentally sound technology and methods approved by the department that prevent the discharge of aquatic nuisance species. However, all of the following shall apply:

(a) The grant by the coast guard of an extension to the implementation schedule under 33 CFR 151.1513 or the exchange of ballast water under 33 CFR 151.1510(a)(1) or saltwater flushing under 33 CFR 401.30 alone is not considered compliance with the federal aquatic nuisance rule for the purposes of this section.

(b) A vessel discharging ballast water must employ a ballast water management system approved pursuant to 33 CFR 151.1510(A)(3) or a ballast water treatment method approved by the department.

(c) A vessel must carry out an exchange of ballast water or saltwater flushing and comply with other applicable requirements of 33 CFR part 151, subpart C, and 33 CFR 401.30.

(d) A vessel using water from a public water system under 33 CFR 151.1510(a)(4) shall utilize a method to sufficiently clean ballast water tanks prior to using water from a public water supply system as ballast water as approved by the department.

(e) A discharge that may cause or contribute to a violation of a water quality standard is not authorized by a permit described in this subsection.

(f) If the federal aquatic nuisance rule is amended after the enactment date of the 2018 amendatory act that added subsection (7), and the director determines that the amended version of the federal aquatic nuisance rule is less protective of the waters of this state from aquatic nuisance species, the applicant shall demonstrate that the oceangoing vessel complies with the federal aquatic nuisance rule as in effect immediately before the effective date of that amendment to the federal aquatic nuisance rule.

(g) If pursuant to a compact of Great Lakes states of which this state is a part, this state adopts standards more protective of the waters of this state from aquatic nuisance species than the version of the federal aquatic nuisance rule otherwise applicable under this subsection, the standards adopted pursuant to the compact apply.

(7) The intent of the legislature in adopting in part the federal aquatic nuisance rule by reference is to help harmonize regulatory programs in Great Lakes states for preventing the introduction and spread of aquatic nuisance species in the Great Lakes, including ballast water management programs, and to allow

regulatory agencies to cooperate in developing stronger programs.

(8) Permit fees for permits under subsection (6) shall be assessed as provided in section 3120. The permit fees for an individual permit issued under subsection (6) are the fees specified in section 3120(1)(a) and (5)(a). The permit fees for a general permit issued under subsection (6) are the fees specified in section 3120(1)(c) and (5)(b)(i). Permits under subsection (6) shall be issued in accordance with the timelines provided in section 3120. The department may promulgate rules to implement subsections (6) to (8).

(9) As used in this section: ~~, "federal~~

(a) "Federal aquatic nuisance rule" means 33 CFR part 151, subpart C, and applicable requirements of 33 CFR 151.2050, 151.2060, and 151.2070.

(b) "Low-activity radioactive waste" means that term as defined in section 11504.

Sec. 11132. (1) Except as otherwise provided in this section, a person shall not deliver to a landfill in this state for disposal and the owner or operator of a landfill shall not permit disposal in the landfill of TENORM with any of the following:

(a) A concentration of radium-226 more than 50 picocuries per gram.

(b) A concentration of radium-228 more than 50 picocuries per gram.

(c) A concentration of lead-210 more than 260 picocuries per gram.

(2) Except as otherwise specified in the landfill operating license, the owner or operator of a landfill shall not permit a delivery of TENORM for disposal at the landfill unless the

generator has provided the following information in writing to the owner or operator of the landfill:

(a) The concentrations of radium-226, radium-228, lead-210, and any other radionuclide identified using gamma spectroscopy, or an equivalent analytical method, in the TENORM based on techniques for representative sampling and waste characterization approved by the department.

(b) An estimate of the total mass of the TENORM.

(c) An estimate of the total radium-226 activity, the total radium-228 activity, and the total lead-210 activity of the TENORM.

(d) The proposed date of delivery.

(3) The department may test TENORM proposed to be delivered to a landfill.

(4) If requested by the owner or operator of a landfill in an application for the renewal of or a major modification to an operating license, the department may authorize with conditions and limits in the operating license the disposal of TENORM with concentrations of radium-226 more than 50 picocuries per gram, radium-228 more than 50 picocuries per gram, or lead-210 more than 260 picocuries per gram, or any combination thereof, but not more than 500 picocuries per gram for each radionuclide. An operating license under this part with such an authorization constitutes a license from the state's radiation control authority under part 135 of the public health code, 1978 PA 368, MCL 333.13501 to 333.13537, if the conditions and procedures for issuance of the operating license under this part are sufficient to satisfy the licensing requirements of part 135 of the public health code, 1978 PA 368, MCL 333.13501 to 333.13537. **If the department grants such an authorization, the department shall promptly notify the senate and**

house committees with primary responsibility for environmental protection issues.

(5) A request under subsection (4) shall include all of the following:

(a) A radiation safety program that addresses all of the following:

(*i*) Personnel radiation protection.

(*ii*) Worker training.

(*iii*) Radiation surveys.

(*iv*) Radiation instrument calibration.

(*v*) Receipt and disposal of radioactive material.

(*vi*) Emergency procedures.

(*vii*) Record keeping.

(b) A report evaluating the risks of exposure to residual radioactivity through all relevant pathways using a generally accepted industry model such as the Argonne National Laboratory RESRAD family of codes or, if approved by the department, another model. The report shall evaluate potential radiation doses to site workers and members of the public during site operation and after site closure. The report shall use reasonable scenarios to evaluate the dose to members of the public.

(c) A description of any steps necessary to ensure the annual dose to members of the public during landfill operation and after site closure will be less than 25 millirem.

(d) A description of an environmental monitoring program under subsection (6).

(6) If TENORM is disposed at a landfill, the operator of the landfill shall conduct a monitoring program that complies with all of the following:

(a) Radiological monitoring of site workers and at the landfill property boundary are conducted as specified in the license.

(b) Radium-226, radium-228, and lead-210 are included among the parameters analyzed in leachate and groundwater at the frequency specified in the license.

(c) Penetrating radiation, radioactivity in air, and radon in air are measured as specified in the operating license if the landfill is used to dispose of TENORM with a concentration of radium-226 more than 50 picocuries per gram, radium-228 more than 50 picocuries per gram, or lead-210 more than 260 picocuries per gram.

(d) Results of all monitoring required under this subsection are included in the environmental monitoring reports required under rules promulgated under this part and the facility operating license.

(7) The owner or operator of a landfill shall submit to the department by March 15 each year a report that summarizes the information obtained under subsection (2) for all TENORM disposed at the landfill during the previous calendar year.

(8) The owner or operator of a landfill shall do both of the following:

(a) Ensure that all TENORM is deposited at least 10 feet below the bottom of the future landfill cap.

(b) Maintain records of the location and elevation of TENORM disposed of at the landfill.

Sec. 11504. (1) "Hauler" means a person who owns or operates a managed materials transporting unit.

(2) "Host community approval" means an agreement, resolution,

letter, or other document indicating that the governing body of the municipality where the materials management facility is proposed to be located has reviewed and approved the development of that specific facility.

(3) "Household waste" means solid waste that is generated from single-family dwellings. Household waste does not include commercial waste, industrial waste, hazardous waste, or construction and demolition waste.

(4) "Hydrogenation" means the chemical reaction between molecular hydrogen and an element or compound, ordinarily in the presence of a catalyst.

(5) "Industrial waste" means solid waste that is generated by manufacturing or industrial processes at an industrial site and that is not a hazardous waste regulated under part 111.

(6) "Industrial waste landfill" means a landfill that is used for the disposal of any of the following, as applicable:

(a) Industrial waste that has been characterized for hazard and that has been determined to be nonhazardous under part 111.

(b) If the landfill is an existing disposal area, nonhazardous solid waste that originates from an industrial site.

(7) "Inert material" means any of the following:

(a) Rock.

(b) Trees, stumps, and other similar land-clearing debris, if all of the following conditions are met:

(*i*) The debris is buried on the site of origin or another site, with the approval of the owner of the site.

(*ii*) The debris is not buried in a wetland or floodplain.

(*iii*) The debris is placed at least 3 feet above the groundwater table as observed at the time of placement.

(*iv*) The placement of the debris does not violate federal, state, or local law or create a nuisance.

(c) Uncontaminated excavated soil or dredged sediment. Excavated soil or dredged sediment is considered uncontaminated if it does not contain more than de minimis amounts of solid waste and any of the following apply:

(*i*) The soil or sediment is not contaminated by a hazardous substance as a result of human activity. Soil or sediment that naturally contains elevated levels of hazardous substances above unrestricted residential or any other part 201 generic soil cleanup criteria is not considered contaminated for purposes of this subdivision. A soil or sediment analysis is not required under this subparagraph if, based on past land use, there is no reason to believe that the soil or sediment is contaminated.

(*ii*) For any hazardous substance that could reasonably be expected to be present as a result of past land use and human activity, the soil or sediment does not exceed the background concentration, as that term is defined in section 20101.

(*iii*) For any hazardous substance that could reasonably be expected to be present as a result of past land use and human activity, the soil or sediment falls below part 201 generic residential soil direct contact cleanup criteria and hazardous substances in leachate from the soil or sediment, using, at the option of the generator, EPA method 1311, "Toxicity Characteristic Leaching Procedure", EPA method 1312, "Synthetic Precipitation Leaching Procedure", or any other leaching protocol approved by the department, fall below part 201 generic residential health based groundwater drinking water values or criteria, and the soil or sediment would not cause a violation of any surface water quality

standard established under part 31 at the area of placement, disposal, or use.

(d) Excavated soil from a site of environmental contamination, corrective action, or response activity if the soil is not a listed hazardous waste under part 111 and if hazardous substances in the soil do not exceed generic soil cleanup criteria for unrestricted residential use as defined in section 20101 or background concentration as defined in section 20101, as applicable.

(e) Construction brick, masonry, pavement, or broken concrete that is reused for fill, rip rap, slope stabilization, or other construction, if all of the following conditions are met:

(*i*) The use of the material does not violate section 3108, part 301, or part 303.

(*ii*) The material is not materially contaminated. Typical surface oil staining on pavement or concrete from driveways, roadways, or parking lots is not material contamination. Material covered in whole or in part with paint that contains more than 0.5% lead is materially contaminated.

(*iii*) The material does not include exposed reinforcing bars.

(f) Portland cement clinker produced by a cement kiln using wood, fossil fuels, or solid waste as a fuel or feedstock, but not including cement kiln dust generated in the process.

(g) Asphalt pavement or concrete pavement that meets all of the following requirements:

(*i*) Has been removed from a public right-of-way.

(*ii*) Has been stockpiled or crushed for reuse as aggregate material.

(*iii*) Does not include exposed reinforcement bars.

(h) Cuttings, drilling materials, and fluids used to drill or

complete a well installed pursuant to part 127 of the public health code, 1978 PA 368, MCL 333.12701 to 333.12771, if the location of the well is not a facility under part 201.

(i) Any material determined by the department under section 11553(5) or (6) to be an inert material, either for general use or for a particular use.

(8) "Innovative technology facility" means a materials management facility that converts solid waste into energy or a usable product and that is not a materials recovery facility, a composting facility, or an anaerobic digester.

(9) "Insurance" means insurance that conforms to the requirements of 40 CFR 258.74(d) and is provided by an insurer that has a certificate of authority from the director of insurance and financial services to sell this line of coverage. An applicant for an operating license or general permit shall submit evidence of the required coverage by submitting both of the following to the department:

(a) A certificate of insurance that uses wording approved by the department.

(b) A certified true and complete copy of the insurance policy.

(10) "Landfill" means a type II landfill or type III landfill.

(11) "Landfill care fund" means a landfill care fund required by section 11525d(2).

(12) "Landfill care fund bond" means a surety bond, an irrevocable letter of credit, or a combination of these instruments in favor of the department used to establish a landfill care fund.

(13) "Large", in reference to a composting facility, means a composting facility to which both of the following apply:

(a) The site at any time contains more than 500 cubic yards of compostable material.

(b) The site does not qualify as a small or medium composting facility.

(14) "Lateral expansion" means a horizontal expansion of the solid waste boundary of any of the following:

(a) A landfill, other than a coal ash landfill, if the expansion is beyond the limit established in a construction permit or engineering plans approved by the department or a certified health department before January 11, 1979.

(b) A coal ash landfill, if either of the following applies:

(*i*) The expansion is beyond the limit established in a construction permit issued after December 28, 2018.

(*ii*) The expansion is made after October 19, 2015, and is a horizontal expansion of the outermost boundary, as defined by a construction certification or operating license, of an existing coal ash landfill.

(c) A coal ash impoundment, if the expansion is beyond the limit established in a construction permit or the horizontal limits of coal ash in place on or before October 14, 2015.

(15) "Letter of credit" means an irrevocable letter of credit that complies with 40 CFR 258.74(c).

(16) "License" means an operating license.

(17) "Lime kiln dust" means particulate matter collected in air emission control devices serving lime kilns.

(18) "Local health officer" means a local health officer as defined in section 1105 of the public health code, 1978 PA 368, MCL 333.1105, to which the department delegates certain duties under part 115.

(19) "Low-activity radioactive waste" means waste material that consists of soils, construction materials, or water that has become radioactive through exposure to neutron radiation.

(20) ~~(19)~~ "Low-hazard industrial waste" means industrial material that has a low potential for groundwater contamination when managed in compliance with part 115. All of the following materials are low-hazard industrial wastes:

(a) Coal ash and wood ash.

(b) Cement kiln dust.

(c) Pulp and paper mill material.

(d) Scrap wood.

(e) Sludge from the treatment and conditioning of water for domestic use.

(f) Residue from the thermal treatment of petroleum contaminated soil, media, or debris.

(g) Sludge from the treatment and conditioning of water from a community water supply.

(h) Foundry sand.

(i) Mixed wood ash, scrap wood ash, and pulp and paper mill ash.

(j) Street cleanings.

(k) Asphalt shingles.

(*l*) New construction or production scrap drywall.

(m) Chipped or shredded tires.

(n) Copper slag.

(o) Copper stamp sands.

(p) Dredge material from nonremedial activities.

(q) Flue gas desulfurization material.

(r) Dewatered grinding slurry generated from public

transportation agency road projects.

(s) Any material determined by the department under section 11553(7) to be a low-hazard industrial waste.

(21) ~~(20)~~ "Low-hazard-potential coal ash impoundment" means a coal ash impoundment that is a diked surface impoundment, the failure or mis-operation of which is expected to result in no loss of human life and low economic or environmental losses principally limited to the impoundment owner's property.

(22) ~~(21)~~ "MAC" means the Michigan Administrative Code.

(23) ~~(22)~~ "Managed material" means solid waste, diverted waste, or recyclable material. Managed material does not include a material or product that contains iron, steel, or nonferrous metals and that is directed to or received by a scrap processor as defined in section 3 of the scrap metal regulatory act, 2008 PA 429, MCL 445.423, or by a reuser of these metals.

(24) ~~(23)~~ "Managed materials transporting unit" means a container, which may be an integral part of a truck or other piece of equipment, used for the transportation of managed materials.

(25) ~~(24)~~ "Materials management facility" or, unless the context implies a different meaning, "facility" means any of the following, subject to subsection (25):

(a) A disposal area.

(b) A materials utilization facility.

(c) A waste diversion center.

(26) ~~(25)~~ Materials management facility or facility does not include a person, utilizing machinery and equipment and operating from a fixed location, whose principal business is the processing and manufacturing of iron, steel, or nonferrous metals into prepared grades of products suitable for consumption, reuse, or

additional processing.

(27) ~~(26)~~ "Materials management goals" means goals identified in the MMP pursuant to section 11578(1)(a).

(28) ~~(27)~~ "Materials management plan" or "MMP" means a plan required under section 11571.

(29) ~~(28)~~ "Materials recovery facility", subject to subsection (29), means a facility that meets both of the following requirements:

(a) Receives primarily source separated material and sorts, bales, or processes the source separated material for reuse, recycling, or utilization as a raw material or new product.

(b) On an annual basis, does not receive an amount of solid waste equal to or more than 15% of the total weight of material received by the facility unless the materials recovery facility is making reasonable effort and has an education program to reduce the amount of solid waste. Material disposed of as a result of recycling market fluctuations is not included in the 15% calculation.

(30) ~~(29)~~ Materials recovery facility does not include any of the following:

(a) A retail, commercial, or industrial establishment that bales for off-site shipment managed material that it generates.

(b) A retail establishment that collects returnable beverage containers under 1976 IL 1, MCL 445.571 to 445.576.

(c) A beverage distributor, or its agent, that manages returnable beverage containers under 1976 IL 1, MCL 445.571 to 445.576.

(d) A facility or area used for reuse, recycling, or storage of recyclable materials solely generated by an industrial facility.

(e) A facility that is an end user or secondary processor and that uses as fuel or otherwise, processes, or stores material generated by industrial facilities.

(f) A facility that primarily manages material that was previously sorted or processed.

(g) An anaerobic digester.

(31) ~~(30)~~ "Materials utilization" means recycling, composting, or converting material into energy rather than disposing of the material.

(32) ~~(31)~~ "Materials utilization facility" means a facility that is any of the following:

(a) A materials recovery facility.

(b) A composting facility.

(c) An anaerobic digester, except at a manufacturing facility that generates its own feedstock.

(d) An innovative technology facility.

(33) ~~(32)~~ "Medical waste" means that term as it is defined in section 13805 of the public health code, 1978 PA 368, MCL 333.13805.

(34) ~~(33)~~ "Medium", in reference to a composting facility, means a composting facility to which all of the following apply:

(a) The site at any time contains more than 500 cubic yards of compostable material.

(b) The site does not qualify as a small composting facility.

(c) The site does not at any time contain more than 10,000 cubic yards of compostable material.

(d) The site does not at any time contain more than 10% by volume of class 1 compostable material other than yard waste.

(e) Unless approved by the department, the site does not at

any time on any acre contain more than 5,000 cubic yards of compostable material, finished product, compost additives, or screening rejects.

(35) ~~(34)~~ "Mixed wood ash" means the material recovered from air pollution control systems for, or the noncombusted residue remaining after, the combustion of any combination of wood, scrap wood, railroad ties, or tires, if railroad ties composed less than 35% by weight of the total combusted material and tires composed less than 10% by weight of the total combusted material.

(36) ~~(35)~~ "Municipal solid waste" means household waste, commercial waste, waste generated by other nonindustrial locations, waste that has characteristics similar to that generated at a household or commercial business, or any combination thereof. Municipal solid waste does not include municipal wastewater treatment sludges, industrial process wastes, automobile bodies, combustion ash, or construction and demolition debris.

(37) ~~(36)~~ "Municipal solid waste incinerator" means an incinerator that is owned or operated by any person, and that meets all of the following requirements:

(a) The incinerator receives solid waste from off site and burns only waste from single-family and multifamily dwellings, hotels, motels, and other residential sources, or such waste together with solid waste from commercial, institutional, municipal, county, or industrial sources that, if disposed of, would not be required to be placed in a disposal facility licensed under part 111.

(b) The incinerator has established contractual requirements or other notification or inspection procedures sufficient to ensure that the incinerator receives and burns only waste referred to in

subdivision (a).

(c) The incinerator meets the requirements of part 115.

(d) The incinerator is not an industrial furnace as defined in 40 CFR 260.10.

(e) The incinerator is not an incinerator that receives and burns only medical waste or only waste produced at 1 or more hospitals.

(38) ~~(37)~~ "Municipal solid waste incinerator ash" means the substances remaining after combustion in a municipal solid waste incinerator.

(39) ~~(38)~~ "Municipal solid waste recycling rate" means the amount of municipal solid waste recycled or composted, divided by the amount of municipal solid waste recycled, composted, landfilled, or incinerated.

(40) ~~(39)~~ "New coal ash impoundment" means a coal ash impoundment that first receives coal ash after December 28, 2018.

(41) ~~(40)~~ "New disposal area" means a disposal area that requires a construction permit under this part and includes all of the following:

(a) A disposal area, other than an existing disposal area, that is proposed for construction.

(b) For a landfill, a lateral expansion, vertical expansion, or other expansion that results in an increase in the landfill's design capacity.

(c) A new coal ash impoundment, or a lateral expansion of a coal ash impoundment beyond the placement of waste as of October 14, 2015.

(d) For a disposal area other than a landfill or coal ash impoundment, an enlargement in capacity beyond that indicated in

the construction permit or in engineering plans approved before January 11, 1979.

(e) For any existing disposal area, an alteration of the disposal area to a different disposal area type than was specified in the previous construction permit application or in engineering plans that were approved by the director or his or her designee before January 11, 1979.

(42) ~~(41)~~ "Nonresidential property" means property not used or intended to be used for any of the following:

(a) A child day care center.

(b) An elementary school.

(c) An elder care and assisted living center.

(d) A nursing home.

(e) A single-family or multifamily dwelling unless the dwelling is part of a mixed use development and all dwelling units and associated outdoor residential use areas are located above the ground floor.

(43) ~~(42)~~ "Operate" includes, but is not limited to, conducting, managing, and maintaining.

(44) ~~(43)~~ "Part 115" means this part and rules promulgated under this part.

(45) ~~(44)~~ "Perpetual care fund" means a trust fund, escrow account, or perpetual care fund bond required by section 11525(2).

(46) ~~(45)~~ "Perpetual care fund bond" means a surety bond, an irrevocable letter of credit, or a combination of these instruments in favor of the department used to establish a perpetual care fund.

(47) ~~(46)~~ "Planning area" means the geographic area to which a materials management plan applies.

(48) ~~(47)~~ "Planning committee" means a committee appointed

under section 11572.

(49) ~~(48)~~ "Post-use polymer" means a plastic to which all of the following apply:

(a) It has been source separated.

(b) It has been sorted from solid waste and other regulated waste but may contain residual amounts of solid waste.

(c) It is not mixed with solid waste or hazardous waste on-site or during conversion at a chemical recycling facility.

(d) It is converted at a chemical recycling facility or, subject to applicable speculative accumulation time frames, stored at a chemical recycling facility before conversion.

(50) ~~(49)~~ "Preexisting unit" means a landfill unit that is or was licensed under part 115 but has not received waste after October 9, 1993.

(51) ~~(50)~~ "Pulp and paper mill ash" means the material recovered from air pollution control systems for, or the noncombusted residue remaining after, the combustion of any combination of coal, wood, pulp and paper mill material, wood or biomass fuel pellets, scrap wood, railroad ties, or tires, in a boiler, power plant, or furnace at a pulp and paper mill, if railroad ties composed less than 35% by weight of the total combusted material and tires composed less than 10% by weight of the total combusted material.

(52) ~~(51)~~ "Pulp and paper mill material" means all of the following materials if generated at a facility that produces pulp or paper:

(a) Wastewater treatment sludge, including wood fibers, minerals, and microbial biomass.

(b) Rejects from screens, cleaners, and mills.

(c) Bark, wood fiber, and chips.

(d) Scrap paper.

(e) Causticizing residues, including lime mud and grit and green liquor dregs.

(f) Any material that the department determines has characteristics that are similar to any of the materials listed in subdivisions (a) to (e).

(53) ~~(52)~~ "Pyrolysis" means a manufacturing process in which post-use polymers are heated in the absence of oxygen until melted and thermally decomposed, and then are cooled, condensed, and converted into valuable raw materials and intermediate and final products, including, but not limited to, plastic monomers, chemicals, waxes, lubricants, and plastic and chemical feedstocks that have economic utility as raw materials and products.

Sec. 11514b. (1) A person shall not deliver to a type II landfill in this state for disposal and the owner or operator of a type II landfill shall not permit disposal in the landfill of technologically enhanced naturally occurring radioactive material with any of the following:

(a) A concentration of radium-226 more than ~~50~~ **25** picocuries per gram.

(b) A concentration of radium-228 more than ~~50~~ **25** picocuries per gram.

(c) A concentration of lead-210 more than ~~260~~ **130** picocuries per gram.

(2) The owner or operator of a type II landfill shall not permit a delivery of TENORM for disposal at the landfill unless the generator has provided the following information in writing to the owner or operator of the landfill:

(a) The concentrations of radium-226, radium-228, lead-210, and any other radionuclide identified using gamma spectroscopy, or an equivalent analytical method, in the TENORM based on techniques for representative sampling and waste characterization approved by the department.

(b) An estimate of the total mass of the TENORM.

(c) An estimate of the total radium-226 activity, the total radium-228 activity, and the total lead-210 activity of the TENORM.

(d) The proposed date of delivery.

(3) The department may test TENORM proposed to be delivered to a landfill.

(4) Within 45 days after the end of each state fiscal year, the owner or operator of a type II landfill shall submit to the department an annual report that summarizes the information obtained under subsection (2) for all TENORM disposed at the landfill during the previous state fiscal year.

(5) The owner or operator of a type II landfill that, ~~disposes~~ **before the effective date of the amendatory act that added section 11514d, disposed** of TENORM with a concentration of radium-226 more than 25 picocuries per gram ~~,~~ **or** a concentration of radium-228 more than 25 picocuries per gram ~~,~~ or **that disposed or disposes of TENORM with** a concentration of lead-210 more than 25 picocuries per gram shall do all of the following:

(a) Ensure that all TENORM is deposited at least 10 feet below the bottom of the future landfill cap.

(b) Maintain records of the location and elevation of TENORM disposed of at the landfill.

(c) Conduct a monitoring program that complies with all of the following:

(*i*) Radiological monitoring of site workers and at the landfill property boundary are conducted as specified in the license.

(*ii*) Radium-226, radium-228, and lead-210 are included among the parameters analyzed in leachate and groundwater at the frequency specified in the license.

(*iii*) Results of all monitoring required under this subsection are included in the environmental monitoring reports required under rules promulgated under this part and the facility operating license.

(6) As used in this section, "technologically enhanced naturally occurring radioactive material" or "TENORM" means naturally occurring radioactive material whose radionuclide concentrations have been increased as a result of human practices. TENORM does not include any of the following:

(a) Source material, as defined in section 11 of the atomic energy act of 1954, 42 USC 2014, and its progeny in equilibrium.

(b) Material with concentrations of radium-226, radium-228, and lead-210 each less than 5 picocuries per gram.

Sec. 11514d. (1) A person shall not deliver low-activity radioactive waste to a landfill in this state for disposal, and the owner or operator of a landfill shall not permit disposal in the landfill of low-activity radioactive waste.

(2) The department and the landfill owner or operator shall test and monitor any low-activity radioactive waste delivered to a landfill before the effective date of the amendatory act that added this section.

(3) If, before the effective date of the amendatory act that added this section, the owner or operator of a landfill permitted disposal in the landfill of low-activity radioactive waste under an

operating license, the owner or operator shall maintain monitoring of the low-activity radioactive waste as a condition of renewal of an operating license under this part. The operating license condition constitutes a license from this state's radiation control authority under part 135 of the public health code, 1978 PA 368, MCL 333.13501 to 333.13537, if the conditions and procedures for issuance of the operating license under this part are sufficient to satisfy the licensing requirements of part 135 of the public health code, 1978 PA 368, MCL 333.13501 to 333.13537.

(4) An application for renewal of an operating license under subsection (3) shall include all of the following:

(a) A radiation safety program that addresses all of the following:

(*i*) Personnel radiation protection.

(*ii*) Worker training.

(*iii*) Radiation surveys.

(*iv*) Radiation instrument calibration.

(*v*) Receipt and disposal of radioactive material.

(*vi*) Emergency procedures.

(*vii*) Record keeping.

(b) A report evaluating the risks of exposure to residual radioactivity through all relevant pathways using a generally accepted industry model, such as the Argonne National Laboratory RESRAD family of codes or, if approved by the department, another model. The report shall evaluate potential radiation doses to site workers and members of the public during site operation and after site closure. The report shall use reasonable scenarios to evaluate the dose to members of the public.

(c) A description of any steps necessary to ensure the annual

dose to members of the public during landfill operation and after site closure will be less than 25 millirem.

(d) A description of an environmental monitoring program to be conducted by the owner or operator. The monitoring program shall comply with department guidelines.

(5) The owner or operator of a landfill shall submit to the department by March 15 of each year a report that summarizes the information obtained under subsection (3) for all low-activity radioactive waste disposed of at the landfill.

(6) The owner or operator of a landfill shall maintain records of the location and elevation of low-activity radioactive waste disposed of at the landfill.