

## HOUSE JOINT RESOLUTION NO. 120

*Directing the Joint Legislative Audit and Review Commission to study biosolids and industrial residuals in Virginia. Report.*

Agreed to by the House of Delegates, February 11, 2016

Agreed to by the Senate, February 23, 2016

WHEREAS, prior to 1994, the Department of Environmental Quality (DEQ) regulated all land application of treated sewage sludge, commonly known as biosolids, when biosolids were applied to agricultural lands; and

WHEREAS, in 1994, the General Assembly directed the Virginia Department of Health (VDH) to adopt regulations to ensure that (i) sewage sludge permitted for land application, marketing, or distribution is properly treated or stabilized; (ii) land application, marketing, and distribution of sewage sludge is performed in a manner that will protect public health and the environment; and (iii) the escape, flow, or discharge of sewage sludge into state waters in a manner that would cause pollution of state waters, as those terms are defined in § 62.1-44.3 of the Code of Virginia, will be prevented; and

WHEREAS, in 2007, the General Assembly authorized the transfer of all regulatory oversight of biosolids from VDH to DEQ; and

WHEREAS, since 2008, biosolids have been land applied in at least 68 localities in the Commonwealth, with at least 54 of those localities receiving biosolids annually; and

WHEREAS, between 2008 and 2013, an average of 221,000 dry tons of biosolids have been beneficially recycled over an average of 63,000 acres annually; and

WHEREAS, this acreage represents less than one percent of the available crop land, pasture land, and forest land in the Commonwealth; and

WHEREAS, the National Academy of Sciences reviewed current practices, public health concerns, and regulatory standards and concluded that the use of biosolids in the production of crops for human consumption, when practiced in accordance with existing federal guidelines and regulations, presents negligible risk to the consumer, to crop production, or to the environment; and

WHEREAS, in accordance with House Joint Resolution No. 694 of the 2007 Session of the General Assembly, the Secretary of Natural Resources and Secretary of Health and Human Resources convened a panel of experts to study the impact of land application of biosolids on human health and the environment; and

WHEREAS, the General Assembly posed specific questions to the panel and requested that it consider the typical contaminant concentrations and application rates of biosolids in its study; and

WHEREAS, the panel included stakeholders from a broad range of disciplines, including medicine, higher education, forestry, agronomy, environmental science, ecology, veterinary medicine, and law; and

WHEREAS, the Secretary of Natural Resources and Secretary of Health and Human Resources published the final report of the panel in 2008 (House Document 27); and

WHEREAS, the panel uncovered no evidence or literature verifying a causal link between biosolids and illness but recognized gaps in the science and knowledge surrounding this issue; and

WHEREAS, the panel stated that these gaps could be reduced through highly controlled epidemiological studies relating to health effects of land-applied biosolids and through additional efforts to reduce the limitations in quantifying all the chemical and biological constituents in biosolids; and

WHEREAS, the panel stated that there are gaps in the research that characterizes the composition, fate, and effects of pharmaceutical and personal care products and other persistent organic compounds in biosolids, as well as in other products, materials, and the environment; and

WHEREAS, House Joint Resolution No. 694 of the 2007 Session of the General Assembly also directed the panel to perform a detailed analysis of the chemical and biological composition of biosolids; and

WHEREAS, detailed analysis of the vast number of constituents of biosolids, combined with the specialized analytical methods employed to detect and quantify these constituents, involves significant cost; and

WHEREAS, because no funding was available to conduct new analyses, the panel was limited in performing a detailed analysis of the chemical and biological constituents of biosolids; and

WHEREAS, under § 405(d)(2)(C) of the federal Clean Water Act, the U.S. Environmental Protection Agency is required to conduct a review of the standards set out in 40 C.F.R. Part 503 not less than every two years for purposes of regulating new pollutants where sufficient data exist; and

WHEREAS, § 62.1-44.3 of the Code of Virginia defines industrial wastes as "liquid or other wastes resulting from any process of industry, manufacture, trade, or business or from the development of any

natural resources"; and

WHEREAS, the land application in Virginia of industrial wastes, including industrial residuals, is regulated by the Virginia Department of Agriculture and Consumer Services (VDACS) and DEQ; and

WHEREAS, VDACS regulates certain industrial residuals as "industrial co-products" in accordance with the regulations applicable to agricultural liming materials and fertilizer, providing for the marketing and distribution of industrial wastes; and

WHEREAS, the land application of industrial residuals that is not regulated by VDACS is regulated by the State Water Control Board and DEQ; and

WHEREAS, industrial residuals from more than 35 facilities are land applied in Virginia pursuant to the terms of a Virginia Pollution Abatement or Virginia Pollutant Discharge Elimination System Permit issued by DEQ; and

WHEREAS, since taking over the regulatory program from VDH, DEQ has conducted over 10,000 inspections of biosolids and industrial residual land application sites; and

WHEREAS, biosolids and industrial residuals are beneficially land applied on less than one percent of the cropland, pastureland, and forestland on Virginia farms; and

WHEREAS, on average, less than 10,000 dry tons of industrial wastes are land applied annually in Virginia, an amount representing less than five percent of the annual amounts of biosolids land applied in Virginia; and

WHEREAS, the permits issued by DEQ include authorization for land application of industrial wastes from a variety of facilities, including poultry hatching plants, breweries, rendering plants, chicken and pork processing and packaging plants, plants for the processing of apples, fish, meat, tomatoes, and wood, plants for the manufacturing of concentrated and dried soup stock, confections, beverages, and snack cakes, farmers' markets, and municipal potable water treatment plants; and

WHEREAS, the Department of Environmental Quality's permit application requires the applicant to submit details regarding the design of the industrial wastes treatment works, including the storage facility and land area determination, as well as characterization of the industrial wastes that includes analyses of heavy metals and other constituents; and

WHEREAS, DEQ examines the specific processes used at the facility generating the industrial wastes to determine whether any waste constituents may represent a threat to human health and the environment; and

WHEREAS, DEQ requires the permit applicant to provide analyses to determine the capacity of the land application site to assimilate nutrients, metals, and any other pollutants of concern, in order to demonstrate that the activity may be performed safely and protect the environment; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Joint Legislative Audit and Review Commission be directed to study biosolids and industrial residuals in Virginia.

In conducting its study, the Joint Legislative Audit and Review Commission (JLARC) shall (i) analyze the current scientific literature regarding the long-term effects of biosolids and industrial residuals on health, including potential impacts on well, surface, and ground water; (ii) evaluate the regulatory requirements for land application and storage; (iii) evaluate the differences between biosolids and industrial residuals rated as "Class A" materials and "Class B" materials; (iv) evaluate the feasibility, especially for local governments, and including an economic impact on citizens of the Commonwealth, of requiring municipal utilities currently permitted to generate, as a byproduct of the municipal wastewater treatment process, "Class B" material to upgrade those facilities to generate "Class A" material; (v) evaluate the effectiveness of the local monitoring component of the programs, while also analyzing the potential for private contractors to serve in a monitoring capacity; (vi) evaluate both the potential outcomes and the probable costs from additional testing requirements for these products; (vii) analyze potential alternatives for waste materials that are currently processed and treated to be land applied, and any potential costs that could be associated with such alternatives; (viii) evaluate the contractual relationships among Virginia localities and the impacts of local agreements and decisions that could affect wastewater treatment and land application, including septic tank pump out requirements; and (ix) where applicable, analyze the potential impacts of Virginia's biosolids and industrial residuals regulations on agricultural interests and future economic development in the Commonwealth.

Technical assistance shall be provided to the Joint Legislative Audit and Review Commission by the Department of Environmental Quality, the Virginia Department of Agriculture and Consumer Services, the Virginia Department of Health, the United States Geological Survey, and the members of the W3170, a multi-state workgroup composed of representatives of the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, universities, and municipal governments from across the United States that is conducting research on understanding the potential hazards and value of constituents in biosolids and other residuals. All agencies and academic institutions of the Commonwealth, local governments, and other interested parties as necessary shall provide assistance to the Commission for this study, upon request.

The Joint Legislative Audit and Review Commission shall complete its meetings for the first year by November 30, 2016, and for the second year by November 30, 2017, and the chairman shall submit to the Division of Legislative Automated Systems an executive summary of its findings and recommendations no later than the first day of the next Regular Session of the General Assembly for each year. Each executive summary shall state whether the Commission intends to submit to the General Assembly and the Governor a report of its findings and recommendations for publication as a House or Senate document. The executive summaries and reports shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

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