

## **Recommendations: Land Application of Biosolids and Industrial Residuals**

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### **RECOMMENDATION 1**

The General Assembly may wish to consider directing the Virginia Department of Health (VDH) to design and conduct a pilot epidemiological study of the human health effects of land application of biosolids. The General Assembly may wish to consider appropriating \$50,000 to fund the study. In designing and conducting the pilot study, VDH should contract with third parties, such as researchers at Virginia institutions of higher education, as needed. VDH should be assisted by the Virginia Department of Environmental Quality as needed. Following completion of the pilot study, VDH should submit its findings and a proposed design for a full-scale epidemiological study, if needed, to the Senate Finance, and Agriculture, Conservation, and Natural Resources Committees; and House Appropriations, and Agriculture, Chesapeake, and Natural Resources Committees. (Chapter 2)

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### **RECOMMENDATION 2**

The Virginia Department of Health should assess the risk of aerosol infection to the public by reviewing the most current research literature and determine whether regulatory setbacks for protecting human health should be expanded. (Chapter 2)

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### **RECOMMENDATION 3**

The Virginia Department of Health should assess whether the risk of aerosol infection to the public is elevated near sites that receive frequent applications and whether restrictions on land application frequency or larger setback areas are needed to ensure that residents are sufficiently protected. (Chapter 2)

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### **RECOMMENDATION 4**

The General Assembly may wish to consider directing the Virginia Department of Health (VDH) to perform sample testing of Class B biosolids that are land applied in Virginia to determine their pathogen content. The General Assembly may wish to consider appropriating \$50,000 to fund sample testing over the course of one year. VDH should use test results to inform its epidemiological pilot study and assessment of aerosol infection risks (Recommendations 1, 2, and 3). (Chapter 2)

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### **RECOMMENDATION 5**

The State Health Commissioner should submit a written report to the State Water Control Board and the director of the Department of Environmental Quality on the findings of the Virginia Department of Health's epidemiological pilot study, assessments of aerosol infection risks, and pathogen tests (Recommendations 1, 2, 3, and 4). The report should include, as necessary, recommendations for amending biosolids regulations to further protect human health and water quality. The report should be submitted no later than July 1, 2019. (Chapter 2)

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### **RECOMMENDATION 6**

The Department of Environmental Quality should report annually to the State Water Control Board on the effectiveness of its land application inspection program. The report should provide (i) the percentage of land application sites and events inspected, (ii) the number and type of violations and citizen complaints, (iii) the five-year trend in violations and citizen complaints, (iv) a recommendation on the number of inspections needed in the coming year, and (v) an assessment of whether changes to the program, program funding, or other actions are needed to maintain regulatory compliance. (Chapter 3)

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### **RECOMMENDATION 7**

The Virginia Department of Agriculture and Consumer Services (VDACS) should require producers of biosolids and industrial residuals products to submit chemical analyses of their products as part of the annual registration process. VDACS should review these analyses to ensure that products continue to have acceptably low levels of trace chemicals. (Chapter 3)

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