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A Technical Bulletin for the Safe Application of Reclaimed Water

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Abstract Text:

Wastewater reclamation and reuse are becoming essential components of water resources management plans worldwide since reclaimed wastewater can serve as an alternative water resource to meet increases in water demand. Potential benefits of using reclaimed wastewater include providing both a resource and an economic alternative to procurement and use of freshwater supplies in conditions where the use of freshwater is not necessary. Although there are no federal regulations directly governing the practice of water reuse, many individual states and municipalities have developed regulations and guidelines pertaining to reclaimed water quality. While wastewater reuse for agriculture and landscape has many benefits, it must be properly managed to maximize productivity and reduce negative environmental impacts such as salinity and sodium buildup in the soil, nitrate leaching, and crop uptake or transport to groundwater of toxic metals. In addition, despite the absence of documented public health problems resulting from wastewater reuse, pathogens, toxic chemicals, and pharmaceutically-active ingredients and endocrine disruptors remain as concerns and are closely watched to help ensure the safe use of reclaimed wastewater. The purpose of the technical bulletin is to provide information for the safe use of reclaimed wastewater for landscape and agriculture irrigation, including a brief review of federal and state laws that directly and indirectly affect water reuse, quality characteristics of reclaimed water, and two success stories for reclaimed wastewater application.

Impact Statement:

Reclaimed wastewater reuse are becoming essential component of water resources management. This project promotes the safe use of reclaimed wastewater for agriculture and landscape irrigation.