



Necessity of standards, rules and environmental limitations on wastewater sludge usage in Iran's agriculture

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In our country up to the year 1400, municipal wastewater treatment units would reach 800 units which would have the capability to be used in various climates; moreover, it needs less space in comparison to the other activated sludge system. The primary and secondary sludge of the remaining wastewater is result of treated wastewater which the mean per capita produced primary and secondary sludge in conventional wastewater treatment systems are respectively 0.7 and 2 liters/person/ day. In recent decades with respect to the legitimate limitations imposed to the burning and disposal methods in land & water, the method of sludge application in the land has been subjected to more attention for agricultural purposes. In this method, great capacity of water and fertilizing characteristic of sludge is utilized for irrigation and soil conditioning. Although the sludge contains useful nutritional herbal materials, and cause soil conditioning, it is possible that it has pathogens, heavy metals and toxic materials which may make this sludge for products, animals and human; in the other hands it causes soil, surface and under water contamination. Unfortunately, in our country there is no environmental standards and legitimate limitations for disposal and reuse of sludge application in the land for agricultural purposes, therefore objective of this paper in addition to per capita primary and secondary sludge production and their environmental hazardous, is reviewing the recent environmental standards for reusing of sludge in the land, and restrictions concerning to type of products and time of harvesting.

Keywords: Sewage sludge, Treated sludge, Reuse in agriculture, Environmental standards, Heavy metals, Pathogen

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