عنوان مقاله:

Waste collection problem with multi-compartment vehicles and fuzzy demands

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خلاصه مقاله:

Nowadays, due to the urbanization and industrialization, the amount ofgenerated waste increased sharply. A large portion of these materials ismunicipal wastes, and cleaning them from the urban environmentconverted to a challenging problem. Reverse Logistics refers to reusingproducts and components in supply chain. on the other hand, in wastelogistics customer (waste producer) is known as the first node of thechain. therefore, this concept is has an applicable foundation for wastemanagement problem. Thus, in this paper by considering reverselogistics, we formulate a vehicle routing problem (VRP) to find a properplan for solving waste problem under realistic conditions and by aim ofreducing time and energy consumption. To do so, we consideredheterogeneous vehicles for various type of waste. additionally, to beingmore realistic, we assume that each customer can generates all types ofwastes. Then, we solved our proposed model using GAMS and evaluatethe applicability of our proposed model.

کلمات کلیدی:

waste management, Green reverse logistics, Locationrouting problem

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