

Calculating Costs for Incineration of Pathological Waste in Oregon

Approved by: Loretta Pickering Date Approved: 7/2/06
Manager, SW Planning & Policy Development

Scope:

This directive describes a method for calculating the average costs for incineration of pathological wastes in Oregon both statewide and for specific wastesheds. It also describes a process for use of alternative methods for calculating these costs.

Purpose/Need:

Oregon law requires pathological wastes to be treated by incineration unless incineration is not reasonably available in a wasteshed. In that case, the law allows pathological wastes to be disposed of in the same manner as cultures and stocks. By rule, OAR 340-093-0190, the Environmental Quality Commission has determined that incineration is not reasonably available if disposal costs for incineration of pathological wastes generated within an individual wasteshed are at least 25% higher than the average statewide costs for all incinerators within the state. This directive provides a method for determining these costs.

Legal Authority:

ORS 459.395(1) requires pathological wastes to be treated by incineration in an incinerator that provides complete combustion to carbonized or mineralized ash, unless the EQC determines that incineration is not reasonably available within a wasteshed. In that case, pathological wastes from a wasteshed may be disposed of in the same manner as cultures and stocks.

OAR 340-093-0190(1)(d)(A) requires pathological wastes to be treated by incinerations unless the Department determines:

- (i) The disposal cost for incineration of pathological wastes generated within the individual wasteshed exceed the average cost by 25 percent for all incinerators within the state (*permitted to accept pathological wastes*); or the generator is unable to contract with any incinerator facility within the State of Oregon due to lack of incinerator processing capacity; and
- (ii) The State Health Division has prescribed by rules requirements for sterilizing "cultures and stocks", and this alternative means of treatment of the pathological waste is available.

The State Health Division (DHS) has prescribed requirements for sterilizing cultures and stocks in OAR 333-056-0030 and has established a process for approving alternative treatment methods for these wastes in accordance with ORS 459.395(2).

Discussion:

Background

Currently, pathological wastes comprise an estimated 5-7% of all infectious wastes generated in Oregon. Medical and veterinary facilities are the primary generators of pathological wastes. The legislature required incineration of pathological wastes in the late 1980's when the majority of hospitals operated incinerators on site to treat pathological and other infectious wastes. Most hospitals have since stopped using incinerators and contract with haulers and processors to treat and dispose of their pathological wastes. Only one incinerator, the Brooks burner, is currently permitted to incinerate pathological wastes in Oregon. Pathological waste generated in Oregon may also be taken out of state for treatment. DHS has approved methods for sterilizing cultures and stocks, primarily autoclaving, and these methods are readily available to infectious waste generators.

Calculation of costs of incinerating pathological wastes.

Form C

The Department does not require or receive any reporting on the generation, management, or disposal of pathological wastes in Oregon. This means the data needed to calculate actual costs for incinerating these wastes statewide and by watershed is not easily available (e.g., amounts of pathological wastes generated by watershed and the costs for collection, transport, and incineration of that waste). Efforts to estimate costs using data from major haulers and processors have also been unsuccessful. These competitors are reluctant to voluntarily share information on tonnages, costs, or revenues. The limited data obtained could not give substantive estimates of either the amounts of pathological wastes generated or related costs for incineration.

In lieu of actual costs, the Department explored several models for estimating costs for incinerating pathological wastes generated by watershed. This modeling demonstrated that costs for incineration are directly proportional to the distance wastes are transported for incineration at Brooks. The varying assumptions looked at estimated amounts of pathological waste generated by any one watershed, number of loads per watershed for a given time period, and tipping fees at Brooks. These factors did not significantly affect comparative watershed:statewide costs. Transportation costs dominated the estimates in all models. For this reason, the Department is using the distance to the incinerator at Brooks and per mile commercial trucking rates as the default method for calculating costs of incinerating pathological waste statewide and by watershed, as described below.

Directive:

To implement OAR 340-093-0190(1)(d)(A), the Department will allow persons to use the following method to demonstrate that a watershed's costs for incinerating pathological wastes exceed statewide average costs by at least 25%:

- 1) For each watershed, measure the distance from the major population center in the watershed to Brooks using a major transportation route.
- 2) Multiply the distance calculated for each watershed by the current commercial trucking rate per mile to calculate the transportation costs for each watershed.
- 3) Use the simple average costs from each watershed to calculate the average statewide transportation costs.
- 4) Use these statewide and watershed averages as the costs for incinerating pathological wastes to determine whether a watershed's costs exceed statewide average costs by at least 25%.

Persons using this method may use a table of transportation costs prepared by the Department, if it is current, or develop their own calculations and submit them, along with supporting documentation, to the Department for approval.

The Department will allow persons to use an alternative method to calculate watershed and statewide incineration costs if that method is approved by the Department.

Implementation:

This directive becomes effective immediately upon approval.

Disclaimer: This directive is not rulemaking by the Environmental Quality Commission and may not be relied upon to create an enforceable right or benefit.

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Review Schedule:

This directive will be reviewed periodically as needed.