

## Storage Piles

Storage piles are typically modeled as area sources. The emission rate is specified over an area (i.e. lb/hr/ft<sup>2</sup>). Depending on the particular source characteristics, the pile base may be modeled as circular, rectangular, or polygonal.

For a circular pile, the following inputs are used:

- release height =  $h_e = \frac{1}{2}$  the average height of the pile
- radius
- initial vertical dimension ( $\sigma_{z0}$ ) = average height of pile / 4.3
- by default it is modeled as an equal-area polygon of 20 sides.

For a rectangular pile, the following inputs are used:

- release height =  $h_e = \frac{1}{2}$  the average height of the pile
- X and Y lengths (DNR recommends the aspect ratio not exceed 10)
- angle (Y length relative to a north-south orientation)
- initial vertical dimension ( $\sigma_{z0}$ ) = average height of pile / 4.3

For an irregularly-shaped pile, the following inputs are used:

- release height =  $h_e = \frac{1}{2}$  the average height of the pile
- initial vertical dimension ( $\sigma_{z0}$ ) = average height of pile / 4.3
- up to 20 vertices can be used