Provide a clear and organized presentation. Rewrite, but do not evaluate, the following integral using both cylindrical and spherical coordinates:

$\iiint\limits_{E} \dfrac{x^2}{z}\,dV$ where E is the region bounded by the graphs of the two surfaces described by the following equations:

$$z = x^2 + y^2 + 1, \text{ and}$$
$$(z-4)^2 = x^2 + y^2 \text{ where } z \le 4$$

Provide a clear sketch of the graph of E.