Sample NSPS/PSD/NSR/HAP Permitting Problem
Example 1

• Magnus Metals wants to construct a facility that will manufacture steel-clad pipe in West Texas.

• The facility will include natural gas-fired boilers and smelt small lots of steel.
Magnus Metals (cont’d)

• Emissions:
  - NOx: 150 tpy
  - PM2.5: 20 tpy
Let’s make it more complicated

• Still Magnus Metals, but now it wants to construct its facility in Harris County.

• You have also learned that Magnus Metals’ process will use manganese as an additive in the steel.
Emissions

• Same emissions:

  NOx  150 tpy
  PM2.5  20 tpy
  Manganese  20 tpy
The final push

• To make life more difficult, Magnus Metals now wants to add the new pipe manufacturing line to its existing pipe mill in Houston.

• You have also discovered that the new line will use a lot of energy and generate significant carbon dioxide emissions (CO2).
Emissions

NOx  150 tpy
PM2.5  20 tpy
Manganese  20 tpy

[Looking ahead:
CO2  500,000 tpy]