

Waste Disposition and Recycling

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South Centers

Ohio State University, Piketon, OH



Mission Statement:

- The Application of Fundamental Chemical Principles to Solve Problems.

Vision Statement:

- To Solve Problems That Aren't in Any Book.

Business Objective:

- Have I Applied My Specialized Knowledge to Help Others Who Under Other Circumstances Wouldn't Be Able to Help Themselves?

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- According to the data presented by US DOE and Fluor personnel at the SSAB Meeting on Th 5/3/12, there are about 28,000,000 pounds of metals that need to be properly handled.
- It is estimated that 48% of the total number of pounds of metals can be recycled. This means that over 13,400,000 pounds of these metals can and ought to be recycled.

Waste Disposition and Recycling

- This also means that the volume of metals to be handled by alternative means has been reduced to about 14,500,000 pounds.

- The present inventory of metals in the thousands of tons includes:
 - Steel (scrap and structural)
 - Aluminum
 - Copper
 - Nickel

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- The US DOE and Fluor personnel emphasized nickel recycling in their SSAB presentations on Th 5/3/12. While nickel and nickel alloys (e.g., Inconel and Monel) have important industrial (re-use) applications, it must be pointed out that nickel in converters does have a classified application (barrier).
- Nickel (to the best of my knowledge) is not “low-hanging fruit.”

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- Aluminum and copper (to the best of my knowledge) represent the “low-hanging fruit.”
- Recycling is a common practice for aluminum and copper. A major advantage is that there aren't (to the best of my knowledge) any classification issues associated with the recycling of these metals.
- The bottom line is that we should seek to recycle the aluminum and copper metals first.

On-Going Work

Our current work is focused in:

- Chemical Consultations/Process Improvement
- Expert Witnessing in the Physical Sciences
- Chemical Release/Explosion/Fire Investigations
- Automobile and Truck Accident Investigations
- Insurance Subrogation Cases
- Nuclear Chemistry Issues (including **Energy Employees Occupational Illness Compensational Program Act** Claims)
- HUBZone Distributor of Chemicals and Supplies for ThermoFisher Scientific, L.L.C.

Making a difference for our clients is our only goal.