



Construction Materials Management Center

Mission: To promote and support waste reduction, reuse, and recycling in the Building Industry.

Why CMM is Important?

- ❑ 2.3M tons of C&D was landfilled in NYS 2011
 - ✓ 21% of over all landfilled materials
 - ✓ 50% upstate, 50% downstate
 - ✓ **103M** (@\$45/ton), not including transportation

Transportation
Environmental Impacts
It's "The Next Thing"

Effective CWM can IMPROVE
the "Bottom Line" \$\$

What is LEAN? Good for Business!

Eliminating waste along entire value streams, instead of at isolated points, creates processes that need less:

**human effort,
space,
capital, and
time**

to make products and services at **far less costs** and with much fewer defects, compared with traditional business systems.

What is LEAN? Good for Business!

Information management becomes much **simpler** and more **accurate**.



The 8 Wastes of Lean (Tim Wood)

- Transportation/Material or Information Movement
- Inventory
- Motion
- Waiting/Delays
- Overproduction
- Over processing
- Defect/Reconciliations/Scrap/Rework/
- Underutilization of Human Resources (Creativity)

What is Construction Materials Management CMM?

Construction Materials Management

is a comprehensive approach to reduce and eliminate physical waste from construction and demolition activities from landfill or incineration by waste reduction, reuse, recycling.



“The 3R’s”

What should a CMM Plan Cover?

- ✓ Designing to prevent waste
- ✓ Planning to prevent waste
- ✓ Use of construction techniques and jobsite methods to reduce and reuse
- ✓ Purchasing to reduce waste
- ✓ Effective CMM recycling
- ✓ Site logistics requirements for CMM
- ✓ Communicating CMM
- ✓ Tracking, documenting, valuing success

GRIP-IT

- ✓ **G**eneration points
- ✓ **R**educe, reuse, recycle “3R” principles
- ✓ **I**nk it
- ✓ **P**romote
- ✓ **I**mplement
- ✓ **T**rack~**D**ocument~**V**alue **S**uccess

GRIP-IT

Generation Points

Who ME???



- Wood Formwork
- Wood Framing
- Light Gauge Framing
- Drywall
- Packaging
- Pallets & Crating
- Material Containers
- (paint, etc.)

ABSOLUTELY!

Reduce, Reuse, Recycle 3R's

- **REDUCE** the waste generated
- Salvage and **REUSE** materials
- **RECYCLE** the materials



Reduce, Reuse, Recycle 3R's

☐ CMM Resources

- ✓ Municipal Governments
- ✓ United States Green Building Council
- ✓ Local Waste Haulers
- ✓ Local Recyclers
- ✓ Regional & National Recyclers



Ink it!

□ Write the CMM Plan

ABC CONSTRUCTION COMPANY LETTERHEAD

Construction Waste Management Plan Smith Building Renovation PSU Project # 01-23456.00

OVERVIEW

This Construction Waste Management Plan is designed by ABC Construction Company with regards to the goals specified by the owner for the Smith Building Renovation. This plan will be adhered to by all subcontractors, along with ABC Construction Company and other jobsite personnel during the construction of this project. ABC Construction Company will implement, discuss goals and issues as part of subcontractor coordination meetings, and document this plan through the course of construction activities. John Smith, the ABC Construction Company site superintendent, will ensure on-site execution of this plan.

PROJECT GOALS

The goals for this project shall meet the requirements set forth by Penn State to recycle or salvage a minimum of 75 percent (by weight) of non-hazardous construction waste.

In order to help achieve these goals, ABC Construction Company will provide a cost analysis for recycling and separating the following waste materials (versus landfilling):

- Cardboard
- Clean dimensional wood
- Beverage and food containers
- Brick and CMU
- Ferrous and non-ferrous metals
- Recyclable Plastic
- Gypsum wallboard
- Asphalt and concrete paving
- Ceiling Tile
- Carpeting
- Existing Windows
- Used equipment oil

All other waste materials, not listed above, will be handled as general refuse and disposed of at a licensed and permitted landfill.

IMPLEMENTATION

This waste management plan will be distributed to all subcontractors working on this project. ABC Construction Company will discuss goals and handling procedures of the waste generated with its subcontractors during coordination meetings. The project's first coordination meeting will provide an