

BNIM berkebile nelson immenschuh mcdowell architects

14 May 2003

Alan Vinson
Professional Contractors and Engineers, Inc.
5900 C. North Tower Drive, P.O. Box 7509
Columbia, MO 65205

DNR Green Office Building- 99076 D/C X0056-01
Re: Construction Waste Management Plan

Dear Mr. Vinson:

We have reviewed the submitted *Construction Waste Management Plan*, and have provided the following comments for incorporation into the final draft:

Glass

Per Section 01736 3.2F, arrange for the removal of "waste glass products daily from the work area and deposit in designated containers." The removal of glass is not mentioned in the submitted Waste Management Plan.

Item A.2: Concrete, Masonry, and Other Inert Fill Material

Per Section 01736 3.2H, dispose of clean masonry waste by crushing and mixing with fill material as fill is placed (on-site), with the excess waste to be disposed of off-site.

Item A.4: Untreated Wood

Wood pallets to be recycled/reused as indicated in Section 01736 3.2 J Item 3a. (T&T Pallet)

Item A.5: Gypsum Wallboard Scrap

Section 01736 3.2G states that gypsum could also be used as a soil amendment. Is this a more expensive alternative to disposing off-site at a gypsum reclamation or recycling facility? Also, local Habitat for Humanity chapters often accept new drywall sheets of half size or larger.

Item A.7: Cardboard

Paper packing materials, newsprint, plastic, and banding materials are not included in your report. (See Section 01736 3.2 C: Packaging Materials)

Item A.8: Paper (Discarded Office Paper Waste)

Classify as indicated in the Section 01736 3.2B. Separate into bond paper, newsprint, and diazo prints.

Item A.9: Plastic Buckets

Are there other recyclable plastics which can be collected daily and deposited in designated containers?

Other concepts that fall under the recycle/reuse category:

- Concrete formwork to be used multiple times as long as determined to be dimensionally sound. Reuse shoring timber until it becomes unsafe. Wood products such as these can be used elsewhere on the job to

build temporary structures such as ramps, railing, temporary doors, and barricades before being sent off-site.

- The curing blanket to be used for curing all the floor slabs of the building.
- Leftover expanded polystyrene used for block outs in concrete pours to be reused.
- Packaging for sprinkler heads, fire protection pipe scrap, and pallets for valves shall be taken back to the fire protection subcontractor's shop for reuse. The mechanical subcontractor could return any unused piping materials to their suppliers for credit or use on other projects.
- There are a number of items such as the ceramic and acoustical tile which can also be reused.
- All frames for the curtain wall and glazing to be pre-fabricated in the subcontractor's shop. All excess material at the shop can be placed in a bin and sent for recycling by the curtain wall subcontractor. The subcontractor shall provide weight tickets for the recycled materials to PCE. Wooden crates, stretch film, and other materials used to deliver materials on site to be collected by curtain wall subcontractor for reuse.
- Miscellaneous lumber to be reused whenever possible.

Other notes upon reviewing the Waste Management Plan:

- Be certain to include quantities for those subcontractors who recycle their own waste. It is the subcontractor's responsibility to report these quantities to PCE. (i.e. "Past experience has indicated that the electrical subcontractor typically recycles his own copper to be resold on his own.")
- Some contractors we have worked with in the past have required their subs to submit a summary of the waste they expect to generate while on-site. Even if it's a rough estimate, this will ensure PCE has provided adequate storage provisions and doesn't end up with overflowing containers.
- Quantities shall be recorded using a consistent unit of measure throughout the project. Estimate using either weight (tons) *or* volume (cubic yards).

As you know, the construction process creates an enormous amount of solid waste. This plan will certainly help reduce the amount of material waste being sent to the landfill. Please review the attached comments and re-submit a revised report. Don't hesitate to contact me if there are questions, comments, and/or concerns. Finally, sincere thanks for all of your efforts to make this a successful plan!

Sincerely,



James Pfeiffer
BNIM Architects

Note: We have received permission to include a sample Construction Waste Management Plan for your use.
Hopefully you find this helpful...JP

cc:

File
Wack
Kolb
Walker