

# **Environmental, Recycling & Waste Management Plan**

## **Pine Glades Development, LLC**

*Objective: Our Company's objectives include minimizing our impact on the environment, particularly the environmental assets of our jobsites and their surroundings. All employees, subcontractors and suppliers should be vigilant in lookout for ways to reduce impact; the following guidelines are just a starting point.*

**DISTURBANCE:** It is extremely expensive to repair and reclaim disturbed areas and extraordinary efforts must be taken to minimize disturbance, including:

- Fence all limits of disturbance prior to commencing excavation. Silt and sediment fences must be installed downhill of disturbed areas per the Grading and Erosion Control Plan.
- Do not take vehicles "off-road" or outside disturbance limits.
- Consolidate materials as close to where they will be used as possible in a way that minimizes disturbance.
- The Project Manager must approve removal of any and all trees. Tree removal shall be kept to an absolute minimum. Only trees designated for removal on the approved Site Plan may be removed. Trees will generally survive if excavation takes place as close as 4 feet from the trunk and every effort should be taken to save such trees, including using care to make clean cuts and to minimize disturbance to the root system.
- Do not disturb or harass wildlife.

**RECYCLABLES:** It should go without saying that all scrap materials should be reused whenever possible.

**Wood Scraps:** Wood scraps include used lumber, trim, shipping pallets, trees and branches. Wood scraps should be stored for burning in our high efficiency wood gasification boiler at times when heating is required. The boiler will be used as our primary heat source in winter, offsetting the need for propane and kerosene. An exhibit showing the potential environmental benefits of using wood scraps to replace fossil fuels is attached. When storage is not viable, send segregated wood scraps to the Teton County Transfer Facility (the "Dump") where it will be composted.

Contact local firewood dealers to solicit interest in using trees, branches and deadfall from land clearing activities. Otherwise, recycle on-site by chipping into mulch.

Pressure treated lumber must be separated from other wood and sent to the Dump.

**Cardboard:** Jackson Community Recycling ("JCR") will provide dumpsters for cardboard on jobsites in their pick-up area. The cardboard dumpster should be ordered when significant quantities of cardboard are being generated. The fees for recycling cardboard are substantially less than standard dump fees.

**Metals:** A separate dumpster will be provided to recycle metals such as pipes, aluminum, and steel scrap. The Dump has a recycler who will sort through and recycle these scrap metals.

**Glass & Plastic Containers:** Bins for glass, aluminum and plastic shall be provided and arrangements made with Jackson Curbside Recycling (733-8559) for regular pick-up.

**Sheetrock:** Is composted at certain times of the year by Terra Firma. Check with Dane Buk (732-2794) to see if they are currently composting and how to proceed.

## **REUSABLES:**

**Plastic Sheeting:** Tarps, rhino-hide and all types of plastic sheeting will be re-used as often as possible before being discarded to reduce landfill waste.

**Remnants: Shingles, Carpet, Doors, Sheetrock, Misc.:** There are currently no recycling programs for these materials in Teton County, so if materials cannot be reused, they become waste and end up in the Landfill. If useable surplus materials are not returnable, contact Habitat for Humanity (734-0828) to determine their current needs.

**HAZARDOUS WASTES:** All hazardous waste products *must* be contained and disposed of in accordance to manufactures instructions.

**Paint, Flammable Liquids, Aerosols:** JCR will take these items for a charge from April through November. An appointment must be made prior to delivery.

**Motor Oil:** Teton Motors (733-6600) will take small amounts of motor oil for recycling at no charge.

**Batteries:** Sealed lead acid and rechargeable tool batteries will be recycled free of charge by placing in a box inside the JCR facility.

**FOOD WASTE:** Food waste, food wrappers and containers must be disposed of in bear proof containers to avoid nuisance bears and birds.

**ENFORCEMENT:** Project Manager shall oversee and enforce these guidelines.

**LEED DOCUMENTATION:** Complete and sign LEED Letter Template on Company letterhead in format provided under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program including:

- Certify that the project has completed a waste management plan and diverted construction, demolition, and land clearing waste to uses other than landfill.
- Provide quantities of diverted materials and means of diversion in the table provided in the LEED Letter Template.
- Indicate how and where waste was diverted.
- Indicate quantities of waste diverted in tons [or cubic yards].
- Letter Template will calculate: Total quantity of diverted waste, total quantity of waste, and the percentage of waste diverted.
- For projects where 50% of waste is diverted, one LEED credit will be achieved; where 75% is diverted, two LEED credits will be achieved.

## **OTHER RESOURCES:**

The California Integrated Waste Management Board has developed Construction & Demolition Debris Recycling guidelines, only a small part of which could be included herein, at <http://www.ciwmb.ca.gov/ConDemo/>. They also have a publications index with a large number of articles on construction wastes at: <http://www.ciwmb.ca.gov/Publications/default.asp?cat=3>

## **CONTACTS:**

**Jackson Community Recycling (“JCR”)**  
270 South Adams Canyon Drive  
(307) 733-7678

**Teton County Transfer Facility**  
5400 South US Highway 191  
(307) 733-7172

**Jackson Curbside Recycling**  
Kelly French  
(307) 733-8559

**Terra Firma**  
Dane Buk  
(307) 732-2794

**California Integrated Waste Management Board**  
<http://www.ciwmb.ca.gov/ConDemo/>

# Benefits of Replacing Propane with Wood Scraps for Jobsite Heating

## Reduction in CO2 from Burning Scrap Wood, Offsetting Propane as Construction-Site Heating Fuel:

lbs. of CO2 produced from <i>Burning</i> 1,000 lbs. of Scrap Wood	1,833 lbs. CO2
lbs. of CO2 eliminated by <i>not Decomposing</i> 1,000 lbs. of Scrap Wood	<u>(1,833)</u>
Net CO2 Emissions from Burning Scrap Wood	0 lbs. CO2

Eliminate Propane as Heat Source: (798) lbs. CO2

Eliminate Fuel from Hauling Scrap Wood to Transfer Station (17)

Net Reduction in CO2 per 1,000 lbs. of Wood Scraps (816) lbs. CO2

x Estimated Heating Days per Winter Burning 1,000 lbs. per day  
 x 2 Winters of Construction x 100

(163,144) Total lbs. CO2

Assumptions:

	<u>Scrap Wood</u>	<u>Propane Equivalent</u>
lbs./day:	1,000	315
BTU/lb:	9,100	21,700
Efficiency:	60%	80%
Net BTUs (MMs):	5.5	5.5
CO2 from Combustion (lbs./day):	1,833	798