

C&D DEBRIS RECYCLING REDUCES GREEN HOUSE GAS:



Onsite demolition & construction recycling in accordance with SF Ordinance 27-06 is mandatory and since 2006 has increased the cost of building in the city. But, as surrounding counties and cities are now adopting similar Build-It-Green programs and requirements, and it all prevents green house gas.

San Francisco architects are aware that Construction and demolition (C&D) debris materials removed from SF building projects SF also requires that C&D materials are to be source-separated at the construction site for reuse or recycling and then must be taken to a facility that reuses or recycles those materials. All mixed C&D debris must be transported off-site by a registered transporter (See list attached as PDF) and taken to a registered facility (see list attached as PDF) that can process mixed C&D debris and divert a minimum of 65% of the material from the landfill. Besides hauling source-separated materials for reuse and recycling. Property owners who do their own dumping, in their own vehicles, and haulers whose vehicles have no more than two axles and no more than two tires per axle are exempt from registering as a transporter.

WHY THE ORDINANCE? A June 5, 2008 report documents that the significantly decreasing waste disposed in landfills and incinerators will actually reduce greenhouse gas emissions. This program, implemented nationwide, will be the equivalent to closing 21% of U.S. coal-fired power plants. This is comparable to leading climate protection proposals such as improving national vehicle fuel efficiency. Preventing waste and expanding reuse, recycling, and composting are essential for a sustainable world and climate stability. The full *Stop Trashing the Climate* report can be downloaded at: www.stoptrashingthecolimate.org. The significant findings in the report are as follows:

must be properly recycled. Since SF's adoption of Ordinance No. 27-06 in 2006 (*PDF copies available from Mark English Architects, by e-mail request*), mandating the recycling of construction and demolition (C&D) debris, surrounding cities and counties have followed suit. A new report documents that these efforts actually prevents formation of green house gas.

The SF ordinance affects all construction projects such as new construction, remodels and partial demolitions, and requires the building permit holder or the property owner to make sure that all C&D materials removed from the project are properly recycled. This ordinance prohibits any C&D materials from being placed in trash or sent to a landfill. The restricted materials includes nearly everything discarded from building activities such as asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing.



1. **ZERO WASTE:** A zero waste approach is one of the fastest, cheapest, and most effective strategies we can use to protect the climate and the environment. Significantly decreasing waste disposed in landfills and incinerators will reduce greenhouse gases by an amount equivalent to closing one-fifth of U.S. coal-fired power plants. Indeed, implementing waste reduction and materials recovery strategies nationally are essential to put us on the path to stabilizing the climate by 2050. Through the Urban Environmental Accords, 103 city mayors worldwide have committed to sending zero waste to landfills and incinerators by the year 2040 or earlier.
2. The practice of landfilling and incinerating biodegradable materials such as food scraps, paper products, and yard trimmings should be phased out immediately. Composting these materials is critical to protecting our climate and restoring our soils.
3. **LAND FILLS:** Wasting to a landfill directly impacts climate change because it is directly linked to global resource extraction, transportation, processing, and manufacturing. When we minimize waste, we can reduce greenhouse gas emissions in sectors that together represent 36.7% of all U.S. greenhouse gas emissions.
4. Landfills are the largest source of anthropogenic methane emissions in the U.S., and the impact of landfill emissions in the short term is grossly underestimated — methane is 72 times more potent than CO₂ over a 20-year time frame.
5. **INCINERATORS:** Incinerators emit more CO₂ per megawatt-hour than coal-fired, natural-gas-fired, or oil-fired power plants. Incinerating materials such as wood, paper, yard debris, and food discards is far from “climate neutral”; rather, incinerating these and other materials is detrimental to the climate.
6. Incinerators, landfill gas capture systems, and landfill “bioreactors” should not be subsidized under state and federal renewable energy and green power incentive programs or carbon trading schemes. In addition, subsidies to extractive industries such as mining, logging, and drilling should be eliminated.
7. Existing waste incinerators should be retired, and no new incinerators or landfills should be constructed.
8. **CHANGED PERSPECTIVES:** New policies are needed to fund and expand climate change mitigation strategies such as waste reduction, reuse, recycling, composting, and extended producer responsibility. Policy incentives are also needed to create locally-based materials recovery jobs and industries.
9. Improved tools are needed for assessing the true climate implications of the wasting sector.

DESIGNS USING CERTIFIED TITLE 24 AUTHOR QUALIFY FOR GREEN POINTS: One of the easiest ways to pick up extra Green Points under **Section J - Building Performance**, of the Green Point-Rating (GPR) Checklist, is to have your Title 24 documentation authored by Mark English Architects where Alan Hugenot, is a *Certified Energy Plans Examiner* (CEPE).

Many Northern California building departments are now specifically requiring that all Title 24 documentation is to be authored by a CEPE. We can also review the home's design for maximum efficiency and interaction of the building elements, to identify specific opportunities where measures that exceed Title 24 can be cost effective by modeling the home and by identifying additional green building opportunities for the project. Homes that exceed Title 24 by 15% or more may also be eligible for ENERGY STAR® certification.

KNOWLEDGE IS POWER: Making sure chosen green measures work in the overall design concept and the combination also satisfies Title 24 energy compliance, while also keeping you apprised of new developments in GREEN DESIGN is what we do for you at GREEN COMPLIANCE PLUS...as your own, on call (24/7), Title 24, Green Energy Compliance Experts.

Once we computer model your project for Title 24 compliance (at preliminary design), our energy analysis based on that project model can be tweaked as your design changes.

Give Alan or Mark a call at *Green Compliance Plus* (415 391-0186) to discuss your Title 24 documentation needs or any Green Energy Subject.