INTRODUCTION TO ENERGY SCREENING TABLES

The following worksheets are used to evaluated the potential impacts of a project.

Table 1 Definition of Project

This Table is used to establish the proposed development parameters that are used the calculation of energy usage. The independent variable to be entered is identified by shading. For residential development, the number of housing units should be entered in the shaded area. For non-residential development, the total floor area of development should be entered in the shaded area.

Tables 2 Summary of Project Impacts

Consumption/Generation Rates. This table indicates the development's projected electrical consumption, natural gas consumption, water consumption, effluent generation, and solid waste generation. No modifications should be made to this table.

Tables 3 through 4 Calculation of Project Impacts

Tables 3 through 4 indicate the results of the analysis.

Table 3 Electrical Consumption - This Table calculates the projected electrical consumption for new development. Default generation rates provided in the shaded areas may be changed.

Table 4 Natural Gas Consumption - This Table calculates the projected natural gas useagefor new development. Default generation rates provided in the shaded areas may be changed.

Table 1 Project Name: HESP 021

Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).

Land Use	Independent	Factor
Residential Uses	**Variable**	**Total Units**
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	**Variable**	**Total Floor Area**
Office	Sq. Ft.	4,153
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	**Variable**	**Floor Area/Rooms**
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	0
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	0
Hotel	Rooms	0
Manufacturing Uses	**Variable**	**Total Floor Area**
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	60,744
Public/Institutional	**Variable**	**Total Floor Area**
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Energy Consumption and Generation

Summary of Project Impacts **- Results of analysis identified below. No modifications should be made to this Table.**

Utilities Consumption and Generation	Factor	Rates

Electrical Consumption	kWh/day	1,035.5
Natural Gas Consumption	cubic feet/day	9,793.4

Table 3: Electrical Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**kWh**	**Variable**	**kWh/Day**
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Day**
Office	4,153	20.80	kWh/Sq. Ft./Year	236.7
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	**Sq. Ft./Rooms**	**kWh**	**Variable**	**kWh/Day**
Specialty Retail Commercial	0	16.00	kWh/Sq. Ft./Year	0.0
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	0	16.00	kWh/Sq. Ft./Year	0.0
Shopping Center	0	35.90	kWh/Sq. Ft./Year	0
Sit-Down Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Fast-Food Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Hotel	0	8,955.00	kWh/Sq. Ft./Year	0.0
Manufacturing Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Day**
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	0	4.80	kWh/Sq. Ft./Year	0.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	60,744	4.80	kWh/Sq. Ft./Year	798.8
Public/Institutional	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Day**
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0

Total Daily Electrical Consumption (kWh/day)	1,035.5

Sources:
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989

Table 4: Natural Gas Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Office	4,153	2.00	Cu. Ft./Mo./Sq. Ft.	276.9
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Hotel	0	2.90	Cu. Ft./Mo./Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**

Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	60,744	4.70	Cu. Ft./Mo./Sq. Ft.	9,516.6
Public/Institutional Use	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0

Total Daily Natural Gas Consumption (cubic feet/day)	9,793.4

Sources:
South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993

INTRODUCTION TO UTILITY SCREENING TABLES

The following worksheets are used to evaluated the potential impacts of a project.

Table 1 Definition of Project

This Table is used to establish the proposed development parameters that are used the calculation of utilities usage. The independent variable to be entered is identified by shading. For residential development, the number of housing units should be entered in the shaded area. For non-residential development, the total floor area of development should be entered in the shaded area.

Tables 2 Summary of Project Impacts

Consumption/Generation Rates. This table indicates the development's projected electrical consumption, natural gas consumption, water consumption, effluent generation, and solid waste generation. No modifications should be made to this table.

Tables 3 through 5 Calculation of Project Impacts

Tables 3 through 7 indicate the results of the analysis.
Table 3 Water Consumption - This Table calculates the projected water consumption ratesfor new development. Default generation rates provided in the shaded areas may be changed.
Table 4 Sewage Generation - This Table calculates the projected effluent generation rates for new development. Default generation rates provided in the shaded areas may be changed.
Table 5 Solid Waste Generation - This Table calculates the projected waste generation for new development. Default generation rates provided in the shaded areas may be changed.

Table 1 Project Name: HESP 021

Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).

Land Use	Independent	Factor
Residential Uses	**Variable**	**Total Units**
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	**Variable**	**Total Floor Area**
Office	Sq. Ft.	4,153
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	**Variable**	**Floor Area/Rooms**
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	0
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	0
Hotel	Rooms	0
Manufacturing Uses	**Variable**	**Total Floor Area**
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	60,744
Public/Institutional	**Variable**	**Total Floor Area**
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation

Summary of Project Impacts **- Results of analysis identified below. No modifications should be made to this Table.**

Utilities Consumption and Generation	Factor	Rates

Water Consumption	**gallons/day**	**3,979**
Sewage Generation	**gallons/day**	**2,349**
Solid Waste Generation	**pounds/day**	**567**

Table 3: Water Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**Gals. of Water**	**Variable**	**Gals./Day**
Single-Family Residential	0	390.000	Gals./Day/Unit	0.0
Medium Density Residential	0	300.000	Gals./Day/Unit	0.0
Multiple-Family Residential	0	234.000	Gals./Day/Unit	0.0
Mobile Home	0	234.000	Gals./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Office	4,153	0.300	Gals./Day/Sq. Ft.	1,245.9
Medical Office Building	0	0.300	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.300	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.150	Gals./Day/Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Room**	**Gals. of Water**	**Variable**	**Gals./Day**
Specialty Retail Commercial	0	0.150	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.150	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.195	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.495	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	0	1.500	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.120	Gals./Day/Sq. Ft.	0.0
Hotel	0	187.500	Gals./Day/Room.	0.0
Manufacturing Uses	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Industrial Park	0	0.300	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.300	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.300	Gals./Day/Sq. Ft.	0.0
Warehouse	60,744	0.045	Gals./Day/Sq. Ft.	2,733.5
Public/Institutional Use	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Public/Institutional	0	0.120	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.120	Gals./Day/Sq. Ft.	0.0

Total Daily Water Consumption (gallons/day)	**3,979.4**

Source: Derived from Los Angeles County Sanitation District rates (150% of effluent generation).

Table 4: Sewage Generation

Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	**# of Units**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Single-Family Residential	0	260.000	Gals./Day/Unit	0.0
Medium Density Residential	0	200.000	Gals./Day/Unit	0.0
Multiple-Family Residential	0	156.000	Gals./Day/Unit	0.0
Mobile Home	0	156.000	Gals./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Office	4,153	0.200	Gals./Day/Sq. Ft.	830.6
Medical Office Building	0	0.200	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.200	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.100	Gals./Day/Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./# Rooms**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Specialty Retail Commercial	0	0.100	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.100	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.130	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.330	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	0	1.000	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.080	Gals./Day/Sq. Ft.	0.0
Hotel	0	125.000	Gals./Day/Room.	0.0
Manufacturing Uses	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Industrial Park	0	0.200	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.200	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.200	Gals./Day/Sq. Ft.	0.0
Warehouse	60,744	0.025	Gals./Day/Sq. Ft.	1,518.6
Public/Institutional Use	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Public/Institutional	0	0.096	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.096	Gals./Day/Sq. Ft.	0.0

Total Daily Sewage Generation (gallons/day)	**2,349.2**

Source: Los Angeles County Sanitation Districts.

Table 5: Solid Waste Generation

Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	**# of Units**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Single-Family Residential	0	12.23	Lbs./Day/Unit	0.0
Medium Density Residential	0	12.23	Lbs./Day/Unit	0.0
Multiple-Family Residential	0	12.23	Lbs./Day/Unit	0.0
Mobile Home	0	12.23	Lbs./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Office	4,153	6.00	Lbs./Day/1,000 Sq. Ft.	24.9
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./# Rooms**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Specialty Retail Commercial	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Shopping Center	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Sit-Down Restaurant	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Fast-Food Restaurant	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Hotel	0	6.00	Lbs./Day/Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Industrial Park	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
General Light Industry	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	60,744	8.93	Lbs./Day/1,000 Sq. Ft.	542.4
Public/Institutional Use	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				**567.4**

Source: City of Los Angeles CEQA Thresholds Guide, 2006, and City of Los Angeles Average Solid Waste Generation Rates, April 1981