

(Adopted 4/12/84)
(Amended 12/7/94)
(Amended 3/2/05)
(Amended 6/19/13)

EXHIBIT “J”

EQUIVALENT DWELLING UNIT COMPUTATIONS

GENERAL

Equivalent Dwelling Unit (EDU) is a numerical value designation where one EDU represents the sewage flow from a single family residential household. For the purposes of computing uniform financial obligations for each Contracting Agency using the Regional Sewerage System, the following computations shall be used to determine EDU’s for residential, commercial, and industrial units:

1. Residential. Each structure or part of a structure which is designed for the purpose of providing permanent housing for one family or tenant shall be one EDU. This includes, but is not limited to, a single family detached residence, an apartment, a townhouse, a condominium, a mobile home or trailer space.
2. Commercial. All structures designed for the purpose of providing permanent housing for enterprises engaged in exchange of goods and services. This shall include, but not be limited to, all private business and service establishments, schools, churches, and public facilities. EDU’s shall be determined by multiplying the fixture units (as defined by Table 1) shown on the approved building plans, by the appropriate sewage factor from the following Table 2 (also see Note A). Total EDU’s for commercial centers for various use categories will be the sum of the EDU’s computed for each category of use. For example, hotel complexes that contain restaurants, pools, health clubs, or

laundry facilities should be calculated based on the individual uses in the hotel complex with the fee based on the sum of the EDU's computed for each category of use.

3. Industrial. All structures designed for the purpose of providing permanent housing for an enterprise engaged in the production, manufacturing, or processing of material. EDU's for industrial users shall be determined as follows:

a. For domestic type wastewater, multiply the fixture units (as defined by Table 1) shown on the approved building plans by a sewage factor of 0.0741, based on a 20 gallons per fixture unit flow per day.

b. For non-domestic wastewater; compute from information contained on the industrial waste permit, using the following formula:

$$\text{EDU} = \frac{\text{Estimated non-domestic flow}}{270} \left[.37 + .31 \frac{\text{BOD}}{230} + .32 \frac{\text{SS}}{220} \right]$$

c. Combine the resultant EDU's derived from a and b above.

NOTES:

- A. Sewage Factor is derived from the formula

$$SF = K \left[.37 + .31 \frac{BOD}{230} + .32 \frac{SS}{220} \right]$$

| | | | |
|--------|-----|---|--|
| Where: | SF | = | Sewage Factor |
| | K | = | Gallons per fixture unit divided by the average domestic household flow of 270 gallons |
| | BOD | = | Biochemical Oxygen Demand |
| | SS | = | Suspended solids |

- B. Reimbursement Fees to be levied on Pre-1979 Structures Connecting to the Regional System

For residential structures with a building permit issued prior to July 1, 1979, no Capital Capacity Reimbursement Account (CCRA) fees will be levied at the time of connection to the regional system. If the original permit was issued after 7/1/79, then the CCRA fees established at the time of permit issuance will apply.

The CCRA fees will apply to all commercial and industrial development regardless of when the structure was constructed. When a non-residential use requests to connect to the regional system or modify its use if already connected, the CCRA fee should be based on the current fee in effect at the time the connection or modified use is made (also see Note C).

- C. Reimbursement Fees to be Levied on Existing System Users Who Expand or Revise Use

In some situations existing commercial and industrial users will expand uses to meet increasing demands. As a result, additional fixture units will usually be included within the expanded facility. Under these situations the following criteria will apply:

- a. CCRA fees will only be levied on the fixture unit (FU) count difference between existing FU's and new FU's.
- b. The CCRA fee will be determined based on the fee in effect at the time of building or sewer permit issuance for the expanding development.
- c. A change in use, placing a commercial development in a different Exhibit "J" category, will not result in the recalculation of CCRA obligation for

the existing FU's. Only the new added FU's will be levied CCRA fees based on the Exhibit "J" category which best defines the proposed use.

D. Collection and Reporting of CCRA Fees

- a. CCRA fees shall be reported at no later than at the time of occupancy.
- b. CCRA fees shall be based on the EDU rate (as established by the EDU resolution adopted by the IEUA Board of Directors) in effect at the time of payment. For example, if CCRA fees are reported in the July report, any connection fees changes effective July 1, would be in effect.

E. Attachment of Sewer Use Rights; Tied to Property or Structure

Under certain situations an existing discharger may want to relocate or renovate a business. The issue may then arise as to ownership of certain existing discharge rights in the regional system.

All sewer capacity remains with the existing building and should be sold to building owners rather than tenants.

In cases where an existing building is completely demolished, the transfer or reuse of capacity rights can be permitted provided that:

- a. Proof of building demolition can be documented;
- b. Payment for original system capacity can be documented;
- c. The demolition occurs simultaneously with the transfer; and
- d. The transfer occurs within the Contracting Agency who originally sold the capacity.

Capacity rights would be determined based on fixture unit counts and the Exhibit "J" use category of the demolished structure. Because local collection systems may also be impacted by a relocation, this exception shall be at the sole discretion of the contracting agency who is accepting the relocated capacity.

Any additional EDUs required shall be purchased per Note C of this Exhibit.

TABLE 1 - Fixture Unit (FU) Values^{1,2}

| Appliances, Appurtenances or Fixtures | Fixture Units |
|--|----------------------|
| Bathtub or Combination Bath/Shower | 2.0 |
| Clothes Washer, domestic, standpipe | 3.0 |
| High Efficiency Clothes Washer | 2.0 |
| Dental Unit, cuspidor | 1.0 |
| Dishwasher with independent drain | 2.0 |
| Drinking Fountain or Water Cooler | 0.5 |
| Food Waste Grinder (Commercial) | 3.0 |
| Floor Drain, Emergency | 0.0 |
| Floor Drain | 2.0 |
| Shower, single-head trap | 2.0 |
| Multi-head, each additional | 1.0 |
| Lavatory, single | 1.0 |
| Lavatory, In sets of two or three | 2.0 |
| Washfountain (1.5-in Minimum Fixture Branch Size) | 2.0 |
| Washfountain (2-in Minimum Fixture Branch Size) | 3.0 |
| Receptor, indirect waste ³ | |
| Bar | 2.0 |
| Clinical | 6.0 |
| Commercial with food waste (1.5-in Minimum Fixture Branch Size) | 3.0 |
| Commercial with food waste (2-in Minimum Fixture Branch Size) | 4.0 |
| Commercial with food waste (3-in Minimum Fixture Branch Size) | 6.0 |
| Kitchen, domestic (with or without food-waste grinder and/or dishwasher) | 2.0 |
| Laundry (with or without discharge from a clothes washer) | 2.0 |
| Service or Mop Basin | 3.0 |
| Service, flushing rim | 6.0 |
| Wash, each set of facets | 2.0 |
| Urinal | 2.0 |
| Waterless Urinal | 1.0 |
| Water Closet, 1.6 GPF | 4.0 |
| Water Closet, greater than 1.6 GPF | 6.0 |

TABLE 1(a) – Discharge Capacity in Gallons per Minute for Intermittent Flow Only^{1,3}

| Gallons per Minute | Fixture Units |
|---------------------------|----------------------|
| Up to 7.5 | 1 |
| Greater than 7.5 to 15 | 2 |
| Greater than 15 to 30 | 4 |
| Greater than 30 to 50 | 6 |

TABLE 1(b) - Maximum Fixture Units for a Trap and Trap Arm^{1,3}

| Size of Trap and Trap Arm (inches) | Fixture Units |
|---|----------------------|
| 1.25 | 1 |
| 1.5 | 3 |
| 2 | 4 |
| 3 | 6 |
| 4 | 8 |

Footnotes:

1. Tables 1, 1(a), 1(b) are based on the 2010 California Plumbing Code
2. Additional information regarding definitions and plan checking are defined by latest Exhibit J - Table 1 Guideline.
3. Indirect waste receptors shall be sized based on the total drainage capacity of the fixtures that drain therein to, in accordance with Table 1(a). Maximum fixture units for a fixture trap and trap arm loadings for sizes up to 4 inches shall be in accordance with Table 1(b).

TABLE 2¹

| Category | Type of Commercial | Typical Descriptions of Establishment | Gal/ Fixture | BOD/TSS | Sewage Factor (see Note A) |
|----------|-------------------------------|--|-----------------|---------|-------------------------------|
| I | Motel/ Hotel | Establishment typically engaged in short-term lodging and may offer food and beverage, recreation, conference/convention room, laundry, and parking services. | 12 | 230/220 | 0.0444 |
| | Recreation/Amusement | Recreational and amusement services and attractions | | | |
| | Restaurant (Fast Food) | Establishments where patrons order or select items and typically pay before eating. Serves food on trays with disposable dishware, has an available drive-thru service, and does not use a dishwasher. | | | |
| | Retail Store | Establishment typically engaged in providing retail goods for purchase | | | |
| | Office | Establishment where business or services are supplied. | | | |
| | Market (without Butcher Shop) | Establishments typically retailing a general line of food, such as canned and frozen foods, fresh fruits and vegetables. Establishment does not process (cut) meat, poultry, or seafood. | | | |
| | Bar/Tavern | Establishment typically engaged in preparing and serving alcohol beverages for immediate consumption. May also provide limited food services. | | | |

| Category | Type of Commercial | Typical Descriptions of Establishment | Gal/ Fixture | BOD/TSS | Sewage Factor (see Note A) |
|----------|----------------------------|---|-----------------|---------|-------------------------------|
| II | Market (with Butcher Shop) | Establishments typically retailing a general line of food, such as canned and frozen foods, fresh fruits and vegetables. Establishment does process (cut) meat, poultry, or seafood. | 24 | 250/350 | 0.1081 |
| | Bakery | Establishment typically manufacturing fresh and frozen bread and bread-type roll products, cookies, crackers, doughnuts, pastries, pies, ice cream cones, and etc. May include commercial and storefront bakeries. | | | |
| | Mortuary | Establishments typically preparing the dead for burial or internment and conducting funerals. May include crematories. | | | |
| III | Convalescent Home | Establishments providing inpatient nursing and rehabilitative serves. The care is typically provided for an extended period of time to individuals requiring nursing care. May include nursing homes, Inpatient care hospices, rest homes with nursing care, etc. | 42 | 250/300 | 0.1780 |
| | Hospital | Establishments typically known and licensed as general medical and surgical hospitals primarily engaged in providing diagnostic and medical treatment to inpatients with any wide variety of medical conditions. | | | |
| | Health Spa with Pool | Establishments typically operating fitness and recreation sports facilities featuring exercise and other active physical conditioning. Must have a pool. May include physical fitness centers with pools, gyms with pools, day spas with pools, etc. | | | |
| | Restaurant (Full Service) | Establishments typically providing food services where patrons order and are served while seated and typically pay after eating. May serve food on non-disposable dishware, operates dishwashing equipment, has waiter/waitresses and includes buffets. | | | |

| Category | Type of Commercial | Typical Descriptions of Establishment | Gal/ Fixture | BOD/TSS | Sewage Factor (see Note A) |
|----------|--|--|-----------------|---------|-------------------------------|
| IV | Laundry (Laundromat) | Establishment typically operating coin-operated or similar self-service laundry equipment for customer use on premises. Laundries or Laundromats classified under this category are for non-water efficient washing machines. | 43 | 350/500 | 0.2499 |
| | Dry Cleaner (Processor) | Establishment typically engaged in laundering services, and specialty cleaning services for garments and other textile items on the premises using solvents other than water. Drop off and pickup sites that do not perform cleaning services are classified under Category I. | | | |
| V | Car Wash (Coin Operated) (See Footnote 2) | Establishments typically engaged in the cleaning and/or washing of automotive vehicles. Consists power washing spray wand car washes. | 102 | 150/500 | 0.4910 |
| VI | Church | Establishments typically engaged in operating religious organizations. May include monasteries, temples, mosques, synagogues, places of worship. | 17 | 230/220 | 0.0630 |
| | School | Establishments typically engaged in furnishing academic courses and associated coursework. May include universities (public/private), junior colleges (public/private), vocational schools. | | | |
| | Public Facility | Establishments typically operated by the local city or other government entities. May include government offices, community centers, fire/police stations, parks, city facilities, court houses, etc. | | | |

| Category | Type of Commercial | Typical Descriptions of Establishment | Gal/ Fixture | BOD/TSS | Sewage Factor (see Note A) |
|----------|-------------------------|--|-----------------|---------|-------------------------------|
| VII | Health Spa without Pool | Establishments typically operating fitness and recreation sports facilities featuring exercise and other active physical conditioning. Must not have a pool. May include physical fitness centers with pools, gyms without pools, day spas without pools, etc. | 42 | 230/220 | 0.1555 |
| | Laundromat | Establishment typically operating facilities with coin-operated or similar self-service laundry equipment for customer use on premises. Laundries or Laundromats classified under this category are for high efficiency front loading washing machines. | | | |

Footnotes:

1. Non-coin operated car washes may be treated as an industrial user.