



Orange County Fire Authority Community Risk Reduction INFORMATIONAL BULLETIN 02-21

Subject: Midway City Fire Water Flow Report Requirements

Midway City is challenged with meeting the fire water flow requirements for new buildings. Water is provided to this community through three different water agencies, Midway Mutual Water Company, Eastside Water Association, and South Midway City Mutual Water Company (map and contact telephone numbers are on reverse side).

All three water agencies have limited water reservoir tanks and only South Midway City Mutual has an automatic water supply interconnection to another water agency (Westminster Water District). Each of these water agencies is independently supplying 200-300 homes fire protection and domestic water from a single source well. Water limitations may impact proposed building projects from meeting the fire water flow requirements identified in the Fire Code.

- **Midway City Mutual Water Company** has two 90,000 gallon reservoir tanks with a 650 GPM water pump, 4" diameter water mains, and 12 fire hydrants. Recent hydrant water tests have provided less than the minimum fire code requirements. All projects in this area need to provide a "Will Serve Letter" from Midway Mutual Water Company with a completed OCFA Water Availability Form prior to OCFA and OC Building Department approval.
- **Eastside Water Association** has a 40,000 gallon and 10,000 gallon reservoir tanks with a 1400 GPM water pump, 6" diameter water mains, and 34 fire hydrants, and a "manual" interconnect valve with Westminster Water District. Recent hydrant water tests have provided minimum fire flow requirements for residential structures up to 3600 square feet. All projects in this area need to provide a "Will Serve Letter" from Eastside Water Association with a completed OCFA Water Availability Form prior to OCFA and OC Building Department approval.
- **South Midway City Mutual Water Company** has a 20,000 gallon tank with an "automatic" interconnect valve with the Westminster Water District, 6" diameter water mains to 4 fire hydrants, and 10 Westminster Water District fire hydrants. Recent hydrant water tests have provided the minimum fire flow requirements for all proposed projects. All projects in this area need to provide a domestic water "Will Serve Letter" from South Midway City Mutual Water Company and a separate "Will Serve Letter" from the Westminster Water District for the fire protection water.

Additional questions regarding specific fire protection water requirements may be forwarded to OCFA Planning & Development @ 714-573-6100.

Midway City Water Agencies



AGENCY CONTACT:

- Eastside Water
714-894-8106
- South Midway Mutual Water
714-842-8080
- Midway Mutual Water
714-532-9409
- Westminster Water District
714-898-3311





OCFA WATER AVAILABILITY FORM

SECTION A: To be completed by customer

Project Name: _____ OCFA SR #: _____ ASSIGNED UPON PLAN SUBMITTAL

Project Address: _____ City: _____

Applicant Phone #: (_____) _____ Fax #: (_____) _____

Area of largest building _____ ft²; Construction type? (check one): IA IB IIA IIB IIIA IIIB IV VA VB

Is this building sprinklered throughout? (check one) N Y

SECTION B: To be completed by local water department/district

Customer to provide results to OCFA

Water Department/District: _____

Test location (indicate address or cross-streets & provide reference map): _____

Hydrant number(s) (if applicable): _____

Elevation of test hydrant: _____ feet above sea level

Date of Test¹: _____ Time of test¹: _____ am pm

¹ Test to be performed as close as possible to the time that the lowest flows and pressures are expected (e.g., M-F, 6:00 – 9:00 am and 5:00 - 9:00 pm)

| FLOW TEST RESULTS | | | |
|--|-----|------------------------|-----|
| TEST INFORMATION IS VALID FOR 6 MONTHS FROM DATE TEST IS PERFORMED | | | |
| Static pressure: | psi | Residual pressure: | psi |
| Observed flow: | gpm | Flow calc'd at 20 psi: | gpm |

Check the box if the test information above was obtained in a manner other than an actual flow test (i.e. by computer modeling).

| Based on fluctuations known to exist at the site of the test, provide estimated values for the following: | | | |
|---|-----|-------------------------|-----|
| Maximum static pressure | psi | Minimum static pressure | psi |
| Minimum residual pressure | psi | Minimum residual flow | gpm |

I have witnessed and/or reviewed this water flow information and by personal knowledge and/or on-site observation certify that the above information is correct.

Name: _____ Company/Agency: _____

Signature: _____ Title: _____

Date: _____

ATTACHMENT 23

CFC TABLE B105.1(2): Minimum Required Fire Flow and Flow Duration for Buildings in OCFA Jurisdiction

| FIRE FLOW CALCULATION AREA (square feet) | | | | | DETACHED SINGLE-FAMILY RESIDENCE/DUPLEX | | DURATION (hours) | OTHER BUILDINGS | | DURATION (hours) |
|---|---------------|---------------|---------------|-------------|---|------|---------------------|-----------------|------|---------------------|
| | | | | | FIRE FLOW (gallons per minute at 20 psi residual) | | | NS | S | |
| Type IA/IB | Type IIA/IIIA | Type IV/VA | Type IIB/IIIB | Type VB | NS | S | | NS | S | |
| 0-22700 | 0-12700 | 0-8200 | 0-5900 | 0-3600 | 1000 | 1000 | 1 | 1500 | 1500 | 2 |
| 22701-30200 | 12701-17000 | 8201-10900 | 5901-7900 | 3601-4800 | 1750 | 1000 | NS: 2 S: 1 | 1750 | 1500 | |
| 30201-38700 | 17001-21800 | 10901-12900 | 7901-9800 | 4801-6200 | 2000 | 1000 | | 2000 | 1500 | |
| 38701-48300 | 21801-24200 | 12901-17400 | 9801-12600 | 6201-7700 | 2250 | 1125 | | 2250 | 1500 | |
| 48301-59000 | 24201-33200 | 17401-21300 | 12601-15400 | 7701-9400 | 2500 | 1250 | | 2500 | 1500 | |
| 59001-70900 | 33201-39700 | 21301-25500 | 15401-18400 | 9401-11300 | 2750 | 1375 | | 2750 | 1500 | |
| 70901-83700 | 39701-47100 | 25501-30100 | 18401-21800 | 11301-13400 | 3000 | 1500 | NS: 3 S: 1 | 3000 | 1500 | 3 |
| 83701-97700 | 47101-54900 | 30101-35200 | 21801-25900 | 13401-15600 | 3250 | 1625 | | 3250 | 1625 | |
| 97701-112700 | 54901-63400 | 35201-40600 | 25901-29300 | 15601-18000 | 3500 | 1750 | | 3500 | 1750 | |
| 112701-128700 | 63401-72400 | 40601-46400 | 29301-33500 | 18001-20600 | 3750 | 1875 | NS: 4 S: 1 | 3750 | 1875 | 4 |
| 128701-145900 | 72401-82100 | 46401-52500 | 33501-37900 | 20601-23300 | 4000 | 2000 | | 4000 | 2000 | |
| 145901-164200 | 82101-92400 | 52501-59100 | 37901-42700 | 23301-26300 | 4250 | 2125 | | 4250 | 2125 | |
| 164201-183400 | 92401-103100 | 59101-66000 | 42701-47700 | 26301-29300 | 4500 | 2250 | | 4500 | 2250 | |
| 183401-203700 | 103101-114600 | 66001-73300 | 47701-53000 | 29301-32600 | 4750 | 2375 | | 4750 | 2375 | |
| 203701-225200 | 114601-126700 | 73301-81100 | 53001-58600 | 32601-36000 | 5000 | 2500 | | 5000 | 2500 | |
| 225201-247700 | 126701-139400 | 81101-89200 | 58601-65400 | 36001-39600 | 5250 | 2625 | | 5250 | 2625 | |
| 247701-271200 | 139401-152600 | 89201-97700 | 65401-70600 | 39601-43400 | 5500 | 2750 | | 5500 | 2750 | |
| 271201-295900 | 152601-166500 | 97701-106500 | 70601-77000 | 43401-47400 | 5750 | 2875 | | 5750 | 2875 | |
| 295901+ | 166501+ | 106501-115800 | 77001-83700 | 47401-51500 | 6000 | 3000 | | 6000 | 3000 | |
| | | 115801-125500 | 83701-90600 | 51501-55700 | 6250 | 3125 | | 6250 | 3125 | |
| | | 125501-135500 | 90601-97900 | 55701-60200 | 6500 | 3250 | | 6500 | 3250 | |
| | | 135501-145800 | 97901-106800 | 60201-64800 | 6750 | 3375 | | 6750 | 3375 | |
| | | 145801-156700 | 106801-113200 | 64801-69600 | 7000 | 3500 | | 7000 | 3500 | |
| | | 156701-167900 | 113201-121300 | 69601-74600 | 7250 | 3625 | 7250 | 3625 | | |
| | | 167901-179400 | 121301-129600 | 74601-79800 | 7500 | 3750 | 7500 | 3750 | | |
| | | 179401-191400 | 129601-138300 | 79801-85100 | 7750 | 3875 | 7750 | 3875 | | |
| | | 191401+ | 138301+ | 85101+ | 8000 | 4000 | 8000 | 4000 | | |

S: Provided with an approved sprinkler system throughout the structure NS: No fire sprinklers or partially protected with a sprinkler system