METHODS OF CONDUCTING SURVEYS

Method 3– Using Pressurized Fire Hydrants and Tanker Relay

1. Complete public protection survey contact sheet
2. Map … (Shall identify the following)
   a. Be sure to scale and identify the scale
   b. Current corporate limits of city(ies) or town(s)
   c. Current fire district, if any
   d. Current response are, if different from fire district
   e. Street names, if no names, street numbers should be listed
   f. Location of **all** fire hydrants
   g. Water main sizes
   h. Pressure zone boundaries (if any)
   i. Water system supply locations and capacities for the area being graded
   j. Water system storage facilities and capacities in the area being graded
   k. Location of fire station(s)
   l. Where any creditable automatic aid equipment will enter the graded area and distance from the automatic aid station to the district line
   m. Locations of all creditable suction points
3. Complete an Apparatus and Equipment Form for all vehicles operated by the fire department and any creditable automatic aid vehicles
   a. List all drop tanks and capacities
4. Submit a copy of the last service test for each apparatus with a pump. Also submit a copy of the last test of the aerial ladder or elevated platform, if either exist.
   a. Last 3 tests will need to be reviewed during survey
5. Complete a Response Form for all volunteer, call back or off shift members that respond to structure fire call.
   a. List the last 20 responses, or
   b. All the structure fires for the last 12 months, whichever is the least (in the department that is being surveyed only)
6. Identify the total number of alarm responses the fire department responded to last year
   a. Structure fires in the city and/or fire district
   b. Responses to first alarms outside
   c. Indicate if outside responses were automatic first alarm responses
7. Identify an exact total number of fire hydrants and suction points in the city and/or district(s).
   a. Plotted on map
   b. Hydrant count breakdown from must be completed

8. Water system(s)
    a. Provide maximum daily consumption (MDC) within the last 3 years
    b. Provide the date of MDC
    c. Provide the average daily rate in the last year
9. Suction Points (provide the following)
    a. Address or exact location
    b. Water available (minimum)
        (1) Using the apparatus and draft procedure designated to operate at this site
        (2) Not over 15 foot lift during a drought with an average of 50 year frequency
        (3) Certified by a: (Name, address & phone number)
            (a) Registered Professional Engineer
            (b) Registered Hydrologist
            (c) Registered Geologist
            (d) Soil Conservationist
            (e) Federal Surface Water Specialist
    c. Number of Engines capable of utilizing the suction point simultaneously
    d. Maximum rate obtainable for each of the Engines and hose arrangements scheduled to be used at each suction site
        (1) Supported by test results of last 3 tests of each suction point
    e. Signed statement from the owner or owners authorizing its use by the fire department and agreement to keep the site accessible.
    f. A description of the procedure to utilize suction point if ice covers the suction point and estimated time necessary to provide a drafting site when the ice is at the maximum thickness
    g. A description of the year round accessibility for Engine(s) of each suction water supply points
    h. A description of the arrangement of the dry hydrant, if provided
10. Alphabetical list of all streets
    a. Their length in miles
    b. Total Miles
    c. How much is not paved
11. Indicate all bridges that do <u>not</u> have a safe weight capacity sufficient for fire department apparatus
    a. Weight information is available from the state department of transportation
12. Provide the maximum rate for hydrant supplied from a water main, or a dry hydrant, using the Engine and hose arrangement scheduled to be used at this hydrant (supported by test results). NOTE: The maximum rate if tankers are supplied directly from a hydrant, using the hose arrangement scheduled to be used at this hydrant (supported by test results)

13. Description of Recent Demonstration
    a. Using only Automatic Aid
    b. More than 1000 feet from a hydrant or suction point
    c. Where 250 gpm or more was delivered for more than one hour
    d. Additional information needed:
        (1) Location of test
        (2) Date
        (3) Rate of flow delivered
        (4) Distance delivered from fire site to water point
        (5) Time duration
        (6) Number of personnel participating with a description of each person's function such as firefighter, pump operator, tanker operator, etc.
        (7) The apparatus used
            (a) Name and number
            (b) Pump capacity
            (c) Tank capacity
            (d) Functions
            (e) Distance from automatic aid station to fire district
        (8) Folding tanks used
            (a) Total capacity
            (b) Useable capacity = Total capacity less volume that cannot be pumped out when drafting from the tank
            (c) Set up time
            (d) Name and number of apparatus carrying each folding tank
        (9) Water point description to include:
            (a) Amount of water available for drafting – the amount of water shall only be that amount that is capable of being drafted under commonly acceptable drafting procedures
            (b) Method of drafting
            (c) Hose layout
            (d) Set up time
        (10) Description of the overall operation