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INSPECTION PROGRAM MISSION STATEMENT

The District's Hydrant Inspection Program shall ensure that every hydrant in the district can be expected to perform properly and reliably whenever it may be needed in an emergency.

INTRODUCTION

NFPA standards call for all public fire hydrants to be inspected on a regular basis. We perform annual inspections not only for the purpose of complying with the standards, but we need to have a high degree of confidence that all hydrants will perform properly in an emergency.

A number of circumstances can affect a hydrant's performance which includes vandalism, accidental damage, wear and tear, mechanical malfunction and even contractors performing work on water lines who forget to reopen hydrant tap valves. We want to detect any of these problems and correct them prior to the hydrant being needed.

HOW THE INSPECTION PROGRAM WORKS

Prior to summer fire season each company is assigned a proportional share of hydrants to inspect. Checklists are provided. Companies perform basic servicing and preventive maintenance. Hydrants requiring more significant work will be referred to summer Reserve Program personnel or EBMUD (the water district) as appropriate.

Companies are supplied with basic materials such as spray paint, lubricant and hand tools.

Having companies perform this work not only ensures a relatively high standard of quality and reliability, but the companies become familiar with some of the quirks and nuances of hydrant installations in the urban-wildland interface environment.

**A job best done before the
temperature breaks 100 degrees**



INSPECTION PROCEDURES

Procedures outlined in the checklist include:

LOCATION

The hydrant location actually witnessed in the field should match the address given on the checklist. The hydrant should also be plotted correctly on District maps. Occasionally new hydrants are not picked up by

**Making note of the
hydrant's location on approach**

the Mapping Program. Also as lots are developed in areas that are not completely built out, a new structure may be built between the closest preexisting "reference address" which is listed in the data base.

Errors can be noted and corrections sent in to the Mapping and Water Supply Program Supervisors.



CLEARANCE

There should be no obstructions, including the ground, preventing easy coupling of hoses or turning of spanners. The hydrant should be visible from all approaches. There should be no brush or tree limbs that could interfere with anyone approaching the hydrant and attempting to connect to it or operate it.

Crews should make minor corrections such as pruning and minor digging. More significant work such as heavy brush removal, significant digging, placing of retaining walls to prevent hillside soil sloughoff or the raising of bodies which are set too low should be referred for correction by submitting a repair request.

UFC 1001.7.1 states: "Posts, fences, vehicles, growth, trash, storage and other materials or things shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or hydrants."

UFC 1001.7.2 states: "A 3-foot clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved."

Ground sloughoff prevents full turning of the spanner



There is a hydrant somewhere behind those blackberry bushes



Pruning back an encroaching hedge



Crews should leave the hydrants clear and serviceable.

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PROCEDURES, Continued

Caps and Chains

Caps should be free from cracks and turn freely. Chains should be attached to caps and the hydrant body and turn freely in the cap chain race.

Crews should clean and lubricate threads and lubricate the chain race on the cap as needed. Missing caps should be replaced.

Valves

Valves should open and close properly and shouldn't leak at either the stem or the nozzle. Leaky packings on older hydrants should be tightened. Valves that are difficult to operate, have bent stems or don't open and close fully should be reported.

Paint

Paint should be in good condition. Hydrants with chips or rust showing should be touched up with aerosol paint. Hydrants in severe need of repainting should be reported. Bodies should be the correct color (which in our district is white for municipal hydrants, yellow for private and yard hydrants and red for special operation hydrants, draft hydrants and hydrants on "dry" systems which have to be supplied via a FDC.)

Color Code

Bonnets and caps should be the appropriate color for the operating range of the hydrant.

Blue Reflector

The blue reflector should be relatively clean and reflective. At least 2/3 of its reflective surface should be intact and in good condition. Severely damaged or missing reflectors should be reported.

Gate Pot

Cleaning threads with a wire brush



Spraying silicone on chain race



The blue reflector should be in good condition



The street shutoff should be visible whether on the roadway or

The gate pot for the street shutoff valve should be accessible and readily discernible from water main zone valves. All hydrant gate pots should be painted white in order to be easily spotted under water if a hydrant gets knocked off. Any gate pots which cannot be located should be reported.

Curb Paint

Curb paint involves two issues. One is a "red zone" painted on the curb where appropriate. The other indicates the distance from the curb to the street valve which is painted in contrasting roman numerals. Missing red zones or numerals should be reported.

Markings

Markings are indicators on the hydrant bodies of special conditions such as a hydrant on a regulator zone or a dead end main. Markings shown on the checklist that do not appear on the hydrant should be reported.

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over on the shoulder



**Painting a gate pot which
had been covered with "slurry seal"**



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Annual Hydrant Inspection Procedures

Part Three

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INSPECTION CHECKLIST

Here is the checklist we use in the district.

Each company on each shift is typically assigned two pages of hydrants to inspect such as the one shown below. Hydrants are listed in the order that they will be encountered while taking a logical route through the district.

HYDRANT MAINTENANCE LIST: 41-A

Rev. 7-12-98

LOCATION	SPEC. COND.	TYP. DATE	FLOW ST.	AVBL FLOW	COLORS		HYD. No.	LOCA TION	CLR- NCE	CAPS OK	CAP CHNS	VLVS OK	PNT OK	CLR CODE	BLUE DOT	GATE POT	CURB PNT	MRK- INGS	INSP BY	DATE
Moraga Wy, 1280	M64	T98	103	3180	T/B	C/O	#14198													
Country Club Dr, 740	M64	T99	104	3180	T/B	C/O	#H10590													
Country Club Dr, 798	M64	T99	110	3180	T/B	C/O	#H10589													
Country Club Dr/School St	M64	T99	112	3180	T/B	C/O	#H11285													
Country Club Dr/Viader Dr	M75	T99	113	3180	T/B	C/O	#15402													
Country Club Dr, 950	M64	T99	100	3180	T/B	C/O	#H16426													
Canyon Rd, 1600	M64	T99	102	3180	T/B	C/O	#H16427													
Canyon Rd/De La Cruz Wy	M64	T95	110	3180	T/B	C/O	#12989													
Sheila Ct, 219	M64	T95	100	2240	T/B	C/O	#12988													
School St/Rick Ct	M64	T89	115	2010	T/B	C/O	#12983													
School St/De La Cruz Wy	M64	T95	110	3180	T/B	C/O	#12984													
School St/Silvia Ct	M64	T95	100	3180	T/B	C/O	#12985													
School St/Hazelwood Pl	M64	T89	121	2010	T/B	C/G	#12986													
Hazelwood Pl, 126	M75	T95	115	3180	T/B	C/O	#12987													
School St, 1700	M64	T98	118	3180	T/B	C/O	#FH10370													
School St, 1678	M64	T89	121	2010	T/B	C/G	#13114													
Country Club Dr, 950 (Rear Entrance)	M24	Tx	New	Hyd	T/	C/	#FH11652													
St. Andrews Dr, 1600	M64	T95	95	3180	T/B	C/O	#H10588													
St. Andrews Dr/Agusta Dr (N)	M64	T95	100	3180	T/B	C/O	#H11014													
Agusta Dr, 629	M64	T99	102	3050	T/B	C/O	#H11013													
Agusta Dr, 619	M64	T99	100	2340	T/B	C/O	#H11012													
Agusta Dr, w. of Gleneagle !	M64	T92	50	1135	T/G	C/O	#H19364													
Agusta Dr, w. of Gleneagle !	M64	T92	140	2550	T/B	C/G	#H19365													
Agusta Dr, w. of Gleneagle !	M64	T92	125	2875	T/B	C/G	#H19366													
Agusta Dr, w. of Gleneagle !	M64	T92	120	2460	T/B	C/O	#H19367													
Greenbrier !	M64	T95	40	1230	T/G	C/R	#H15062													
Tamarisk !	M64	T95	80	3020	T/B	C/O	#H15065													
Spyglass Ln (1) !	M64	T95	50	1380	T/G	C/O	#H15063													
Spyglass Ln (2) !	M64	T95	45	1145	T/G	C/R	#H15064													
Agusta Dr/Spyglass Ln	M64	T99	100	2340	T/B	C/O	#H11011													
Agusta Dr/Tamarisk	M64	T99	100	2340	T/B	C/O	#H14558													
Agusta Dr, 105' nw/o Agusta Wy !	M85	Txx	New	Hyd	T/	C/	#FH10575													
Agusta Dr, 350' nw/o Agusta Wy !	M85	Txx	New	Hyd	T/	C/	#FH10574													
Agusta Dr, 440' nw/o Agusta Wy !	M85	Txx	New	Hyd	T/	C/	#FH10576													
Agusta Dr, 835' nw/o Agusta Wy !	M85	Txx	New	Hyd	T/	C/	#FH10577													
Agusta Dr, 1080' nw/o Agusta Wy !	M85	Txx	New	Hyd	T/	C/	#FH10578													
Agusta Dr, cul de sac	M85	Txx	New	Hyd	T/	C/	#FH10579													
Agusta Wy, 180' sw/o Agusta Dr !	M85	Txx	New	Hyd	T/	C/	#FH10580													
Agusta Wy, 505' sw/o Agusta Dr !	M85	Txx	New	Hyd	T/	C/	#FH10577													
Greenbrier 365' S/O Agusta Dr !	M85	Txx	New	Hyd	T/	C/	#FH10597													
St. Andrews Dr, 1735	M64	T95	100	2870	T/B	C/O	#H11018													
St. Andrews Dr/Indian Wells	M64	T95	50	1735	T/B	C/O	#H13223													
Indian Wells, 24	M64	T95	40	0730	T/O	C/R	#H13222													
Brookline, 113	M64	T89	55	1095	T/G	C/O	#H14161													
Brookline, 10	M64	T95	40	1150	T/G	C/R	#H14162													

Remarks:

Annual hydrant inspection maintenance is a universal concept practiced throughout the world.

Jamaica Fire Brigade on Inspection in Kingston

If the process is thorough and sensible, it will pay great dividends when hydrants are needed in an emergency.

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