## NEW YORK CITY ENVIRONMENTAL PROTECTION BUREAU OF WATER AND SEWER OPERATIONS CROSS CONNECTION CONTROL PROGRAM ANNUAL REPORT

JANUARY 1st TO JULY 31, 2012

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Prepared in accordance with Section 8.2 of the July 2007 United States Environmental Protection Agency Filtration Avoidance Determination

Prepared by:

James A. Luke, P.E., Chief Permitting & Compliance Bureau of Water and Sewer Operations During the first half of 2012, the Bureau's Cross Connection Control Program continued to exceed the current calendar year milestones which were established by the United States Environmental Protection Agency's (EPA) Filtration Avoidance Determination, and are being presented for this semi-annual reporting period.

Beginning at the end of last year, DEP utilized a task order service contract with an engineering consulting firm, Hazen & Sawyer, which involved performing cross connection control inspections, directing installation of backflow prevention devices as required for both EPA and New York State Department of Health (SDOH) compliance. This temporary contracted work was scheduled to assist in meeting annual inspection target numbers which were created with the roll-out of the Commissioner's Strategic Plan. The number of inspections and reviews performed by staff and the consultants are included in the summaries of the statistics entered into the table. At this time, in addition to potentially hazardous locations, the agency has been performing inspections of some facilities classified as aesthetically objectionable, all of which are recorded in the Cross Connection Control database. Several educational and outreach presentations to the plumbing, building, real estate, and engineering industry groups on the changes and requirements regarding cross connection prevention and the need for the appropriate backflow prevention device.

Policy changes and updating of the NYC Building Code have facilitated the need to check all fire sprinkler services for proper backflow protection. The 2008 Plumbing Code required fire sprinkler services to have the minimum backflow protection of a Double Check Detector Assembly or DCDA. A greater level of protection would be necessary, if the fire sprinkler system contains any chemical treatment for the prevention of freezing or corrosion control, or the building was located in close proximity to a water body.

The Department has made some upgrades to the website providing additional information regarding backflow prevention, and an easier way for navigating. There is also an email address on this Cross-Connection Control website (backflow@dep.nyc.gov) to be used to receive inquiries from small businesses and the public for any questions or concerns relating to compliance requirements. Another new address was created to accept requests for a waiver from the requirement of using an approved backflow prevention device (BPD) when utilizing a fire hydrant as a temporary source of potable water. Hydrantwaiver@dep.nyc.gov is now available for non-profit organizations and community garden associations to obtain a waiver from the requirement of using an approved BPD whenever a fire hydrant is used for a watering station or community garden maintenance. A couple of examples of a waiver that was issued to a particular group would be the NY Road Runners Association for a watering station during the marathon. and the NYC Department of Parks & Recreation for small community garden organizations that cannot afford to hire a plumber and obtain an approved BPD just to water a small green space or maintain a community garden. These organizations are required to demonstrate that the City's water supply will be protected from potential backflow when operating the fire hydrant for watering operations, and their applications are processed and evaluated on a case by case basis.

Also this year, the Bureau responded an incident possibly related to a backflow or cross connection condition. This occurred at the Brooklyn Navy Yard, and multiple inspections and surveys were conducted in and around the area. None of which resulted in the identification of a cross connection problem. Several locations within the Navy Yard were issued Orders to install a backflow device, and the metering program has heightened their efforts for compliance there.

Finally in the first half of 2012, there has been a re-organization of the Cross Connection Program to consolidate functions to streamline activities. The inspection responsibilities were

moved to Distribution, to allow for better coordination with field emergencies. Enforcement has been moved to Administration where it will expand to include the issuing of other water supply related violations, including permitting and inspection compliance. The Plan Review Section will remain with Permitting and staff has received new computer equipment upgrades which along with the improvements made to the database should assist them with their daily operations.

In summary, the Bureau's rigorous oversight and regulation of Cross Connection Control/Backflow activity, which includes a substantial inspection program, incident response, enforcement, plan review team, and the additional work performed by the consultants, continues to provide an excellent level of protection of the City's public water supply system. The Cross Connection Control Program strives to provide a dynamic program with constant improvements by utilizing the following framework and direction in the evolution of our policies:

- The immediate response, assessment and inspection of all premises in a given area to determine the degree of hazard posed by a potential cross connection event when facilitated by the report of an emergency, notification or request from the Bureau of Water Supply, or Distribution Operations.
- 2) There are no approvals or the issuance of a Permit for a new wet connection or a two (2) inch tap for domestic use without a review for approval, or an exemption (variance) issued by the Cross Connection Control Unit (CCCU) of the Bureau.
- 3) The swift assessment of plans submitted for review and approval to the NYC Department of Environmental Protection (DEP), which eliminates the need for applicants to submit their cross connection device plans to the New York State Department of Health for sign-off. Applicants will soon be able to apply on-line through "On-Line" permitting.
- 4) No approval of a Permit for a wet connection, or 1½ and 2 inch taps will be issued without the review and approval issued by the Cross Connection Control Unit (CCCU) for all fire sprinklers and combined services.
- 5) Electronic records of the proper installation, including the initial testing of all approved devices as well as the annual testing of any cross connection control containment device are collected, tracked, and maintained by the CCCU of DEP. Submission of the initial and annual test reports on-line is also planned for the near future.
- 6) Regularly scheduled outreach and informational sessions, PowerPoint presentations, hand-outs, and dialogues with Professional Engineers, industry groups and plumbing industry professionals regarding any changes in the DEP cross connection control policy and procedures are on-going. Plus, easier access to information on our website.

## **CROSS CONNECTION FAD MILESTONES**

200/yr	400/yr	TBD*	400/yr	225/yr	300-450/yr	1-2/yr	FAD Requirement
762	185(120)	4(4)	2,949	5,184	2,716	1	Jan June 2012
57	445	19(6)	7625	4060	5187	2	Jan Dec. 2011
474	472	-	3280	2887	8262	3	Jan Dec. 2010
268	792	0	3021	1064	2812	0	Jan Dec. 2009
586	1160	12	2642	1124	3207	0	Jan Dec. 2008
532	1290	44	2120	1122	4232	4	Jan Dec. 2007
Notices of Violation Issued for Failure to Test Annually (Install)	Exemption Requests Fr Processed (Approved)	Backflow Preventer Plans Reviewed with Self- Certification (Approved)	Backflow Preventer Plans Approved	Enforcement Initiated for "Hazardous" Premises	Facility "Hazardous" Inspections	Responding to Incidents	Annual and Semi- Annual Periods

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↑These were	Orders to	submit the test	reports. No	formal NOVs	have been	written.	
<b>T</b> Exemption	submissions	have waned	No established due to new fee	schedule,	policy changes	& rejections.	
	*(TBD)To be	determined.	No established	minimum level	of response.		