

NEW YORK CITY ENVIRONMENTAL PROTECTION

BUREAU OF WATER AND SEWER OPERATIONS

CROSS CONNECTION CONTROL PROGRAM

SEMI-ANNUAL REPORT

JANUARY 1st TO JUNE 30, 2013

JULY 31, 2013

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

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During the first half of 2013, the DEP Bureau of Water and Sewer Operations (BWSO) Cross Connection Control Program continued to exceed the current calendar year milestones that were established by the United States Environmental Protection Agency's (EPA) Filtration Avoidance Determination. The status of the program is being presented in this semi-annual report for the period ending June 30, 2013. Please see attached Table A "Cross Connection FAD Milestones" which includes the metrics for this reporting period. Below, highlights for the program during this reporting period are provided.

Since the beginning of last year, the cross connection control program continues to work as three sections that interact as needed to facilitate standard operations. The inspection staff and those responsibilities were sent to the Division of Distribution Operations. This was done to improve response time and allow for better coordination of potential cross connection related issues with the people working in distribution with respect to anomalies and/or emergencies. The Enforcement Group was sent to a newly formed section in Administration which was expanded to include all of the enforcement needs for BWSO. The plan review and exemption issuing unit was renamed the Cross Connection Plan Review Unit, and was moved to the Division of Review & Construction Compliance.

The Department's mission of directing the installation of backflow prevention devices as required for both EPA and New York State Department of Health (SDOH) compliance remains an integral part of DEP efforts and has continued to be a high priority. Cross Connection Inspections are of such importance that targets for them are included as a goal in the DEP Strategic Plan, *Strategy 2011-2014*. All inspections are recorded within computer data bases and tracked throughout the compliance process as needed.

With respect to outreach and education, several educational and outreach presentations to the plumbing, building, real estate, and engineering industry groups explaining some of the program changes and illustrating the requirements regarding cross connection prevention and the need for installing the appropriate backflow prevention device were performed. The City's website has included an informational video on cross connection and backflow prevention which is primarily targeted for the small business and restaurant community. A link can be found to the video at <http://www.nyc.gov/html/sbs/html/home/home.shtml>. Finally, the DEP website was upgraded this year to enhance the user experience and make it easier to use and find information on cross connections.

Super-Storm Sandy has prompted significant policy discussions in NYC that have implications for cross connections requirements in the city. The emphasis with respect to cross connections was responding to the need to modify the installation of the proper backflow prevention device in these flood prone areas. One of the items changed included a provision for the installing of RPZs above the 100 year flood elevation to prevent the immersion of the discharge port during high storm surge events. The restriction of habitable space to a particular elevation, emergency power requirements and availability of safe drinking water were some others.

Updates to the NYC Plumbing Code were also made, which required fire sprinkler services to have installed as the minimum backflow protection an approved Double Check Detector Assembly or DCDA. A permit to obtain a new water service connection for a fire sprinkler system requires an approval from the Cross Connection Plan Review Unit (CCPR) and approval from the NYC Department of Buildings for the sizing of the sprinkler service line. This requirement ensures that no water connections will be made without the necessary level of backflow protection. If the fire sprinkler system contains any chemical treatment for the

prevention of freezing or corrosion control, or the building is located in close proximity to an unapproved source or water body, then a Reduced Pressure Zone Detector Check Assembly would be required on that fire service line.

In summary, the Bureau's rigorous oversight and regulation of Cross Connection Control/Backflow activity, which includes a substantial inspection program, incident response, enforcement, and plan review 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 program with constant improvements by utilizing the following framework:

- 1) The immediate response, assessment and inspection of appropriate 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 Plan Review Unit (CCPR).
- 3) The review and approval of plans submitted to the DEP for cross connection devices. Applicants will soon be able to apply on-line through DEP's Water and Sewer Permitting System. .
- 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 CCPR 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 device are collected, tracked, and maintained by the CCPR 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, 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. In addition, the DEP website has been made more user friendly and provides easy access to cross connection control information at www.nyc.gov/dep.

CROSS CONNECTION FAD MILESTONES - Table A

| Annual and Semi-Annual Periods | Responding to Incidents | Facility "Hazardous" Inspections | Enforcement Initiated for "Hazardous" Premises | Backflow Preventer Plans Approved | Backflow Preventer Plans Reviewed with Self-Certification (Approved) | Exemption Requests Processed (Approved) | Notices of Violation Issued for Failure to Test Annually (Install) |
|--------------------------------|-------------------------|----------------------------------|--|-----------------------------------|--|---|--|
| Jan. - Dec. 2007 | 4 | 4232 | 1122 | 2120 | 44 | 1290 | 532 |
| Jan. - Dec. 2008 | 0 | 3207 | 1124 | 2642 | 12 | 1160 | 586 |
| Jan. - Dec. 2009 | 0 | 2812 | 1064 | 3021 | 0 | 792 | 568 |
| Jan. - Dec. 2010 | 3 | 9262 | 2887 | 3280 | 1 | 472 | 474 |
| Jan. - Dec. 2011 | 2 | 5187 | 4060 | 7625 | 19(6) | 445 | 57 |
| Jan. - Dec 2012 | 2 | 4,318 | 4,348 | 6,115 | 7(4) | 374(266) | 413(1623) |
| Jan. - June 2013 | 0 | 1987 | 1356 | 3077 | 8(4) | 188 (164) | 1645(849) |
| FAD Requirement | 1-2/yr | 300-450/yr | 225/yr | 400/yr | TBD* | 400/yr | 200/yr |

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|--|--|---|
| <p>*(TBD)To be determined. No established minimum level of response.</p> | <p>↑Exemption submissions have waned due to new fee schedule, policy changes & rejections.</p> | <p>↑These were Orders to submit the test reports. Failure to install are in ()s.</p> |
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