



# City of New York

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## OFFICE OF THE COMPTROLLER

John C. Liu  
COMPTROLLER



## MANAGERIAL AUDIT

**Tina Kim**

Deputy Comptroller for Audit

Audit Report on the Health and Safety  
Conditions of Department of Parks and  
Recreation's Public Swimming Pools

MH12-137A

**August 22, 2013**

<http://comptroller.nyc.gov>



THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
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NEW YORK, N.Y. 10007-2341

John C. Liu  
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August 22, 2013

**To the Residents of the City of New York:**

My office has audited the adequacy of the Department of Parks and Recreation's (DPR) controls to ensure that public swimming pools are being consistently maintained and lifeguards are qualified and properly vetted. We audit areas such as these to ensure that the public is not injured or harmed when visiting facilities, such as public pools, operated and maintained by City agencies.

The audit found that DPR's controls to ensure that pools are consistently maintained in a safe manner need improvement. For the pools in our sample, we identified one or more issues at many of them. Weaknesses include: limited evidence that inspections were performed as required and that all conditions were corrected; pool personnel at some of the pools—specifically at the mini-pools—may not have consistently tested or monitored the quality of the pool water as required by DPR's own regulations; and DPR is not consistently tracking or addressing Department of Health and Mental Hygiene (DOHMH) violations in a timely manner. On a positive note, the audit found that lifeguards were qualified and properly vetted.

The audit made 10 recommendations, including that DPR should: establish written policies and procedures that require documentation for all pre-season inspections conducted; reinforce the requirement that water-quality tests are conducted in the frequency and manner stipulated by DPR regulations; track and monitor DOHMH violations to ensure that all violations are addressed and mitigated in a timely manner; and address the outstanding conditions cited in this report if it has not done so already.

The results of the audit have been discussed with DPR officials, and their comments have been considered in preparing this report. Their complete written response is attached to this report.

If you have any questions concerning this report, please e-mail my audit bureau at [audit@comptroller.nyc.gov](mailto:audit@comptroller.nyc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "John C. Liu".

John C. Liu

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# THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER MANAGEMENT AUDIT

## Audit Report on the Health and Safety Conditions of Department of Parks and Recreation's Public Swimming Pools

MH12-137A

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### AUDIT REPORT IN BRIEF

The Department of Parks and Recreation (DPR) maintains a municipal park system of more than 29,000 acres, including more than 1,700 parks and over 1,000 playgrounds. DPR facilities range from community and recreation centers to golf courses and swimming pools throughout the five boroughs.

DPR is responsible for operating both indoor and outdoor swimming pools in City parks. During the 2012 summer swimming season from June 28, 2012, through September 3, 2012, DPR operated 81 outdoor swimming pools among 55 facilities—13 Olympic pools, 23 intermediate pools, 23 wading pools, 19 mini-pools, and three diving pools. Additionally, DPR operated 12 indoor swimming pools, which were located in 11 DPR recreation centers.<sup>1</sup>

DPR obtains annual permits to operate each pool from the New York City Department of Health and Mental Hygiene (DOHMH). DOHMH is responsible for inspecting all pools to ensure that they comply with the State Department of Health Sanitary Code and DOHMH's Health Code regulations. According to the Health Code regulations, operators of public pools must ensure that the pools are maintained in a safe, clean, and sanitary condition. DPR utilizes an electronic repair tracking system, the Asset Management Parks System (AMPS), which borough repair shops use to assign work crews to perform necessary repairs for all DPR-operated facilities (e.g., playgrounds, pools, toilet facilities in parks).

Lifeguard candidates who pass a qualifying test must also successfully complete 40 hours of training, pass a CPR course, and pass all final swimming and written tests in order to become certified lifeguards. All certified lifeguards receive a CPR license and a lifeguard license, and are retrained and retested annually in order to receive new licenses.

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<sup>1</sup>DPR recreation centers may contain indoor pools, seasonal outdoor pools, weight rooms, basketball courts, dance studios, game rooms, etc. Our inspection of the recreation centers was limited to the swimming pools (including related areas, such as locker rooms and changing rooms). Two recreation centers, Tony Dapolito Recreation Center and Asser Levy Recreation Center, had both a seasonal indoor and outdoor pool that are not operated at the same time.

## Audit Findings and Conclusion

DPR's controls to ensure that pools are consistently maintained in a safe manner need improvement. There is limited evidence that inspections were performed as required and that all deficient conditions were corrected. In addition, our observations of water-quality testing performed by pool personnel at the time of our inspections and the review of DPR's Daily Report of Operations (daily reports) maintained at each pool, which records the water-quality tests, revealed that pool personnel at some of the pools—specifically at the mini-pools—may not have always tested or monitored the quality of the pool water as required by DPR's own regulations.

In addition, there is limited evidence to substantiate that DPR is addressing DOHMH violations in a timely manner. DPR does not appear to be consistently addressing violations issued by DOHMH inspectors at City pools to ensure that the identified conditions were corrected. We found instances of recurring DOHMH violations that DPR did not appear to address in a timely manner.

Our unannounced inspections of 39 sampled pools identified 54 deficient conditions at 29 of them, indicating that DPR was not consistently adhering to the City Health Code, the pools' safety plans, or its own policies and procedures. Our subsequent reinspections at 10 of these pools in July 2013 determined that of 21 conditions we reported to DPR, 12 were repaired, two were partially repaired, and seven were not repaired at all.

Finally, we found that DPR ensured that its lifeguards were qualified and properly vetted before being hired and were retested and recertified for the 2012 season.

## Audit Recommendations

DPR should:

- Establish written policies and procedures that require documentation for all pre-season inspections conducted and the results of those inspections.
- Establish written policies and procedures that explain how the conditions in need of repair are reported and addressed.
- Ensure that all conditions found in need of repair during the pre-season and in-season are documented in AMPS to ensure that they are addressed in a timely manner.
- Reinforce the requirement that Filter Plant Operators (FPO) perform all the water-quality tests in the frequency and manner stipulated by DPR regulations, and ensure the results are recorded in the daily log reports.
- Track and monitor DOHMH violations to ensure that all violations are addressed and mitigated in a timely manner.
- Address the outstanding conditions cited in this report if it has not done so already.

## Agency Response

DPR officials agreed with the intent of the audit's 10 recommendations. However, they asserted that they already comply with two recommendations regarding the development of written policies and procedures for documenting all pre-season inspections and how conditions in need

of repair are reported and addressed. After carefully reviewing DPR's arguments, we stand by our recommendations.

# INTRODUCTION

## Background

DPR maintains a municipal park system of more than 29,000 acres, including more than 1,700 parks and over 1,000 playgrounds. DPR facilities range from community and recreation centers to golf courses and swimming pools throughout the five boroughs.

DPR is responsible for operating both indoor and outdoor swimming pools in City parks. During the 2012 summer swimming season from June 28, 2012, through September 3, 2012, DPR operated 81 outdoor swimming pools among 55 facilities—13 Olympic pools, 23 intermediate pools, 23 wading pools, 19 mini-pools, and three diving pools. Additionally, DPR operated 12 indoor swimming pools, which were located in 11 DPR recreation centers.

Olympic and intermediate pools are permanent in-ground structures with locker room facilities. Depending on the sizes of the pools and the number of pools on site, Olympic pool facilities have bathing capacities up to 2,178 individuals. Mini-pools are small “backyard-sized” pools, either aboveground or in-ground; they have a maximum capacity of 32 individuals. Mini-pools, which are usually three-feet deep, are generally located in playgrounds or schoolyards. Outdoor public pools are generally open seven days a week from the end of the school year through Labor Day. Indoor swimming pools are generally open year-round.

DPR obtains annual permits to operate each pool from DOHMH. DOHMH is responsible for inspecting all pools to ensure that they comply with the State Department of Health Sanitary Code and DOHMH’s Health Code regulations, which outline the rules with which public swimming pools, including DPR pools, must comply. According to the Health Code regulations, operators of public pools must ensure that the pools are maintained in a safe, clean, and sanitary condition. The Health Code also requires the pools to maintain lifesaving and safety equipment along with written pool safety policies and procedures in the form of a safety plan, which is to be maintained at each pool site.

As part of these regulations, the chlorine and pH levels of the swimming pool water must be tested at least three times daily—at the beginning of the day, during the day’s peak bather load, and at the end of the day, or more frequently if needed. In addition, while the pool is open to the public, DPR’s own policy is to test the swimming pool water once every hour when the air temperature is 80 degrees or below and once every half hour when the air temperature is above 80 degrees.

DPR utilizes an electronic repair tracking system, AMPS, which borough repair shops use to assign work crews to perform necessary repairs for all DPR-operated facilities (e.g., playgrounds, pools, toilet facilities in parks). For pool conditions identified as in need of repair, borough pool managers and coordinators are supposed to enter work order requests into AMPS.

Lifeguard candidates who pass a qualifying test are enrolled in the Municipal Lifeguard Training Program, which is offered by DPR’s Lifeguard School. This state-certified program teaches applicants the critical skills of cardiopulmonary resuscitation (CPR), first-aid, and techniques for saving a swimmer in distress. A lifeguard candidate must successfully complete 40 hours of training, pass a CPR course, and pass all final swimming and written tests in order to become a

certified lifeguard. All certified lifeguards receive a CPR license and a Lifeguard License, and are retrained and retested annually in order to receive new licenses.

## **Objectives**

The objective of the audit was to determine whether DPR has adequate controls in place to ensure that (1) public swimming pools are being consistently maintained and operating in a safe manner and (2) lifeguards are qualified and properly vetted.

## **Scope and Methodology Statement**

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The primary audit scope was Calendar Year 2012. We conducted reinspections of selected pools in July 2013 to determine whether conditions we reported to DPR were addressed. For an analysis of violations issued by DOHMH, we expanded the audit scope to include Calendar Year 2011. Please refer to the Detailed Scope and Methodology at the end of this report for specific procedures and tests that were conducted.

## **Discussion of Audit Results**

The matters covered in this report were discussed with DPR officials during and at the conclusion of this audit. A preliminary draft report was sent to DPR officials and discussed at an exit conference held on July 29, 2013. On July 31, 2013, we submitted a draft report to DPR officials with a request for comments. We received a written response from DPR officials on August 15, 2013. In their response, DPR officials agreed with the intent of the audit's 10 recommendations. However, they asserted that they already comply with two recommendations regarding the development of written policies and procedures for documenting all pre-season inspections and how conditions in need of repair are reported and addressed. After carefully reviewing DPR's arguments, we stand by our recommendations.

The full text of the DPR response is included as an addendum to this report.



## FINDINGS AND RECOMMENDATIONS

DPR's controls to ensure that pools are consistently maintained in a safe manner need improvement. For the 39 pools in our sample, we identified one or more issues at 29 of them. There is limited evidence that inspections were performed as required and that all conditions were corrected. There were structural and safety conditions at some of the 39 pools we inspected that were not repaired. In addition, our observations of water-quality testing performed by pool personnel at the time of our inspections and the review of DPR's Daily Report of Operations (daily reports) maintained at each pool—which records the water-quality tests—revealed that pool personnel at some of the pools—specifically at the mini-pools—may not have consistently tested or monitored the quality of the pool water as required by DPR's own regulations.

In addition, there is limited evidence to substantiate that DPR is addressing DOHMH violations in a timely manner. DPR does not appear to be consistently addressing violations issued by DOHMH inspectors at City pools to ensure that the identified conditions were corrected. We found instances of recurring DOHMH violations that DPR did not appear to address in a timely manner.

Our unannounced inspections of 39 sampled pools identified 54 deficient conditions at 29 of them, indicating that DPR was not consistently adhering to the City Health Code, the pools' safety plans, or its own policies and procedures. For example, we found:

- Several safety concerns pertaining to the physical condition of the pools, including loose ladders and flooding of water on or around the deck area;
- Slip and fall hazards at several pools; and
- Instances of poor physical conditions in the locker rooms and bathrooms, including non-working showers.

Our subsequent reinspections at 10 of these pools in July 2013 determined that of 21 conditions we reported to DPR, 12 were repaired, two were partially repaired, and seven were not repaired at all.

Finally, we found that DPR ensured that its lifeguards were qualified and properly vetted before being hired and were retested and recertified for the 2012 season.

These issues are discussed in greater detail in the following sections of this report. A summary of the issues identified during our initial unannounced inspections at the sampled outdoor and indoor pools can be found in Appendices II and III, respectively.

### **DPR's Controls to Ensure that Pools are Maintained in a Safe Manner Need Improvement**

#### **Limited Evidence that Inspections and Repairs are Performed**

According to DPR personnel, all outdoor pools are to be inspected before the summer pool season begins so that deficient conditions can be identified and corrected prior to the start of the season. DPR pool managers, pool coordinators, and borough repair-shop personnel stated that

they conduct these pre-season inspections, while borough shops assign repair crews to the pools during these inspections in order to repair any deficient conditions.

However, there is limited evidence that the inspections were performed as required, all conditions in need of repair were sufficiently identified, or adequate repairs were made for the 2012 season. There is a lack of sufficient evidence—either in the form of inspection reports or work order requests generated in AMPS—to indicate results of any inspections or the repairs made as a result of those inspections. DPR officials and pool personnel provided only testimonial evidence indicating that pre-season inspections are performed and that needed repairs are made prior to the beginning of the pool season. There is no requirement that DPR personnel document the pre-season inspections they conduct, the conditions they find, or whether repairs that are needed to be made have been addressed. In addition, DPR lacks a written procedures manual that details the pre-season inspection and repairs processes or mandates the documentation of these processes.

As a result, DPR has limited assurance that all deficient conditions were identified or corrected to ensure the safety of pool patrons during the upcoming pool season.

### **Work Order Requests Not Consistently Prepared**

Work order requests should be prepared for deficient conditions that cannot be repaired by pool personnel. Such work order requests should be tracked to ensure the timely completion of repairs.

During our unannounced visits of 39 sampled outdoor and indoor pools, we found 54 deficient conditions, including safety concerns on the pool decks, bathrooms, locker rooms, and other areas. Some of the conditions were serious according to Health Code regulations and may have warranted the temporary closing of the pools. (See Appendices II and III.) Of the 54 conditions, we followed up on 38 of them we deemed to be more serious to determine whether work order requests existed to correct the conditions. We found that eight of the 38 conditions appeared as work order requests in AMPS (three of them were created on the day of or after our visit). Of the eight conditions, we obtained evidence that three were resolved, one was partially resolved, and two were not resolved at all.

There appears to be no consistent way in which conditions identified by pool personnel as being in need of repair are addressed. In addition, DPR does not have written procedures that detail how conditions found in need of repair should be addressed to ensure that they are mitigated in a timely manner.

Even when work order requests are prepared, there is no formal mechanism to ensure that the repair is completed in a timely manner. For example, one particular work order request—for a missing gate latch that existed at the time of our inspection of Dry Dock pool in Manhattan—was opened for approximately one year prior to our visit, yet AMPS showed that the work order request was closed as “cancelled” without an explanation for the cancellation. However, the condition not only existed during the time of our visit, but DOHMH also issued a violation for the same condition during the 2011 and 2012 pool seasons. (The results of our unannounced inspections are discussed further below.) At the exit conference, DPR officials stated that even though the gate latch had not been installed at the time of our visit, a lifeguard had been assigned to stand post at the gate as a compensating control to mitigate the condition. However, we do not feel that this control is adequate. This gate has been missing its latch since at least the 2011 pool season and lifeguards can be distracted from monitoring the gate if a life-

threatening condition or other diversion requires their attention. DPR officials stated that the latch has now been installed.

Without proper documentation of inspection results, the risk that the conditions will continue to go undetected or not repaired increases as a result of the inconsistent generation of work order requests into AMPS for conditions identified in need of repair and from the lack of evidence to show how the conditions were addressed.

## Recommendations

DPR should:

1. Establish written policies and procedures that require documentation for all pre-season inspections conducted and the results of those inspections.

**DPR Response:** “Our agency does have policies and procedures in place to document the inspections and the results of those inspections. When the auditors interviewed the Assistant Commissioner for Citywide Services, he informed them that Parks completes pre-season and post-season inspection reports. However, the auditors never requested a copy of a completed report. We have documentation outlining the pre-season and post-season inspections. ... We will, however, review our various reports in order to identify areas to further enhance oversight of these assessments.”

**Auditor Response:** The pre-season and post-season reports DPR refers to are performed by DPR’s Technical Services division, which focuses on the filter plant and other technical aspects. Our audit focused on the maintenance and operations of the pools and related facilities, which DPR acknowledges in its response is the responsibility of borough staff. DPR provided no evidence that the pre-season inspections performed by borough staff are documented. In the absence of evidence to the contrary, we stand by our recommendation.

2. Establish written policies and procedures that explain how the conditions in need of repair are reported and addressed.

**DPR Response:** “There is already a procedure in place whereby the needs and conditions are reported. During the pre-season, the documented inspections are discussed at regularly occurring meetings with all personnel involved. Any serious condition in need of repair is documented in the form of a work order. There are occasions when borough staff complete work without putting in a work order. An example of this may include an instance when a pool staff member tightens a loose ladder. Our Technical Services division reports any conditions that need to be addressed to the appropriate personnel. We will review our systems for addressing needs and conditions and strengthen our procedures where appropriate.”

**Auditor Response:** Again, DPR appears to be referring to the inspections performed by the Technical Services division, which was outside the scope of this audit. DPR provided no evidence that it has written policies and procedures that explain how the conditions in need of repair are reported by borough staff and addressed. In the absence of evidence to the contrary, we stand by our recommendation.

3. Ensure that all conditions found in need of repair during the pre-season and in-season are documented in AMPS to ensure that they are addressed in a timely manner.

**DPR Response:** “Parks will take measures to further ensure that we review AMPS on a routine basis and ensure that open work orders are addressed in a timely manner.”

## Limited Evidence that Water-Quality Tests are Consistently Performed

According to the New York City Health Code §165.39(a), persons in charge of pools are required to maintain a daily operational record and log book which should include, among other things, the results of tests for chlorine levels and other information to demonstrate compliance with the Code. Copies of these records are to be kept by the bathing establishment. As part of these regulations, the chlorine and pH levels of the swimming pool water must be tested a minimum of three times a day—at the beginning of the day, during the day’s peak bather load, and at the end of the day—or more frequently, if needed, to ensure that the levels remain within the appropriate chlorine and pH levels. DPR’s regulations require that a water test be conducted no less than once per hour. According to DPR’s FPO Manual, good pool operation requires that the pool be tested for chlorine and pH levels at least once every hour or once every half-hour if the air temperature exceeds 80 degrees.

However, DPR did not have evidence that the tests were consistently performed as required at the mini-pools. A review of the pool water readings recorded in the pools’ DPR Daily Reports of Operations (daily reports) for 10 randomly selected days for the 30 sampled outdoor pools— 20 Olympic and intermediate pools and 10 mini-pools—revealed that readings at the pools were not being completely and consistently recorded at the mini-pools. Of the 300 daily reports we requested for the selected period and pools, DPR personnel could not locate 14 daily reports covering seven pools. For the 286 daily reports that were provided to us, 36 (13 percent) were missing at least three required water-quality test readings. Of the 36 daily reports that were missing three or more required readings, we found that 30 were for eight of the 10 mini-pools. In addition, of the 10 mini-pools in our sample, six pools were each missing more than 10 water-quality test readings for the 10-day period tested, and four of them were each missing more than 30 water-quality test readings.

Furthermore, we found that 21 pools did not have all the required information properly completed on all of their daily reports. For example, 75 (26 percent) out of the 286 daily logs we reviewed did not record the outdoor air temperature recorded for the 8am or 2pm readings or both<sup>2</sup>. As a result, we could not determine whether the correct number of water-quality test readings were performed or recorded for 34 of the 75 daily logs.<sup>3</sup> One pool (Betsy Head in Brooklyn) was missing at least one of the two required temperature readings for all of the 10 days that we sampled, and another (Mayor Wagner pool in Manhattan) was missing at least one of the two temperature readings recorded for nine of the 10 sampled days.

At the Wagner pool, we also found that the FPO did not follow proper water-quality testing procedures. When testing the chlorine level of the wading pool, he initially attempted to use a

<sup>2</sup> Mini-pools do not open until 11am. Therefore, we looked to see if the FPOs recorded the air temperature reading at the pool’s opening time.

<sup>3</sup> While some of the temperature readings were missing, some pools recorded the water-quality tests every half hour, which is the maximum number of readings required had the temperature exceeded 80 degrees.

sample from the intermediate pool instead. We asked him to retake the test of the wading pool water; the results showed a chlorine level of 10. Because of the high level, the Pool Manager evacuated the children. The pool remained closed during the remainder of our visit for treatment. DPR officials stated that the FPO was retrained that day in proper testing procedures.

The deficiencies noted appear to be caused by insufficient supervisory oversight. We found that supervisors were not signing off on all hourly water-quality test readings as required. Our review of the 286 sampled daily reports provided to us showed that only 130 (45 percent) had all the required signatures during the period of time the pools were open to the general public from 11am to 7pm<sup>4</sup> and 89 (31 percent) did not have any supervisory signatures at all. In total, of the 2,288 signatures that should have been on the daily reports we reviewed, 981 (43 percent) signatures were missing. As was the case with the water test readings that were missing in the daily reports, mini-pools were missing the most supervisory signatures. We found that none of the 92 daily reports we received from the 10 mini-pools had all the required signatures. For five (50 percent) of the 10 mini-pools, the supervisors did not sign off on any of the water-quality tests readings entered by the FPO. In total, of the 736 signatures that should be on the daily reports for the 10 mini-pools, 721 (98 percent) of the supervisor signatures were missing.

By signing the daily reports, supervisors are verifying that they observed the readings and ensured that they were done correctly. Without evidence of the required signatures, DPR has limited assurance that the FPOs are properly conducting the water readings at the established intervals. This could delay efforts to take remedial steps when the water pH or chlorine levels are not at the appropriate levels.

## Recommendations

DPR should:

4. Reinforce the requirement that FPOs perform all the water-quality tests in the frequency and manner stipulated by DPR regulations, and ensure the results are recorded in the daily log reports.

**DPR Response:** “Parks will reinforce the requirement that FPOs perform all the water-quality tests in the frequency and manner stipulated by Parks regulations, and ensure the results are recorded in the daily log reports.”

5. Ensure that the pool supervisors review and sign off on the daily log reports to ensure that the FPOs are performing the water-quality tests in the manner and frequency required by the regulations and that the results and other required information are being properly entered into the daily log reports.

**DPR Response:** “At the annual training for pool supervisors, the importance of proper recording of water tests will be emphasized.”

## Ineffective Follow-up of DOHMH Violations

DPR does not adequately track and monitor DOHMH violations to ensure that they are corrected. During Calendar Year 2012, 89 violations were issued to 34 of the 39 outdoor and

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<sup>4</sup> Non-mini pools are manned by pool personnel and may be open for special programs, such as swimming lessons, senior lap swimming, and children's day camps.

indoor pools that we reviewed. Of the 89 violations, 28 were not cited again in a subsequent DOHMH inspection. For the remaining 61 violations, 27 had not been cleared as noted by DOHMH in a following inspection report, and we were unable to make a determination regarding the remaining 34 because DOHMH had not yet conducted subsequent inspections. We asked DPR officials to provide us with evidence to ensure that all the outstanding violations that DOHMH issued were cleared. We received an email response stating that violations issued for general and critical conditions that were not immediately addressed were to be cleared prior to the start of the 2013 pool season. (We followed up with six of the violations during our July 2013 reinspections. Of the six, two—peeling paint in bathrooms and missing latch from wading pool fence—were not addressed; two—missing pages from a safety plan and inoperable showers—were partially addressed; and two—wire over pool and loose ladders—were fully addressed.)

Our review of the 2012 DOHMH inspection reports found that at 14 different pools, DPR had not addressed 11 different types of violations even though DOHMH kept citing them for the same violations. The conditions that were cited more than once as recurring violations by DOHMH inspectors included:

- Self-latching gates not working properly;
- Peeling paint in bathrooms;
- Emergency lighting not maintained where night swimming permitted; and
- A flow meter not being properly maintained.

We believe that the above deficiencies result from DPR not having a system whereby these violations are tracked and followed up. The responsibility to ensure that conditions are corrected falls primarily on personnel at the pools. There is no requirement that they report to borough offices the results of the inspections nor is there a requirement that they document the results of the inspections in a formal tracking system.

The lack of a system that ensures violations are followed up and corrected in a timely manner increases the risk that the deficiencies may worsen over time and pose further hazards to pool patrons.

## Recommendations

DPR should:

6. Address and clear all outstanding DOHMH violations.

**DPR Response:** “Parks agrees. Although many of the violations have been addressed, Parks will continue to make sure that pending violations are remedied in a timely manner. Going forward, a work order will be generated for every pool violation issued by the DOHMH, regardless of the scope of the violation.”

7. Track and monitor DOHMH violations to ensure that all violations are addressed and mitigated in a timely manner.

**DPR Response:** “Parks agrees. Pending violations are circulated at the pools and are distributed up the chain of command. Parks will regularly review the status of work orders and has created a centralized DOHMH violation system to more

effectively track and follow up on violations. All serious violations will be entered into AMPS, noted as a violation, and monitored.”

## Outdated Safety Plans

According to §165.19 of the Health Code, the operators of pools are required to develop, maintain, and implement a written safety plan which consists of policies and procedures to be followed by personnel during normal operations and emergencies for protecting the public from accidents and injuries. Safety plans must include procedures for daily bather supervision, injury prevention, reacting to emergencies, injuries and other incidents, providing first aid, and summoning help. Section 165.17 lists the types of safety equipment to be kept at the pool. In addition, the safety plan must be posted and accessible at the pools at all times. The Health Code requires that the safety plans must be periodically reviewed and updated. Changes made to the safety plan should then be submitted to DOHMH before implementation.

According to DPR officials and pool personnel, not all safety equipment required by the safety plans are up to date. Our review of the safety plans for the 30 sampled outdoor pools revealed that 27 (90 percent) were issued more than 15 years ago. We also found that one of the pools did not have its safety plan available during our visit. Outdated or missing safety plans may result in lifesaving equipment not being kept at the pool sites, misunderstandings as to how the pools should be properly maintained and operated, or inadequate or inappropriate responses to emergencies. This has the potential of putting the bathers at risk of harm or injury. DPR officials stated at the exit conference that they will update the pools’ safety plans to accurately reflect the safety needs of the public.

### Recommendation

8. DPR should update and submit to DOHMH for approval safety plans for those pools whose plans are outdated.

**DPR Response:** “Parks agrees. Parks has already begun the updating process and plans to submit them to DOHMH.”

## Conditions Found During Auditors’ Unannounced Visits

During our inspections of the 39 sampled pools, we identified a total of 54 conditions needing correction at 29 of them. A number of the conditions could be deemed serious, according to DOHMH Health Code and DPR regulations, and have warranted immediate action by DPR to mitigate or correct them.

According to Health Code §165.11(b), where one or more of certain public health hazard conditions exist, the bathing establishment may be immediately closed and shall remain closed until the hazardous conditions are corrected. It also forbids the use of the facility until the violations are corrected. Public health hazards that may result in the closure of the facility include but are not limited to:

- Overhead electrical wires within 20 feet of the pool, except where covered and secured in a ceiling;
- Unprotected electrical circuits or wiring within 10 feet of the pool;
- Failure to maintain emergency lighting source;

- Sharp objects on deck area;
- Failure to provide Pool Safety Plan approved by DOHMH; and
- Any other condition dangerous to life or health.

Our inspections of the indoor and outdoor pools and our review of inspection documentation resulted in findings of at least one instance of each of the above conditions, which would have necessitated the pools close unless these conditions were remediated. There was only one occasion where a pool was closed during one of our inspections for failure to maintain the water quality at a wading pool. DPR and DOHMH officials stated that no pool was closed by DOHMH for any violation because all public health hazards were immediately corrected at the time of inspection. However, it is important that DPR take great care to ensure that these conditions do not exist.

### ***Structural and Safety Hazards in the Pool Areas***

Our observations at the 39 sampled pools revealed that one or more of the following structural or hazardous conditions existed at 21 (54 percent) of them, which, if left uncorrected, might pose a safety risk to pool patrons. (Appendices II and III list the conditions found at each pool.) Examples of some structural and safety hazards we observed include:

- Hand rails and ladders leading from the deck into the water were either missing or loose;
- Missing or broken latches on gates of fences separating the larger main pools and the wading pools (which are more frequently used by small children);
- An electrical wire running horizontally above a pool;
- Unprotected electrical outlets within 10 feet of a pool; and
- An abandoned, empty, and uncovered diving pool at one location, which although cordoned off with a fence, was accessible to swimming patrons because of an unlocked gate.

We also found hazardous objects and/or trip and slip hazards at the pools. Examples of such hazards included:

- An orange cone demarcating a hazard was in the middle of the pool deck with bolts protruding from the base;
- A wet and slippery ramp leading to a mini-pool (where we observed patrons repeatedly slipping on the slick surface) caused by water from a shower constantly running down the ramp; and
- Protruding cut off metal rods on a deck near the edge of a pool from a previously removed lifeguard tower.

We informed DPR of the other conditions we observed and they stated that they spend the off-season making repairs and replacing ladders. A summary of our reinspections of conditions identified and reported to DPR are discussed below.

### ***Inadequate Locker Room and Bathroom Conditions***

We found inadequate locker room and bathroom conditions at four (10 percent) of the 39 sampled pools. Examples of conditions we found included showers that were not working in the



men's and women's locker rooms (at one pool in particular, Betsy Head, 20 of the 30 showers in the men's room were not working) and a broken toilet stall door in a men's room

We informed DPR officials of the conditions we observed and they stated that the showers at one of the pools we cited were repaired on February 8, 2013. The other conditions had not been specifically addressed; however, DPR officials stated that they were to be addressed prior to the opening of the 2013 pool season.

### ***Water Quality Issues***

We found water quality issues at four (10 percent) of the 39 sampled pools. Specifically, we found paint peelings and leaves in water and high chlorine levels. DPR officials stated that pool personnel are responsible for monitoring the conditions of the pools throughout the day to ensure that they are kept free of debris and that the chlorine levels are kept within the acceptable range. While we were at the pools, pool personnel addressed the high chlorine levels and leaves in the water immediately.

### ***Regulations Not Consistently Posted***

Eight (21 percent) of the 39 sampled pools did not properly display the required notices and regulations. According to Health Code §165.41(2), a sign or signs shall be securely posted in a conspicuous place in the pool area which provide(s) information, including the number of persons permitted in the pool and on the deck, pool hours, and the required bathing attire permitted. In addition, warnings prohibiting urinating in the pool and denying entry to persons with contagious diseases or infectious conditions must be posted.

DPR officials stated that they planned to replace or properly display the required notices and regulations prior to the 2013 pool season. We re-inspected one of these pools in August 2012 and noted that the sign was replaced.

### ***Poor Ventilation***

Our inspections of the nine indoor pools sampled identified instances of poor ventilation at four of them. At Chelsea Recreation Center, there was mold growing on the ceiling of the lifeguards' office and on the sheetrock covering the ventilation system. At Metropolitan Recreation Center, there was visible mold and considerable condensation in the men's locker room. At Tony Dapolito and Roy Wilkins Recreation Centers, the ventilation system was not working at all and the doors had to be kept open periodically to provide natural ventilation.

According to DPR officials, the mold conditions at Chelsea and Metropolitan have been corrected by cleaning the mold. In addition, a fan has been placed in the locker room at Metropolitan to assist with air circulation to prevent condensation. Further, they stated that the dehumidifier at Roy Wilkins will be repaired.

### ***Results of Unannounced Reinspections Conducted at the Beginning of 2013 Pool Season***

DPR officials stated that conditions that we reported to them that had not been addressed immediately would be corrected by the start of the 2013 pool season. However, our subsequent reinspections of 10 of the 30 sampled outdoor pools in July 2013—after the pool season opened—found that a significant portion of the conditions was still not adequately addressed. For the 21 conditions we followed up on, 12 (57 percent) were repaired. Of the remaining nine, two were partially repaired and seven were not repaired at all.

Examples of conditions not repaired prior to our reinspections during July 2013 include pool steps leading into a pool missing the required handrails attached, a flooded deck, and loose ladders. Table I shows the number of conditions that were repaired, partially repaired, or not repaired at all for the 10 pool facilities we reinspected. (More detailed results of our reinspections are shown in Appendix IV.)

**Table I**

Summary Results of Reinspections Conducted During July 2013

Borough	Pool	Total Conditions Reinspected	Repaired	%	Partially Repaired	%	Not Repaired	%
Bronx	Claremont	2	2	100.00%	0	0.00%	0	0.00%
Bronx	Haffen	2	0	0.00%	0	0.00%	2	100.00%
Queens	Windmuller	1	0	0.00%	1	100.00%	0	0.00%
Brooklyn	Betsy Head	3	2	66.70%	1	33.30%	0	0.00%
Brooklyn	Bushwick	2	2	100.00%	0	0.00%	0	0.00%
Brooklyn	Kosciuszko	2	1	50.00%	0	0.00%	1	50.00%
Brooklyn	PS20	4	2	50.00%	0	0.00%	2	50.00%
Manhattan	Dry Dock	1	0	0.00%	0	0.00%	1	100.00%
Manhattan	Frederick Douglass	2	1	50.00%	0	0.00%	1	50.00%
Manhattan	Tony Dapolito	2	2	100.00%	0	0.00%	0	0.00%
<b>Total</b>	<b>10</b>	<b>21</b>	<b>12</b>	<b>57.14%</b>	<b>2</b>	<b>13.33%</b>	<b>7</b>	<b>35.00%</b>

## Recommendations

DPR should:

- Address the outstanding conditions cited in this report if it has not done so already.

**DPR Response:** “As discussed in this response, Parks will continue to consistently test water quality at our intermediate and Olympic sized pools and we will work to ensure the water tests at our mini pools are properly documented. We have implemented a centralized system to track the resolution of DOHMH violations and will continue to perform post closing and pre opening outdoor pool inspections. We will also work to ensure that the maintenance issues that inevitably arise at our pools (such as loose ladders) are promptly addressed and recorded in AMPS when appropriate.”

- Prominently display the regulations and notices that are required to be posted.

**DPR Response:** “Parks will ensure that all required notices and regulations are prominently posted.”

## DETAILED SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The primary audit scope was Calendar Year 2012. We conducted reinspections of selected pools in July 2013 to determine whether conditions we reported to DPR were addressed. For an analysis of violations issued by DOHMH, we expanded the audit scope to include Calendar Year 2011.

We reviewed prior audits and surveys of the health and safety conditions of DPR's outdoor swimming pools to attain a general understanding of conditions that may exist at the pools.

To identify the significant rules, regulations, policies, and procedures governing the operation of DPR swimming pools and the training and certification of lifeguards, we reviewed and used as criteria:

- New York City Health Code Article 165 – Bathing Establishments;
- State Sanitary Code Part 6 - Subpart 6-1 – Swimming Pools;
- Parks Academy Swimming Pool Operations Manual (June 22, 2012);
- Parks Academy Filter Plant Operators Manual (June 22, 2012);
- Parks Academy Mini-Pool Operations Manual for City Seasonal Aid[es]/Filter Plant Operators (June 22, 2012); and
- Department of Citywide Administrative Services' General Statement of Duties and Responsibilities for Park Supervisor, City Seasonal Aide, Urban Park Ranger, and Lifeguard.

To obtain an overview of DPR's swimming pool operations, we interviewed DPR officials, including the First Deputy Commissioner, the Assistant Commissioner for Urban Park Services, and the Director of DPR's training facility at the Parks Academy. To obtain a general understanding of the inspection, work order, and repair process relating to issues at the pools, we interviewed the Assistant Commissioner for Citywide Services; Manhattan, Bronx, Queens, and Brooklyn Borough Pool Managers; Manhattan, Bronx, and Brooklyn Borough Shop Managers; and Manhattan, Bronx, and Staten Island Pool Coordinators.

To obtain a further understanding of pool operations, including customer entry, lifeguard station locations, and the location of safety equipment, we conducted walk-throughs with DPR officials at Lasker Pool in Manhattan, Astoria Pool in Queens, and Jesse Owens Playground Pool in Brooklyn. During these walk-throughs, we met with the following DPR officials: Pool Manager, Borough Coordinator, the Filter Plant Operator, Lifeguard Coordinator/Director of Water Safety, Lieutenant Lifeguard, the Assistant Commissioner for Urban Park Services, and the Director of the Parks Academy.

To obtain an understanding of DOHMH's swimming pool inspection process, we met with DOHMH officials from the Bureau of Public Health and Engineering to discuss their inspections of DPR swimming pools and the efforts of the two agencies to clear violations. We also accompanied DOHMH inspectors on their inspections of an indoor and an outdoor pool.

To determine whether DPR ensures the safety of pool patrons, we conducted unannounced inspections of 30 judgmentally selected outdoor pool facilities from July 30, 2012, through August 16, 2012, and nine indoor pool facilities from October 16, 2012, through January 8, 2013. (See Appendix I for the lists of the sampled outdoor and indoor pools.) Although Tony Dapolito and Asser Levy Recreation Centers are each considered a pool facility, they contain both an indoor and an outdoor pool. We inspected each pool separately because they are open seasonally and never at the same time. Therefore, while we conducted 39 separate initial inspections, we actually visited 37 different pool facilities. Because some larger facilities may include multiple pools, our physical inspection of actual pools was significantly greater.

Using a checklist we created based on current established criteria and DOHMH inspection standards, guidelines, and procedures, we inspected the pool facilities in teams having at least one male and one female auditor. The inspection checklist included provisions for observing the testing of the water quality by the FPOs (i.e., for pH levels and chlorine levels); checking the clarity of the water; inspecting main drains; inspecting the safety and sanitary conditions of the pool, the deck area, the locker rooms and bathrooms; looking for the presence of required lifesaving equipment and first-aid kits; and looking to see if the required safety plans were on hand and if signs and regulations were posted as required. We also interviewed pool personnel, such as Pool Supervisors and FPOs.

Upon arrival at the pool facilities, we identified ourselves to the Pool Supervisors and requested the Pool Safety Plans, the rosters of lifeguards on duty during our inspections, and the Lifeguard and CPR (cardiopulmonary resuscitation) certificates. For those lifeguards on duty at the time of our visit, we reviewed the Lifeguard and CPR certificates to ensure that the certificates were current and valid. We also asked each pool's supervising lifeguard to identify the lifeguards on duty so that we could match them to the names on the rosters.

To determine the effectiveness of DPR's efforts in testing and maintaining the quality of the pool water to ensure that it is clean and safe for swimming, we observed the FPOs as they took the water samples and tested the water. We then recorded the results of the FPOs' readings.

At the end of the summer swimming pool season, we requested from DPR the water-quality test readings recorded in the daily reports for that season for the sampled outdoor pools we visited. We then randomly selected a sample of 10 days and tested the sampled daily reports to determine whether the water-quality test readings were taken in accordance with applicable rules and regulations and in the required frequency during the hours the pools were open to the public for general admission (from 11am to 7pm). We also reviewed the daily reports to determine if the required supervisory signatures were present for these water-quality tests. For any readings that were outside of the acceptable DOHMH range, we reviewed the daily reports to determine whether any corrective actions were noted.

We reported all of the conditions we found during our pool inspections to DPR officials on August 15, August 22, and August 23, 2012, and asked DPR officials to ensure that the conditions we reported were corrected. We received responses from DPR officials on August 17 and September 14, 2012, as to the status of their repairs. From August 27 through August 29, 2012, we conducted unannounced reinspections of a judgmentally selected sample of eight pool

facilities (denoted with an asterisk in Appendix I) to determine whether the conditions that DPR reported on August 17, 2012, as having been corrected had, in fact, been corrected.

From July 2 through July 5, 2013, we conducted additional unannounced reinspections of a judgmentally selected sample of 10 pool facilities (see Appendix IV) to determine whether certain conditions we reported to DPR were, in fact, corrected prior to the opening of the 2013 pool season as DPR officials stated.

Two indoor pools were closed for repairs during the period we were conducting our inspections. To determine the reasons for the pool closings and the work being done at the pools, we conducted unannounced visits of the Brownsville Recreation Center Indoor Pool in Brooklyn on October 18, 2012, and Roy Wilkins Recreation Center Indoor Pool in Queens on October 24, 2012. Brownsville Pool was closed for major renovations. We spoke with the Brownsville Center's manager to understand the issues that led to the closing of the pool for renovations. Roy Wilkins Pool was temporarily closed in order to paint the pool. We returned and conducted an unannounced inspection once the pool reopened. We reported all the conditions we found during our indoor pool inspections to DPR officials on February 7, 2013, and we received a response from DPR officials on March 22, 2013.

To determine whether DPR addressed violations issued by DOHMH inspectors at City pools, we reviewed DOHMH inspection reports for Calendar Year 2012 for our sampled outdoor and indoor pools to identify violations cleared by DPR and any recurring violations for which there were no indications of them having been addressed by DPR. We identified those violations noted in the first inspection report for Calendar Year 2012 and then reviewed any additional inspection reports to determine whether those violations were addressed or not. We also reviewed all DOHMH reinspections to determine whether previous violations had been addressed.

To evaluate DPR's efforts to remedy serious conditions, we looked to see if some of the serious conditions we identified had been reported by checking to see if related work order requests had been created in AMPS. We selected 38 of the more serious conditions we had identified at 22 pools and looked to see if for each condition a work order request existed in AMPS on the date of our visit and, if not, whether a work order request was created subsequently. We obtained a record of all pool-related work order requests in AMPS for Calendar Years 2011 and 2012. For those conditions where there was a work order request, we recorded the dates the work order requests were created and the dates the conditions were repaired.

To determine whether lifeguards were qualified and properly vetted, we reviewed the DPR personnel and training files for a sample of 35 of the 318 lifeguards who were present during our unannounced visits to the 30 sampled outdoor swimming pools. We randomly selected 30 of the lifeguards and judgmentally selected five lifeguards who had issues with their lifeguard and/or CPR certificates during our unannounced visits. We first determined whether the lifeguards were newly hired or returning employees. We then reviewed their applications, history cards, eye exam results, and written CPR and Lifeguard exams to ensure that they had passed. For any failing grades, we ensured that a test was retaken and passed. We reviewed the CPR and Lifeguard certificates on file to ensure that they were up to date. We also reviewed the signed attendance sheets for the training courses to ensure that the lifeguards were present.

## Sample of 30 Outdoor Pool Facilities Inspected (Unannounced) July 30-August 16, 2012

	<b>Pool Name</b>	<b>Pool Type</b>	<b>Borough</b>
1	Claremont	Intermediate, Wading	Bronx
2	Crotona*	Olympic	Bronx
3	Edenwald Houses	Mini	Bronx
4	Haffen	Intermediate, Wading	Bronx
5	Mullaly	Intermediate, Wading	Bronx
6	Betsy Head*	Olympic	Brooklyn
7	Bushwick*	Intermediate, Wading	Brooklyn
8	David Fox/PS 251	Mini	Brooklyn
9	Glenwood Houses	Mini	Brooklyn
10	Howard	Intermediate, Wading	Brooklyn
11	Kosciuszko	Olympic, Wading	Brooklyn
12	McCarren	Olympic	Brooklyn
13	PS 20 Playground*	Mini	Brooklyn
14	Abe Lincoln	Mini	Manhattan
15	Asser Levy Recreation Center	Intermediate, Wading	Manhattan
16	Dry Dock	Intermediate, Wading	Manhattan
17	Frederick Douglass	Mini	Manhattan
18	Highbridge	Olympic, Wading	Manhattan
19	John Jay	Intermediate, Diving	Manhattan
20	Thomas Jefferson	Olympic, Wading	Manhattan
21	Tony Dapolito Recreation Center*	Intermediate, Diving	Manhattan
22	Wagner*	Intermediate, Wading	Manhattan
23	Astoria*	Olympic	Queens
24	Fort Totten	Intermediate, Wading, Diving	Queens
25	PS 10	Mini	Queens
26	Windmuller*	Mini	Queens
27	Lyons	Olympic	Staten Island
28	Mariner's Harbor Playground	Mini	Staten Island
29	PS 14 Playground	Mini	Staten Island
30	West Brighton	Intermediate, Wading	Staten Island

\* Based on DPR's responses to our notification of the conditions we identified during our initial unannounced inspections, we conducted unannounced reinspections from August 27 through August 29, 2012, of a judgmentally selected sample of eight pool facilities.

Sample of Nine Indoor Pool Facilities Inspected (Unannounced)  
October 16, 2012-January 8, 2013

	<b>Pool Name</b>	<b>Pool Type</b>	<b>Borough</b>
1	St. Mary's Recreation Center	Intermediate	Bronx
2	Metropolitan Recreation Center	Intermediate	Brooklyn
3	St. John's Recreation Center	Intermediate	Brooklyn
4	Asser Levy Recreation Center	Intermediate	Manhattan
5	Chelsea Recreation Center	Intermediate	Manhattan
6	Hansborough Recreation Center	Intermediate	Manhattan
7	Recreation Center 54	Intermediate	Manhattan
8	Tony Dapolito Recreation Center	Intermediate	Manhattan
9	Roy Wilkins Recreation Center	Intermediate	Queens

Note: The Flushing Meadow Park Recreation Center contains indoor pool facilities. However, DPR contracts out the operation and maintenance of that center to a private entity. As a result, we excluded it from our review. The Brownsville Recreation Center indoor pool in Brooklyn was closed to the public for major renovations. As a result, we excluded it from our review.

## APPENDIX II

### Types of Issues Found at the 39 Sampled Pool Facilities during Our Unannounced Inspections

	Name of Pool Facilities*	Borough	Issue was Found during Auditors' Visit	Type of Issue					
				Structural or Safety Hazards of Pool Area	Locker Rooms and Bathroom Conditions	Water Quality Issues	Failure to Post Signs and Regulations	Poor Ventilation (Indoor Pools Only)	Inadequate Emergency Lighting (Indoor Pools Only)
1	Claremont	Bronx	X	X					
2	Crotona	Bronx							
3	Edenwald Houses	Bronx	X	X					
4	Haffen	Bronx	X	X					
5	Mullaly	Bronx	X	X					
6	Betsy Head	Brooklyn	X	X	X				
7	Bushwick	Brooklyn	X	X	X				
8	David Fox/PS 251	Brooklyn							
9	Glenwood Houses	Brooklyn	X				X		
10	Howard	Brooklyn	X	X					
11	Kosciuszko	Brooklyn	X	X	X	X			
12	McCarren	Brooklyn	X			X			
13	PS 20	Brooklyn	X	X			X		
14	Abe Lincoln	Manhattan	X	X					
15	Asser Levy*	Manhattan							
16	Dry Dock	Manhattan	X	X					
17	Frederick Douglass	Manhattan	X	X					
18	Highbridge	Manhattan	X	X					
19	John Jay	Manhattan							
20	Thomas Jefferson	Manhattan							
21	Tony Dapolito*	Manhattan	X	X					
22	Wagner	Manhattan	X			X			
23	Astoria	Queens	X	X					
24	Fort Totten	Queens							
25	PS 10	Queens							
26	Windmuller	Queens	X	X					
27	Lyons	Staten Island	X				X		
28	Mariner's Harbor	Staten Island	X	X					
29	PS 14	Staten Island							
30	West Brighton	Staten Island	X	X	X		X		
31	St. Mary's R/C	Bronx	X				X		
32	Metropolitan R/C	Brooklyn	X	X				X	
33	St. John's R/C	Brooklyn	X		X		X		
34	Asser Levy R/C*	Manhattan							
35	Chelsea R/C	Manhattan	X	X			X	X	X
36	Hansborough R/C	Manhattan	X				X		X
37	R/C54	Manhattan							
38	Tony Dapolito R/C*	Manhattan	X	X				X	
39	Roy Wilkins R/C	Queens	X					X	
	<b>TOTALS</b>		<b>29</b>	<b>21</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>2</b>

\*Pool facilities may include more than one type of pool (e.g., wading, intermediate-size, Olympic-size, and/or diving pools). Asser Levy and Tony Dapolito Recreation Centers have both seasonal indoor and outdoor pools, which we inspected separately because they are not operated at the same time.

Note: Our inspection of the recreation centers (31-39) was limited to the swimming pool facilities (including related facilities, such as locker rooms, bathrooms, and changing rooms). Poor Ventilation and Inadequate Emergency Lighting conditions were applicable only to the indoor pools within the recreation centers.



Description of Issues Found at 29 Sampled Pool Facilities

Assigned Pool Facility Number*	Name of Pool Facilities	Borough	Number of Issues Found at the Pool Facilities	Structural or Safety Hazards of Pool Area	Locker Rooms and Bathroom Conditions	Water Quality	Failure to Post Signs and Regulations	Poor Ventilation (Indoor Pools Only)	Inadequate Emergency Lighting (Indoor Pools Only)
1	Claremont	Bronx	2	-Malfunctioning latch on wading pool fence -Loose ladders					
3	* Edenwald Houses	Bronx	2	-Standing water -Loose ladders					
4	Haffen	Bronx	2	-Flooded deck -Loose ladders					
5	* Mullaly	Bronx	1	-Loose ladders					
6	Betsy Head	Brooklyn	3	-Trip/safety hazard -Loose ladders	-20 out of 30 men's showers inoperable				
7	Bushwick	Brooklyn	4	-Missing latch from wading pool fence -Wire over pool;		-Leaves in pool water -High chlorine level in wading pool			
9	* Glenwood Houses	Brooklyn	1				-Required sign not posted		
10	* Howard	Brooklyn	1	-Wading pool gate help open by hazard cone					
11	Kosciuszko	Brooklyn	3	-Pool steps without handrails	-Broken door in men's handicap stall	-Peeled paint in water			
12	* McCarren	Brooklyn	1			-Peeled paint in water			
13	PS 20	Brooklyn	4	-Tripping hazard on deck caused by sagging wood -Slippery ramp -Loose ladders			-Required sign not posted		
14	* Abe Lincoln	Manhattan	2	-Tripping hazard on deck caused by sagging wood -Standing water					
16	Dry Dock	Manhattan	1	-Missing latch from wading pool fence.					
17	Frederick Douglass	Manhattan	2	-Tripping hazard caused by leftover metal rods protruding from the deck -Loose ladders					
18	* Highbridge	Manhattan	1	-Loose ladders					
21	Tony Dapolito	Manhattan	1	-Unprotected electrical outlet					

Assigned Pool Facility Number*	Name of Pool Facilities	Borough	Number of Issues Found at the Pool Facilities	Structural or Safety Hazards of Pool Area	Locker Rooms and Bathroom Conditions	Water Quality	Failure to Post Signs and Regulations	Poor Ventilation (Indoor Pools Only)	Inadequate Emergency Lighting (Indoor Pools Only)
22 *	Wagner	Manhattan	1			-High chlorine level in wading pool			
23	Astoria	Queens	1	-Unsecured abandoned diving pool					
26	Windmuller	Queens	1	-Slippery ramp					
27 *	Lyons	Staten Island	1				-Required signs not properly displayed		
28 *	Mariner's Harbor	Staten Island	1	-Loose ladders					
30 *	West Brighton	Staten Island	3	-Loose ladders	- Four out of eight men's showers inoperable		-No safety plan on site		
31 *	St. Mary's R/C	Bronx	1				-Required sign not posted		
32 *	Metropolitan R/C	Brooklyn	2	-Broken tile on pool deck				-Mold and condensation in men's locker room	
33 *	St. John's R/C	Brooklyn	2		-Five out of 12 men's showers inoperable		-Required sign not posted		
35 *	Chelsea R/C	Manhattan	4	-One unprotected electrical outlet			-Required sign not posted	-Mold in lifeguard office	-No emergency lights installed
36 *	Hansborough R/C	Manhattan	2				-Required sign not posted		- Five out of 12 emergency lights not operational
38 *	Tony Dapolito R/C	Manhattan	3	-Loose ladders -Unprotected electrical outlet				-Ventilation not operational	
39 *	Roy Wilkins R/C	Queens	1					-Ventilation not operational	
<b>Total</b>	<b>TOTALS</b>	<b>39</b>	<b>54</b>	<b>31</b>	<b>4</b>	<b>5</b>	<b>8</b>	<b>4</b>	<b>2</b>

\*DPR officials stated that the conditions at all pool facilities were addressed or would be addressed before the opening of the 2013 pool season. However, we did not perform reinspections of these pool facilities at the start of the 2013 pool season in order to confirm that all the conditions we reported had been addressed. See Appendix IV for the results of our reinspections of conditions at 10 pool facilities during July 2013, after the opening of the 2013 pool season.

Results of Auditors' Reinspections at 10 Pools in  
July 2013

Boro	Pool	Total Conditions Reinspected	Description of Conditions	Status Based on Reinspections
Bronx	Claremont	2	-Malfunctioning latch on wading pool fence	Latch is repaired
			-Loose ladders	Ladders are secured
Bronx	Haffen	2	-Flooded deck	Flooded deck
			-Loose ladders	Loose ladder
Queens	Windmuller	1	-Slippery ramp	Loose non-slip tape placed on slippery ramp
Brooklyn	Betsy Head	3	-20 out of 30 men's showers inoperable	15/30 men's showers inoperable
			-Trip/safety hazard	trip hazard repaired
			-Loose ladders	ladders secured
Brooklyn	Bushwick	2	-Missing latch from wading pool fence	Latch replaced
			-Wire over pool	wire removed
Brooklyn	Kosciuszko	2	-Pool steps without handrails	Pool steps without handrails
			-Broken door in men's handicap stall	door repaired
Brooklyn	PS 20	4	-Required sign not posted	Required sign posted based on 2012 season reinspection
			-Tripping hazard caused by sagging wood	Tripping hazard caused by sagging wood
			-Slippery ramp	ramp painted with sand in paint - no longer slippery
			-Loose ladders	Loose ladders
Manhattan	Dry Dock	1	-Missing latch from wading pool fence	Missing latch from wading pool fence
Manhattan	Frederick Douglass	2	-Tripping hazard caused by leftover metal rods protruding from the deck	Tripping hazard caused by leftover metal rods protruding from the deck
			-Loose ladders	Ladders secured
Manhattan	Tony Dapolito	2	-Unprotected electrical outlet (outdoor pool)	Electrical outlet properly covered
			-Unprotected electrical outlet (indoor pool)	Electrical outlet properly covered
<b>Total</b>	<b>10</b>	<b>21</b>		



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RE: Draft Audit Report on the Health and Safety Conditions of Department of Parks and Recreation's Public Swimming Pools / Audit MH12-137A

Dear Deputy Comptroller Kim,

I am writing in response to the New York City Comptroller's ("Comptroller") Draft Audit Report (the "Report") referenced above.

The New York City Department of Parks & Recreation ("Parks" or "Agency") strictly adheres to rigorous and robust standards and procedures for the maintenance and operations of its indoor and outdoor pools. The program, which meets or exceeds the requirements outlined in New York City Health Code Article 165, also includes:

- Lifeguard Training Certified by New York State
- Pool Safety Plans as required by the Department of Health and Mental Hygiene (DOHMH)
- Certified Pool Operator Training
- 24 hour staffing at our intermediate and Olympic outdoor pools
- Detailed oversight by DOHMH

All of our pools undergo a thorough assessment prior to and after each season. In addition, all of our pools are inspected daily and water quality tests are performed routinely at one hour or half hour intervals depending on air temperature to ensure proper chlorine and pH levels in the pools. The Parks Academy offers mandatory annual training courses for all Filter Plant Operators and all Pool Supervisors 1 and 2 and also produces extensive manuals detailing every aspect of pool operations.

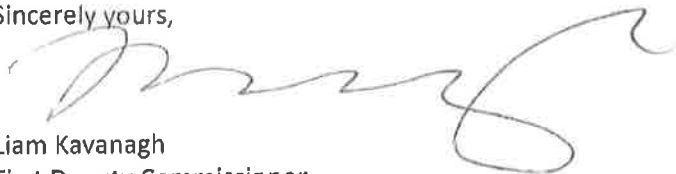
The 2012 pool season was an exemplary year for Parks. Over 1.9 million people enjoyed safe and free bathing at our 81 outdoor swimming pools (including 23 wading pools and three diving pools). Similarly, approximately 473,000 people participated in swimming opportunities at 12 indoor swimming pools. Parks places the utmost importance on its responsibilities to care for and protect its pool infrastructure and all visitors to the highest safety, maintenance, and cleanliness standards.

We are pleased the Report found that all of the Agency's lifeguards were properly trained, certified, and that all pools visited by the auditors were fully staffed by our lifeguards. In addition, the Report substantiates that Parks consistently conducted water quality tests at all large and intermediate sized pools and had the appropriate safety equipment. Our water quality testing standards far exceed requirements set forth by the New York City Sanitary Code.

Parks is addressing improvements in the administrative oversight of inspections and repairs mentioned in the Report. Although these findings are important and we are prioritizing resolution, we note that they do not impact Parks ability to keep the pools open and safe.

Attached is our response to the Report's Recommendations and we assure you that we will continue to uphold the highest standards to ensure City pools are open, safe and healthy for all users and visitors. Thank you.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Liam Kavanagh', written in a cursive style.

Liam Kavanagh  
First Deputy Commissioner

## NYC DEPARTMENT OF PARKS AND RECREATION RESPONSE TO AUDIT MH12-137A

### INTRODUCTION

Parks operates and maintains one of the largest municipal swimming pool systems in the country. With nearly 2 million visits by the bathing public at our pools in 2012, it is evident that these pools are a safe and healthy resource, offering a recreational opportunity and respite from the summer heat at no fee to the users. The bathing public also utilizes programs at the pools such as "Learn To Swim" (which caters to 29,000 participants), "Swim for Life" (nearly 4,500 participants), lap swim hours (nearly 12,000 participants), senior programs (nearly 1,000 participants), adapted aquatics (nearly 600 participants), swim teams (over 1,500 participants), free swim hours, and day camps.

Many of these massive swimming pool facilities were constructed during the WPA in the mid 1930s, making them over 75 years old. The fact that they are fully operational and remain inviting is a testament to our rigorous and robust pool maintenance program.

The intermediate and large pools are staffed 24 hours a day. To ensure a healthy and safe environment is maintained, the water quality is tested hourly between 8am and 10pm to ensure proper chlorine and pH levels, then every 2 hours overnight. When the temperature is above 80 degrees, we test the water every 30 minutes. This allows Parks to maintain a high standard of water quality and cleanliness, as well as ensure continual monitoring of the mechanical equipment. The water is tested by Filter Plant Operators ("FPOs") who have undergone an intensive training at the Parks Academy under the guidance of our Director of Training, who has nearly 30 years of field and training experience.

Parks' well-trained lifeguards are a strong presence at the pools and a critical component of our strategy for safety. The Report found that these lifeguards were retested and recertified for the 2012 season. Furthermore, the safety equipment at our pools such as backboards, reaching poles, and resuscitation equipment meets or exceeds the New York City Health Code (Article 165) and the local New York City law (Title 24). Parks Enforcement Patrol ("PEP") and NYPD officers supplement staff, ensuring a secure environment for many New Yorkers during the hot summer months.

### RESPONSE TO FINDINGS

#### LIMITED EVIDENCE THAT INSPECTIONS AND REPAIRS ARE PERFORMED

The Report states that *"there is limited evidence that inspections and repairs are performed."* Parks respectfully disagrees with this assessment. Parks policy requires that personnel perform and document inspections with checklists and photographs. We start at the end of each swimming season, when pool personnel complete a comprehensive 49 point checklist that identifies conditions to be corrected prior to the start of the next season. This inspection checklist includes a review of the filter plant, drains, pumps, motors, and the overall condition of the pool. This inspection is used as a basis for the inspections the following year. The inspections, conducted by the Technical Services division, include notes and photographs by the inspectors. These inspections are kept on file at 5-Boro Shops and on The Parks Intranet and are available for review. They were not requested during the audit.

While our Technical Services division focuses on the filter plant and other technical aspects of the pool operations, the borough staff focuses on the maintenance and operations of the pools and related facilities. The Pool Supervisors complete a daily "opening checklist" to identify any outstanding

conditions that need to be addressed. Repairs are performed as needed as evidenced by the fact that over 2,800 work orders (or approximately 95%) were completed for pools in 2012. Any condition that is a safety or health hazard to the public (as defined by The Department of Health and Mental Hygiene, or DOHMH) is corrected immediately. This means that well over 2,000 inspections are performed at our pools every year.

### **WORK ORDER REQUESTS NOT CONSISTENTLY PREPARED**

All repairs do not require a work order. For example, if a pool staff member tightens a loose ladder, it is not required that they indicate completion of that task into the database. Furthermore, due to the high volume of patrons at our facilities, certain issues such as loose ladders may be remedied only to re-emerge after heavy usage.

When a serious condition is identified, an order for work is prepared. The borough pool manager forwards it to the appropriate division to initiate repairs. As stated earlier, over 2,800 work orders were completed for all pools in 2012, or about 35 repairs per pool.

Additionally, Parks' Technical Services Division creates work orders based on the post season inspection checklist and photographs and inspections. These inspections can determine if the work was completed, or additional work needs to be performed.

The audit further states "*Without proper documentation of inspection results, the risk that the condition go undetected...*" Parks maintains that we do document inspections, as stated earlier. There are daily inspection checklists, post season checklist, and pre-season notes and photos. This ensures that a condition requiring attention is not overlooked.

Almost all of the 54 conditions identified in Appendix III, such as "leaves in pool water" at Bushwick Pool, have been addressed. Of the 38 conditions that were deemed the most serious in the Report, 36 (95%) of them have been remedied. The remaining two conditions were related to the ventilation units at the Tony Dapolito and Roy Wilkins Recreation Centers. These require major capital improvements to resolve. However, in the future Parks will ensure that all serious work performed is entered into AMPS, our Agency's tracking system.

### **LIMITED EVIDENCE THAT WATER QUALITY TEST ARE CONSISTENTLY PERFORMED AT MINI POOLS**

Parks performs water quality tests either hourly or every 30 minutes from 8am to 10pm depending on the air temperature, then every 2 hours overnight at our intermediate and large pools. This means that the water quality is tested between 20 and 30 times per day. The tests are conducted to ensure that chlorine and pH are at acceptable levels. If not, then remedial action is taken. This far exceeds the State requirement of three water quality tests daily. By conducting this number of tests, we ensure that our water quality is at a higher level than almost any other public or private pool in the State.

The audit states that "*DPR did not have evidence that the tests were consistently performed as required at mini-pools.*" The audit focused this finding on the mini-pools rather than our larger pools, which are meeting all requirements. Our large pools experience the highest volume of usage and have the biggest impact. DOHMH cited Parks for levels of chlorine out of range on only 3 occasions at our outdoor pools in 2012. Immediate action was taken to restore proper levels.

Additionally, the audit states that *"By signing the daily reports, supervisors are verifying that they observed the readings and ensured that they were done correctly."* At mini-pools, the pool supervisor oversees multiple sites under his/her jurisdiction. Therefore it is not physically possible for them to observe *all* of the required readings. However, we have directed all supervisors to make every effort to review the inspection log at the end of each day. If they cannot do so, they will sign the inspection form during their next visit on the subsequent day.

Pool Supervisors and FPOs undergo intensive training annually at the Parks Academy. There are certain situations in which the FPO has a justifiable reason why he cannot complete an inspection on schedule. However, during training at our Parks Academy for Pool Supervisors and FPOs, Parks will emphasize the importance of recording the hourly tests and obtaining the appropriate signatures.

### **INEFFECTIVE FOLLOW-UP OF DOHMH VIOLATIONS**

Parks works with DOHMH throughout the pool season and will improve coordination to ensure that violations are addressed in a prompt manner. Under the oversight of DOHMH, Parks is able to keep the pools open because any infraction deemed critical to public safety is remedied accordingly. In 2012, all infractions were handled either by the pool operations staff or by our Technical Services division, depending on the nature and complexity of the infraction.

In some circumstances, violations were issued directly at the pools and were not fully circulated amongst pertinent Parks staff. In order to rectify this issue, Parks has since centralized a DOHMH violation system that is overseen by our Assistant Commissioner for Urban Park Services to more effectively track and follow up on violations in the future. Going forward, a work order will be generated for all violations issued by either the DOHMH or the FDNY, regardless of the scope of the violation. A custom field has been added to AMPS that allows the violation ID number to be tied to the work order which will allow us to better track violations.

It should be noted that Parks acted immediately on any public safety or health hazards, while prioritizing other violations to be cleared. An example of that process is illustrated where self latching gates are malfunctioning. Until the repairs can be made, the gate is staffed to monitor egress and ingress.

### **OUTDATED SAFETY PLANS**

The audit states that *"...not all safety equipment required by the safety plans are up to date."* This is a misleading statement. The required safety equipment in the plans meets or exceeds Article 165 of the New York City Health Code. However, Parks will review and update our Safety Plans to more accurately reflect the safety equipment that is currently used. Indeed, some of the equipment in the safety plan is no longer used by lifeguards. For example, ring buoys have been replaced by rescue tubes and are no longer needed or used. There have been limited changes to New York City Health Code Article 165 since the mid-1990s, which is when our Safety Plans were last updated. Procedures such as evacuation routes, supervision of bathers, and injury prevention are unchanged.

It should be noted that all Pool Supervisors 1 & 2 and all Filter Plant Operators are trained annually prior to the pool openings. Recreation personnel are trained in the off season as requested by the Recreation Chiefs. Other pool training classes are offered as elective classes through our Parks Academy, which also produces extensive manuals detailing every aspect of pool operations.



### **CONDITIONS FOUND DURING AUDITORS' UNANNOUNCED VISITS**

The audit quotes Article 165 by saying where certain public health hazard conditions exist, the bathing establishment may be immediately closed until the hazardous conditions are corrected. As stated earlier, despite some of the conditions noted in the audit, DOHMH did not close any of our pools during the audit period of 2012. As stated earlier, Parks has successfully operated our pool facilities under the detailed and careful oversight of DOHMH. When a potential safety hazard is discovered, it is rectified. That is one of the purposes of the daily opening checklist. It identifies potential hazards.

RESPONSE TO RECOMMENDATIONS AND IMPLEMENTATION PLAN FOR PARKS AND RECREATION  
AUDIT MH12-137A

**RECOMMENDATION 1:** Establish written policies and procedures that require documentation for all pre-season inspections conducted and the results of those inspections.

**PARKS RESPONSE:** Our Agency does have policies and procedures in place to document the inspections and the results of those inspections. When the auditors interviewed the Assistant Commissioner for Citywide Services, he informed them that Parks completes pre-season and post-season inspection reports. However, the auditors never requested a copy of a completed report. We have documentation outlining the pre-season and post-season inspections. We also have an extensive "Swimming Pool Operations Manual" in place that details every aspect of operations at the pools and various annual training courses offered at our Parks Academy. We will, however, review our various reports in order to identify areas to further enhance oversight of these assessments.

**RECOMMENDATION 2:** Establish written policies and procedures that explain how the conditions in need are reported and addressed.

**PARKS RESPONSE:** There is already a procedure in place whereby the needs and conditions are reported. During the preseason, the documented inspections are discussed at regularly occurring meetings with all personnel involved. Any serious condition in need of repair is documented in the form of a work order. There are occasions when borough staff complete work without putting in a work order. An example of this may include an instance when a pool staff member tightens a loose ladder. Our Technical Services division reports any conditions that need to be addressed to the appropriate personnel. We will review our systems for addressing needs and conditions and strengthen our procedures where appropriate.

**RECOMMENDATION 3:** Ensure that all conditions found in need of repair during the pre-season and in season are documented in AMPS to ensure that they are addressed in a timely manner.

**PARKS RESPONSE:** Before the beginning of each season, Parks reviews the post-season inspection reports from the previous season and ensures that all conditions have been addressed. In addition, our Technical Services Division inspects the filter plant and technical operations while borough staff inspects the facility for safety issues. A work order is generated in AMPS for all serious conditions that warrant repair, which is then addressed by our experienced staff. However, Parks will take measures to further ensure that we review AMPS on a routine basis and ensure that open work orders are addressed in a timely manner.

**RECOMMENDATION 4:** Reinforce the requirement that FPOs perform all the water-quality tests in the frequency and manner stipulated by DPR regulations, and ensure the results are recorded in the daily log reports.

**PARKS RESPONSE:** Our Agency's standards for water quality testing are far stricter than those for almost any other private or public pool in the State. We believe these testing standards demonstrate our commitment to ensuring the health of the bathing public. The water is tested for proper chlorine and pH levels either hourly or every 30 minutes between 8am and 10pm depending on the air temperature, then every two hours over night. This means that the water quality is tested 20 to 30 times per day. At times, if the Filter Plant Operator must address an emergency condition, he/she may miss a reading. The mini-pools are overseen by a roving supervisor who, on occasion, may not be able to observe every inspection. However, in almost all cases, these tests are occurring as required. Parks will reinforce the

requirement that FPOs perform all the water-quality tests in the frequency and manner stipulated by Parks regulations, and ensure the results are recorded in the daily log reports.

**RECOMMENDATION 5:** Ensure that the pool supervisors review and sign off on the daily log reports to ensure that the FPOs are performing the water-quality tests.

**PARKS RESPONSE:** Pool Supervisors sign off on the daily log reports the vast majority of the time, especially in the large pools. There have been some instances at the mini-pools where proper documentation of the inspections was not always completed. We believe this is because they are overseen by a roving supervisor who visits numerous sites. At the annual training for pool supervisors, the importance of proper recording of water tests will be emphasized. The pool supervisors will be further instructed to adhere strictly to the safety plan and record the tests.

**RECOMMENDATION 6:** Address and Clear all outstanding DOHMH violations.

**PARKS RESPONSE:** Parks agrees. Although many of the violations have been addressed, Parks will continue to make sure that pending violations are remedied in a timely manner. Going forward, a work order will be generated for every pool violation issued by the DOHMH, regardless of the scope of the violation. It is important to note that of the 38 conditions identified by the auditors and deemed serious, 36 (95%) of them have been remedied. The remaining two deficiencies are related to the ventilation units at the Tony Dapolito and Roy Wilkins Recreation Centers. These require major capital improvements to resolve.

**RECOMMENDATION 7:** Track and monitor DOHMH violations to ensure that all violations are addressed in a timely manner.

**PARKS RESPONSE:** Parks agrees. Pending violations are circulated at the pools and are distributed up the chain of command. Parks will regularly review the status of work orders and has created a centralized DOHMH violation system to more effectively track and follow up on violations. All serious violations will be entered into AMPS, noted as a violation, and monitored.

**RECOMMENDATION 8:** DPR should update and submit to DOHMH for approval safety plans whose plans are outdated.

**PARKS RESPONSE:** Parks agrees. Parks has already begun the updating process and plans to submit them to DOHMH.

**RECOMMENDATION 9:** Address the outstanding conditions cited in this report if it has not done so already.

**PARKS RESPONSE:** As discussed in this response, Parks will continue to consistently test water quality at our intermediate and Olympic sized pools and we will work to ensure the water tests at our mini pools are properly documented. We have implemented a centralized system to track the resolution of DOHMH violations and will continue to perform post closing and pre opening outdoor pool inspections. We also work to ensure that the maintenance issues that inevitably arise at our pools (such as loose ladders) are promptly addressed and recorded in AMPS when appropriate.

**RECOMENDATION 10:** Prominently display the regulations and notices that are required to be posted.

**PARKS RESPONSE:** Parks will ensure that all required notices and regulations are prominently posted.