



Barry L. Kluger
Inspector General

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June 14, 2018

Phillip Eng
President
MTA Long Island Rail Road
Jamaica Station Building
93-02 Sutphin Blvd.
Jamaica, NY 11435

**Re: Vehicle Idling at
Long Island Rail Road
MTA/OIG #2018-05**

Dear Mr. Eng:

In 2012, the Office of the MTA Inspector General (OIG) issued a report entitled *Excessive Idling of Highway Vehicles at Long Island Rail Road and Metro-North Railroad* (OIG #2012-06). Our report examined how Long Island Rail Road (LIRR) and Metro-North Railroad (MNR) were managing idling within their respective highway fleets and made recommendations for improvement.

Based on the data we collected in 2012 on LIRR vehicles subject to New York State idling regulations, we found that these vehicles idled on average for two hours and eight minutes each day they were used, wasting over 13,000 gallons of fuel per month, at a cost per month of over \$40,000. In its formal response to the OIG, LIRR agreed to implement the recommendations included in our report.

The OIG initiated a follow-up review in 2017, resulting in our preliminary report containing six recommendations to improve the monitoring of unnecessary idling. In your letter dated June 8, 2018, on behalf of the agency, you agreed with all of our recommendations and explained the actions that have been or soon will be taken to reduce unnecessary idling at the LIRR. This letter serves as our final report and incorporates the implementation information for each recommendation under sections subtitled "Agency Response."

In performing this review we interviewed LIRR management and staff; collected and analyzed memos, policies and other internal documents; and examined idling data across LIRR's approximately 700-vehicle fleet, using reports from Sentinel Fleet Management (Sentinel), the software package provided by BSM Wireless Inc. (BSM) that LIRR and MNR use to manage idling. It should be noted, however, that a joint agency effort between LIRR, MNR, and Bridges and Tunnels is underway to contract with a new vendor to replace BSM and Sentinel by the end of 2019.

During our review, both the railroads and the OIG became aware of significant inherent technological problems with Sentinel's ability to accurately record the details of idling events, resulting in the production of unreliable idling data and reports. As a consequence, OIG cannot accurately quantify the amount of unnecessary idling at LIRR at this time. These serious limitations call into question whether BSM is meeting its contractual obligations and the suitability of its product; reasons, among others, for replacing both BSM and Sentinel. More fundamentally, however, based on our interviews of key staff and evaluation of relevant procedures and reports, it is evident that LIRR's awareness, monitoring, and enforcement of idling behavior has been inadequate. Indeed, a recent in-house review conducted by LIRR's Business Process Management & Corporate Compliance (BPMCC) team effectively corroborated our findings and concluded that the agency had not sustained its initial efforts made in response to our 2012 report, meaning that both the amount of excessive vehicle idling and the employee mindset behind it in 2017 are unlikely to have improved from what we found in 2012.

Commendably, BPMCC's report makes substantive recommendations that should address shortcomings found by both the agency and OIG review teams. However, given that LIRR's previous efforts to address the deleterious environmental and financial consequences of idling were not sustained over time, and the new AVL system is not projected to be in place until the end of 2019, additional actions to supplement BPMCC's recommendations are needed to re-establish and maintain an effective program to limit unnecessary idling. To that end, OIG makes the six recommendations below.

Recommendation 1:

LIRR should assign ultimate responsibility for reducing unnecessary idling to an operational executive who will oversee and be accountable for idling management. This executive should be the point person for program guidance, and should have sufficient authority to administer and enforce policies and procedures as needed to make the idling program continually effective and efficient.

In previous years, one fundamental problem with LIRR's idling management program was that departmental Vehicle Coordinators (Coordinators), whose assignment to monitor and report on vehicle idling was required by agency policy; either had not been designated or were unaware of their responsibilities.¹ Additionally, the Vehicle Fleet Operations Group (VFO), which manages LIRR's highway fleet, did not perform the following "essential function" enumerated in the policy: "On a monthly basis, monitor vehicle idling reports from AVL. Perform ongoing reviews and provide general oversight and coordinate with departments to identify possible unnecessary idling occurrences."² Further, VFO did not "[n]otify Coordinators and Department Heads if vehicle-related procedures are not being followed as warranted," which is another "essential function" enumerated in the policy.³

¹ LIRR Corporate Policy & Procedure #OOS-008, *Passenger and Work Vehicle Assignment and Use*, February 2014.

² *Ibid.*, Section IV. (Essential Functions); C. (Senior Manager, VFO) 4.

³ *Ibid.*, Section IV. C. 5.

The current plan, and BPMCC's recommendation, is for VFO to continue to administer LIRR's idling program. If so, given that adherence to policy and effective communication between VFO and Coordinators are essential to the success of LIRR's idling program, having an executive in place to discover and address any breakdown in these operating requirements should help keep the program on track.

Agency Response

Agreed. LIRR has designated the Chief Engineer as the operational executive in charge of idling management and in that capacity he "will issue a corporate directive to all operators of LIRR vehicles, Vehicle Coordinators and Department Heads reminding them of the vehicle idling policy and their responsibility to ensure compliance." In addition, the Vehicle Fleet and Security Offices will ensure that all applicable staff can use LIRR's AVL system in a manner consistent with "conducting vehicle idling reviews and follow-ups in compliance with policy." Finally, the Vehicle Fleet Office will report instances of non-compliance to the Chief Engineer.

Recommendation 2:

LIRR should amend Policy #OOS-008, *Passenger and Work Vehicle Assignment and Use*, to require compliance with the idling law of the City of New York, and provide appropriate training to vehicle operators regarding this requirement.

Our analysis of Policy #OOS-008 also revealed that while it cites New York State regulations regarding idling, it does not include a requirement to comply with New York City's (NYC) idling law, which prohibits any vehicle from idling for more than three minutes.⁴ Because LIRR vehicles regularly travel in NYC boroughs, and are subject to its idling law while within city limits, LIRR operators should be aware of and comply with that law.

Agency Response

Agreed. LIRR will amend its Vehicle Operation Policy #ENG-008 to "re-enforce adherence to idling laws and additionally reference New York City idling law...." LIRR also noted that the agency's vehicle-related training is mandatory for all drivers of LIRR vehicles and includes instruction on idling.

Recommendation 3:

LIRR should work with MTA Business Service Center to incorporate into the Request for Proposal and the eventual contract with a new AVL vendor (with a new software package), the lessons learned from working with BSM and from using Sentinel.

⁴ New York City Administrative Code, Title 24, Section 24-163. New York State Environmental Conservation Law §3-0301; 6 NYCRR 217-3 prohibits idling over five minutes.

Recommendation 4:

LIRR should ensure that BSM's performance on the current contract is factored into BSC's evaluation of it for any future contracts with any MTA agencies.

The impending replacement of Sentinel, expected to be in place by the end of 2019, represents an opportunity to capitalize on the knowledge LIRR has gained by applying it to the Request for Proposal and the eventual new contract with BSM's replacement. Because the selection of a new vendor is taking place through a joint procurement process with MNR and Bridges and Tunnels, all three agencies will benefit if the process addresses the previously-noted technological problems as well as the system capability and customer service deficiencies reported by VFO.

Agency Response

Agreed with both Recommendations 3 and 4. Regarding future AVL services, the agency confirmed that BSC is in the process of negotiating a one-year contract extension with BSM to run through September 2019 and that LIRR's Office of Security is coordinating with BSC to "create a requisition by third quarter 2018 for a replacement system" that will address the "[t]echnological problems, and system capability limitations experienced with Sentinel...."

Recommendation 5:

LIRR should determine whether BSM has met its contractual obligations with respect to Sentinel's ability to record and report idling data. If BSM has not done so, the agency should seek compensation.

The technical problems with Sentinel's ability to produce reliable idling data and reports severely restrict LIRR's ability to operate an effective idling management program and ensure the efficient use of its fleet. As such, this loss represents wasted capital. Since the OIG understands that BSM may not be able to fix the problems, LIRR's past and future payments to BSM for the Sentinel system should be assessed to reflect the reduced functionality that has been and is being provided.

Agency Response

Agreed. LIRR staff "will evaluate the severity and timeframe of the LIRR receiving unreliable data and reporting as contracted with BSM by fourth quarter 2018." In conjunction with this effort, BSC Procurement and LIRR's Office of Security "will attempt to quantify the loss reflected by this reduced functionality and work with the BSC to seek reimbursement from BSM, as applicable."

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Recommendation 6:

LIRR should develop metrics to quantify unnecessary idling, and should establish idling reduction goals for LIRR's highway vehicle fleet, in anticipation of implementing a new system capable of accurately and reliably capturing idling data.

While the LIRR idling program, historically, has made no use of metrics or quantitative, time-bound performance goals, we believe it appropriate to do so at this stage of the program's development. Specifically, agency management should develop and use metrics to identify and measure unnecessary idling, including: (1) the ratio of fuel consumption to miles traveled; (2) time spent idling as a percentage of the time a highway vehicle operates; and (3) the average amount of time highway vehicles idle per day. Similarly, the use of performance goals will signal LIRR's commitment to and help drive progressive reductions in unnecessary idling.

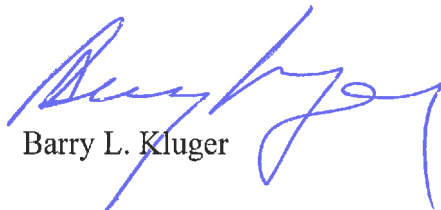
The fundamental structure, process, and policy are in place at LIRR to run an effective and efficient idling management program. And certainly, by implementing BPMCC's recommendations, as we understand that management has committed to do by the first quarter of 2018, the agency has taken an important step toward strengthening that program. We now look forward to the agency's implementation of our additional recommendations, firmly believing that the combined benefits of the two will strengthen the LIRR idling program even further.

Agency Response

Agreed. The Chief Engineer and Senior Manager of VFO will "establish informative and meaningful metrics to be reported via Sentinel" and that reports will be distributed to applicable staff members. Further, VFO and the Security Office "will work with BSM to identify and resolve any problems with inaccurate data to ensure the reports from Sentinel are correct." Finally, the Chief Engineer and the Senior Manager of VFO will "determine, communicate, implement, and report on future [idling] performance goals at the corporate level" and will share the metrics with BSC for incorporation into the Request for Proposal for a new AVL system.

As always, we appreciate the courtesy and cooperation afforded to us at all times by you and your staff. If you have any questions please do not hesitate to call me or Executive Deputy Inspector General Elizabeth Keating at (212) 878-0022.

Very truly yours,


Barry L. Kluger

Cc: Mark Young