Lead and Copper Rule File Review Final Report
NJDEP
April 18 through April 21, 2016

Prepared by
U.S, Environmental Protection Agency
Region 2
New York, New York

Approved by:

Date: 9/22/16

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Background

This report is based on the review of 55 small and medium public water systems in the State of New Jersey, for their compliance with the Lead & Copper Rule (LCR). These systems were selected as a direct result of their action level exceedance for lead and some were randomly selected by the region. The goal was to review the effectiveness of the State implementation program. Documentation was reviewed for each system to ensure that a monitoring plan was developed and accurately followed, collection of timely and appropriate number of lead and copper samples occurred; consumer notices were provided to consumers timely; collection and evaluation of source water monitoring data; designation and maintenance of optimal water quality parameters was taking place; public education was being provided to consumers; and optimal corrosion control recommendations were submitted and approved in a timely manner.

Lead & Copper Rule documents reviewed

- Lead & copper monitoring plans
- Lead & copper monitoring results for the last 2 compliance cycles
- Consumer notices provided to households, including sampling instructions
- Source water monitoring data
- Designation of Optimal Water Quality Parameters (OWQP)
- Copies of Public Education and certifications
- Copies of Public Notices (if applicable) and certificates
- Corrosion Control Treatment approval documentation
- State response to EPA LCR Framework questionnaire

Summary of Findings/Observations

EPA found NJDEP's, Lead & Copper Rule (LCR) files to be well organized and our staff determined that the majority of systems took the appropriate number of LCR tap samples according to their schedules. When systems failed to conduct appropriate monitoring, our staff found evidence of State follow up actions in accordance with the LCR. Systems were routinely reminded of their requirement to conduct water quality parameters (WQP), initial source water monitoring, conduct public education (PE), make recommendations for optimal corrosion control treatment (OCCT) and install treatment as required. Where the NJDEP program was deficient was in consistently determining and reporting of violations to the Safe Drinking Water Information System (SDWIS). PWS files contained letters indicating State follow up and compliance assistance, but typically without the issuance of violations. These violations are required to be reported to SDWIS, to accurately reflect compliance with the LCR. We also found three sample invalidation justifications that may not meet LCR requirements.

NJDEP stated that the originally established 1990s WQPs and corrosion control treatment (CCT) approval documents, which were instituted in conjunction with the initial implementation of the LCR, are not available in your records. Consequently, maintaining compliance is problematic for water systems and effective enforcement becomes complicated for the State and EPA. During this review process, we found various concerns (listed below) that we need to bring to your attention and will require a modification of your current LCR Action Plan, which you provided to us on September 10, 2015. EPA

acknowledges NJDEP's efforts in working diligently to reassign and hire staff to focus on LCR compliance, issuing letters to systems in order to reconcile documentation deficiencies, and reestablishing rule requirements to the system by providing technical assistance.

As we indicated during the file review, NJDEP needs to provide documentation, where necessary, for the WQP and CCT approval process, review the tap sampling plans to verify the location and use of Tier 1 sites, address the systems who continue to fluctuate in and out of compliance, and correct all LCR file deficiencies. During our review we observed that some systems did have sampling plans, but with no Tier 1 sites identified. Other systems were missing tap sampling plans, making it difficult for the review team to determine when systems were meeting their tap sampling and WQP sampling requirements.

In many instances, official decisions regarding WQP and CCT were made and communicated via e-mails rather than official letters from NJDEP. The files didn't have the approved WQP and CCT records. This is not appropriate documentation for official decisions and needs to be corrected.

Discrepancy/Issues/Questions

Below is the file review discrepancy list for 26 of the water systems reviewed. Most discrepancies were for items not found and the water systems' response to action level exceedances. Please evaluate our comments and respond within 30 days on our findings. Your response should include a plan to report missing violations of the LCR, provide needed documentation, where necessary, and review/update water systems' tap sampling plans.

PWSID	PWS_NAME	PWS_TYPE	POPUL	File Review Comments/Concerns/Potential discrepancies
NJ0102302	BALLY'S PARK PLACE CASINO	NTNCWS	6500	* Public Education due 11/30/15, completed 3/5/16 (Type 65 violation) not reported * Initial WQP due 9/30/15, completed 11/30/15; (Type 53 violation) not reported
NJ0105348	ONE LOVE DAYCARE AND PRESCHOOL	NTNCWS	62	* Based on 6/18/14 ALE, WQP due 6/30/14 not reported (Type 53 violation) * PE not found, due 8/31/14 (Type 65 violation)
NJ0108014	TOWER EAST MOBILE HOME PARK	CWS	80	Late initial Source Water sampling; due 3/30/15, completed 6/4/15 (Type 56 violation)
NJ0117331	HOMESTEAD RESIDENTIAL HEALTH CARE	NTNCWS	25	* Based on 7/13/13 ALE provide confirmation that system made CCT recommendation by 1/13/14
NJ0315301	FOUNTAIN OF LIFE CENTER	NTNCWS	920	* Based on 8/12/13 ALE, Provide confirmation Source Water monitoring completed by 2/12/14
NJ0320334	IRONSTONE SHOPPING CTR	NTNCWS	400	* Source Water sampling results not found. (Type 57 violation) * Explain why only 5 samples required by system after exceeding action level; 10 required
NJ0329301	NEWCOMB MIDDLE SCHOOL	NTNCWS	412	Provide confirmation that 7/14/15 samples invalidation justification followed State regulations
NJ0329302	HELEN A FORT MIDDLE SCHOOL	NTNCWS	837	* Provide confirmation that 7/15/15 samples invalidation justification followed State regulations
NJ0329330	DEBORAH HEART & LUNG CENTER	NTNCWS	1300	* Based on 6/16/15 ALE system required to complete WQP monitoring by 6/30/15, completed on 7/15/15; (Type 53 violation) should have been reported. * System was late in recommending CCT which was due 12/31/15, completed on 2/16/16. Requires (Type 57 violation) to be reported.
NJ0429001	PINE VALLEY GOLF CLUB	CWS	27	* Provide confirmation that 10/15/14 samples invalidation justification followed State regulations
NJ0435394	ATCO POST OFFICE	NTNCWS	39	* Late CCT recommendation; due 6/30/15 completed 7/8/15 (Type 57 violation)
NJ0603301	CUMBERLAND CNTY TECHNICAL ED	NTNCWS	685	* Based on 6/10/15 ALE, WQP sampling performed late (Type 53 violation)
NJ0721305	MOUNTAIN RIDGE COUNTRY CLUB	NTNCWS	400	* State type 52 violation letter, not found in SDWIS (Data flow discrepancy) * Confirm why system is taking only 5 samples after action level exceeded; 10 required

PWSID	PWS_NAME	PWS_TYPE	POPUL	File Review Comments/Concerns/Potential discrepancies
NJ0721305	MOUNTAIN RIDGE COUNTRY CLUB	NTNCWS	400	* State type 52 violation letter, not found in SDWIS (Data flow discrepancy) * Confirm why system is taking only 5 samples after action level exceeded; 10 required
NJ1001303	DELAWARE VALLEY REGIONAL	NTNCWS	1155	* Based on 4/8/15 ALE, WQP sampling due 6/30/15, completed 7/31/15. (Type 53 violation) * 3/10/16 State letter indicates treatment technique violation for failure to maintain treatment. If this is a federally reportable violation, report to SDWIS.
NJ1008300	ALBERT ELIAS	NTNCWS	43	* Corrosion control treatment (CCT) recommendation due 6/30/14, not found, but letter found indicating approval of recommendation. EPA request approval date just to confirm.
NJ1106315	PRINCETON TECHNOLOGY CTR	NTNCWS	80	* Type 52 violation issued by the State not found in SDWIS (data flow discrepancy) * System did not recommend CCT in a timely manner (Type 57 violation)
NJ1107001	LAWRENCEVILLE SCHOOL	CWS	1000	* Based on 6/30/13 ALE, CCT recommendation due by 12/30/13, completed 8/15/14 (Type 57 violation)
NJ1110301	PRINCETON FRIENDS SCHOOL	NTNCWS	50	* Based on 11/16/15 ALE, PE due 2/28/16, performed 3/12/16; (Type 65 violation)
NJ1319348	BAIS LEAH	NTNCWS	130	* Source Water sampling not found (Type 57 violation)
NJ1407301	DICKERSON SCHOOL	NTNCWS	400	* PE due 3/1/2016 not found (Type 65 violation), Letter in file indicating PE due and completed, but not found in file.
NJ1407318	360 ROUTE 24	NTNCWS	62	* 2009 and 2010 ALEs with no follow up action or violations issued; No WQP, PE, or Source Water sampling found. State violations issued but returned to compliance without any real compliance achieved. Systems appears to be periodically deactivated. Request follow up plan by NJDEP on getting system back into compliance.
NJ1615339	HILLCREST COMMUNITY CTR	NTNCWS	180	* Confirm why system is taking only 5 samples after exceeding action level; 10 required
NJ1701301	ALLOWAY TWP ELEMENTARY SCHOOL	NTNCWS	466	No discrepancies, but system Pb/Cu sampling plan not found in the State file.
NJ1710001	HARDING WOODS MHP	CWS	960	* Based on 9/25/14 ALE, Provide confirmation Source Water monitoring completed by 3/25/16
NJ1918310	350 COMPLEX WELL A	NTNCWS	309	* Based on 5/1/15 ALE, Public Education (PE) not found; due 8/31/15 (Type 65 violation)

The following 29 systems were found to be in compliance with the Lead & Copper Rule (LCR) and all applicable reporting requirements and require no additional follow up, with respect to the Rule.

PWSID	PWS_NAME
NJ0104003	BUENA BOROUGH MUA
NJ0108003	TILTON TERRACE MH
NJ0112348	BARRETT ASPHALT
NJ0329002	HILLTOP MOBILE VILLAGE
NJ0333326	U.S. POST OFFICE - VINCENTOWN
NJ0339320	WAGNER BOOT CAMP
NJ0809301	POLYMER ADDITIVES
NJ1023001	STOCKTON WATER DEPARTMENT
NJ1102307	FARIDY VEISZ FRAYTAK PC
NJ1211300	MIDDLESEX PRESBYTERIAN CHURCH
NJ1402308	KIJ MANAGEMENT
NJ1414401	JEFFERSON TWP HIGH SCHOOL
NJ1415305	OUR LADY OF THE MAGNIFIC
NJ1436365	NJDOT @ ROXBURY CORP CENTER
NJ1505324	PUBLIC WORKS BLDG

PWSID	PWS_NAME
NJ1505375	AIR PARK EMERGENCY SERVICES
NJ1603304	N. HALEDON FIRST PRESB. CHURCH & NURS
NJ1613001	NJDWSC WANAQUE NORTH
NJ1615009	REFLECTION LAKES GARDEN APARTMENTS
NJ1615340	MILFORD MANOR
NJ1902361	MANOR PLAZA CONDO ASSOC. COMPLEX
NJ1906315	STERLING PLAZA OFFICE
NJ1908325	GREEN APPLE ACADEMY
NJ1911003	LAKE TAMARACK WATER
NJ1922013	U W V H DC SYSTEM
NJ2105320	ISE FARMS INC
NJ2106309	JAMES ALEXANDER CORP
NJ2117003	OXFORD HERITAGE MANOR
NJ2122326	WASHINGTON SHOPPING CENTER, INC

The chart below summarizes NJDEP's LCR violation reporting pattern, indicating the number of each type of LCR violation reported to SDWIS, each year since 2000. The chart highlights how some violation types are rarely reported or that reporting of such incidents has diminished over time, yet this pattern did not necessarily agree with our file review findings. For example, violations for failure to conduct a CCT study/recommendation or to complete public education were almost non-existent. However our file review found several instances where such violations should have been cited, suggesting these violation types are occurring more often. The concern here is that lack of violation reporting is creating a false sense of compliance with the Rule.

NJDEP LCR Violation Reporting Counts (By Year: 2000 – 2015)

Violation Description /CY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Follow-up Or Routine LCR Tap M/R	4	4	4	3	194	258	157	63	41	28	23	19	17	30	11	23	1	880
Initial Tap Sampling for Pb and Cu	6	1	1	1	25	45	51	19	7	7	11	2	1		1	2	1	181
OCCT/SOWT Study/Recommendation																1		1
Public Education							2	1	1									4
Water Quality Parameter M/R	12	9	9	4		1	1	1								7		44
Total	**22**	**14**	**14**	**8**	**219**	**304**	**211**	**84**	**49**	**35**	**34**	**21**	**18**	**30**	**12**	**33**	**2**	**1110**

EPA Recommendations

The following areas of concern and actions must be addressed by NJDEP:

- Modify your 2015 LCR Action Plan to address deficiencies identified in this report within 30 days.
- Approve and document all WQP and CCT approvals for all applicable PWSs within the next 6 months.
- Document Tier 1 sites and tap sampling plans for all applicable PWSs within the next 6 months.
- Report all missing violations to SDWIS and ensure accurate and appropriate violation codes are reported, to reflect accurate compliance with LCR within 3 months.
- Have approved WQP and CCT documents and LCR tap sampling plans filed appropriately and available for future file reviews.
- Create an implementation schedule within 30 days, which provides the projected dates of completion by NJDEP.