

LCR-D

Massachusetts Department of Environmental Protection - Drinking Water Program Lead and Copper - 90th PERCENTILE COMPLIANCE Report

	(F	or Syster	ns Requi	rea t	o Collec	t IVIO	re Inan 5	Sampi	es)								
I. P	WS INFORM	MATION: P	lease refer	to you	ır DEP Lea	d & C	opper samp	ling pla	n for appro	ved sam	pling locati	ons.					
PWS	S ID #:	4036002					City	/ Town	: Bourne,	MA							
PW:	S Name:	North Sag	gamore Wate	r Distr	rict					PWS C	lass:	CC	M 🛛 NTI	NC 🗌			
San	npling	☐ FIRST	SEMI-ANNUA	AL SAN	IPLING PER	IOD			☐ RED	UCED - E	VERY THREE	YEAR	S				
	quency:	☐ SECO	ND SEMI-ANN	IUAL S	SAMPLING P	ERIOD)		☐ LEA	☐ LEAD SERVICE LINE (LSL) REPLACEMENT PROGRAM							
	ose one)	☐ REDUC	CED – ANNUA	AL.		☐ DEMONSTRATION											
Plea limit mg/l	se report re (MDL) but b for copper.	sults that are elow 0.005	e ND or less mg/L for lead	than d or 0.	(<) the labo 05 mg/L for	ratory coppe	ghest value) 's reported de er shall be rep	tection li ported as	mit (MDL) a measured	s zero. F or may b	Results at or a e reported as	above s 0.00	the laborate 25 mg/L for	ory's det lead or	ection 0.025		
nece	essary.						nis is your 90										
							quired to conf										
Note	: Do not inc	lude school	results on th	nis for	m unless th	e PW	S is a school.										
-		LFA	D RESULT	S (m	a/L)					COI	PPER RES	ULTS	(ma/L)				
#	Results	#	Results	#	Results	#	Results	#	Results	#	Results	#	Results	#	Results		
1*	0	16	0	31	rtoduito	46	rtocuito	1*	0	16	0.21	31	riodulio	46	rtocuito		
2	0	17	0	32		47		2	0.02	17	0.26	32		47			
3	0	18	0	33		48		3	0.02	18	0.27	33		48			
4	0	19	0.003	34		49		4	0.05	19	0.35	34		49			
5	0	20	0.003	35		50		5	0.06	20	0.62	35		50			
6	0	21		36		51		6	0.10	21		36		51			
7	0	22		37		52		7	0.11	22		37		52			
8	0	23		38		53		8	0.11	23		38		53			
9	0	24		39		54		9	0.11	24		39		54			
10	0	25		40		55		10	0.11	25		40		55			
11	0	26		41		56		11	0.13	26		41		56			
12	0	27		42		57		12	0.14	27		42		57			
13	0	28		43		58		13	0.15	28		43		58			
14	0	29		44		59		14	0.17	29		44		59			
15	0	30		45		60		15	0.18	30		45		60			
*Lov	vest Value																
N		1.5	ed to collec	-	20 lea	ad and	d copper sa	•				20			copper		
Circle			es collected sample # fo	-		х 0.9 сорр	$= \frac{18}{\text{er in the tab}}$				system's 90 esults in the						
		0		С	ompared t	o 0.0	15 mg/L		0.	.27			Compare	d to 1.	3 mg/L		
(Le	ead result at 9	0 th percentile	sample#)		(The lead	action	level)	(Сор	per result at	90 th percer	ntile sample#)		(The cop	per action	ı level)		
	ERTIFICATI																
							ed by the abo porting require							nunity s	ystem		
you			at or below					Cilicitis	iii accordai	ice with c	710 OWII (22.	10/1(1	,,(1)0.				
			eded the le						samplir	na sites	exceeded	the le	ad action l	evel.			
	□, o,	otorii oxoo	5454 (115 15	au u	31,011 10 701	GI I G	(Ins	ert # of		.g o.too							
							nined from the CCR) reportir								nity		
	My sys	stem was a	at or below	the	copper ac	tion le	evel.										
	☐ My sys	stem exce	eded the c	oppe	r action le	el an	THE RESERVE THE PARTY OF THE PA	4	samplir	ng sites	exceeded	the co	opper action	n level			
I have	e also notified	the owner of	each sampling	g site c	of their sites'	individu	Ins) leen previously lal results. I cel f my knowledge	rtify under	penalty of la	the DEP a w that I an	and that I have in the person a	comp uthoriz	lied with 310 ed to fill out to	CMR 22. his form a	06B(7). and the		
	Matthew Sa	wicki, Supe	rintendent			111	181 5	00	M				Septe		4, 2017		
		Title				S	signature of PW	S or Own	er's Represe	ntative				Date			
Pleas	se submit For	rm LCR-C ald	ong with this	form.	/			Rev.Oc	t 2016				Page1	of	1		





Lead and Copper Analysis Report

I. PV	VS INFO	ORMAT	ION:	Please re	fer to your I	DEP Lead	& Cop	per samp	oling pla	n for appro	ved sa	mpling loc	cations.				
PWS	S ID #:		4036	5002				City	/ Tow	n: BOUR	NE						
PWS	S Name	: [Nort	h Sagamo	re Water D	istrict					PWS	Class: (COM 🛛 NTNC	☐ TNC			
Davidio	ne or Spe	sial Cam	nles	Or	riginal, Resub	mitted or				If F	Resubm	itted Repor	t, list below:				
Routii	ne or Spe	ciai Sain	pies	1	Confirmation	Report			(1) Reason for Resubmission (2) Collection Date of Origin								
	⊠ RS	□ ss		☑ Original	Resubmitte	ed 🗌 Confir	mation	☐ Resa	Resample Reanalysis Report Correction								
SAME	PLE NOTE	S – (Suc	h as, it	f a Manifold/N	Multiple sample	, list the sou	irces tha	at were on-	line durir	g sample colle	ction).						
II. A	NALYTI	CAL L	ABO	RATORY	INFORMAT	ION:											
Prim	ary Lab	MA Cer	t. #:	M-RI010	Primar	y Lab Nan	ne: N	lew Engla	nd Testii	g Lab			Subcontracte	d? (Y/N)	N		
An	alyte	Actio	n Lev	el (mg/L)	Lab Me	thod	MD	L (mg/L)	Ana	lysis Lab MA	Cert.#		Analysis Lab	Name			
	Lead:		0.01	15	3113	3B	(0.001		M-RI010			New England Tes	ting Lab			
С	opper:		1.3	3	3120)B		0.01		M-RI010			New England Tes	ting Lab			
LAB	SAMPLE	NOTES															
	DEP A	Approve	ed Sa	mple Locat	tion	Collection	Data		LE/	D		CC	PPER	Lab Sam	nle ID#		
(Se				n for sampling		Conection	. Date	Result (ı	mg/L)	Date Analyze	d Re	esult (mg/L)	Date Analyzed	Lub Guill			
1	275 Willis	ston Roa	ad			8/22/2	017	ND		8/25/2017		0.11	8/25/2017	7H2302			
	51 Sanos					8/23/2	017	ND)	8/25/2017		0.11	8/25/2017	7H2302			
3	10 Marsh	Pond F	Road			8/23/2		0.00		8/25/2017		0.02	8/25/2017	7H2302			
_	28 Siasc		oad			8/23/2		0.00		8/25/2017		0.14	8/25/2017	7H2302			
-	17 Norris					8/23/2017		ND		8/25/2017 8/25/2017		0.11	8/25/2017	7H2302			
	275 Willis		ad			8/23/2017 8/23/2017		ND ND		8/25/2017		0.06	8/25/2017	7H2302			
	64 Norris	Road				8/23/2	017	NL	,	8/25/2017	-	0.21	8/25/2017	7H2302	23-07		
8											_						
9										ALSO NO.	+						
10						-					-						
11						-					+						
13											+						
14											+						
15																	
16																	
17																	
18																	
19																	
20																	
	Rep	ort SCH	OOL R	ESULTS colle	ected in accord	lance with 3	10 CMR	22.06B (7))(a)9 belo	w. Do not use	hese so	chool results	in 90 th percentile calc	ulations.			
1																	
2											-						
3																	
4						<u></u>											
fill ou	t this forn	n and the	e infor	mation conta	person authoriz nined herein is my knowledge	true,	Prima	ry Lab [Directo	· Signature Date		3/30/2017					
If no	t submittin	g these r	esults	electronically	r, mail <u>ONE</u> cop s report <u>or</u> no la	oy of this repater than 10	oort to yo	our DEP Re	egional C	ffice no later the	an 10 d whichev	lays after the er is sooner	e end of the month in	which you re	ceived		
	C	OM & N	TNC										ate DEP Regional	Office.			
DEP				itial & Date)				eview									
	ccepted			☐ Disapp			_	nents									
													Page	of			
														Page	8 of 8		



WS ID #:	4	4036	002				City /	Town:	BOURNE						
WS Name	: T	North	Sagamo	re Water D	District			PWS Class: COM ⊠ NTNC ☐ T							
			0-	inimal Danub	mitted or				If Res	ubmitted Re	port,	list below:			
outine or Sp	ecial Samp	oles		iginal, Resub Confirmation			(*	I) Reason	for Resubmis	ssion	(2) Collection Date	of Original Sample		
⊠ RS	Пss		☑ Original	Resubmitte	ed 🔲 Confir	mation	Resam	ole 🔲 Rea	nalysis 🔲 Re	port Correction	n				
		h as, if	a Manifold/M	lultiple sample	e, list the sou	urces tha	at were on-lin	e during sa	mple collection	on).					
ΔΝΔΙ ΥΤ	ICAL LA	ABOF	RATORY	NFORMAT	TION:										
rimary Lab		-	M-RI010	7	y Lab Nan	ne. N	lew England	Testing L	ab			Subcontracted	? (Y/N) N		
				Lab Me			L (mg/L)	_	s Lab MA Ce	rt.#		Analysis Lab N	ame		
Analyte Lead:	Actio	0.01	I (mg/L)	3113			0.001		M-RI010			New England Test			
Copper:		1.3		3120			0.01		M-RI010			New England Test	ing Lab		
AB SAMPLE	NOTES	1.0													
DED	Annrova	od Son	nple Locat	ion				LEAD			COF	PPER	Lab Sample ID#		
See DEP ap	proved LC	CR plan	for sampling	locations)	Collection	n Date	Result (mg	g/L) Dat	e Analyzed	Result (mg	g/L)	Date Analyzed	Lab Sample 10#		
9 Mano	met Road	d			8/23/2	017	ND	8	/30/2017	0.27		8/25/2017	7H24048-01		
100 Sta	ndish Ro	ad			8/24/2	017	ND	8	/30/2017	0.10		8/25/2017	7H24048-02		
276 Wil	iston Roa	ad			8/24/2017		ND		/30/2017	0.17		8/25/2017	7H24048-03		
36 Pilgr	im Road				8/24/2017		ND	8	/30/2017	0.62		8/25/2017	7H24048-04		
5															
5															
7															
3															
0															
1															
2															
3															
4															
5															
6															
7															
8								_							
9															
20	oport SCH	OOL R	ESULTS coll	ected in accor	dance with 3	310 CMF	22.06B (7)(a)9 below. I	Do not use the	se school res	ults ir	n 90 th percentile calc	ulations.		
1	oport GOIT	JOLIN													
2															
3															
4															
I out this fo	rm and th	e infor	mation conta	person author ained herein my knowledg	is true,	Prima	ry Lab Di	rector S	ignature: Date:	8/31/20)			
If not submit	ting these i	results	-1	v, mail <u>ONE</u> co s report <u>or</u> no	ony of this re	port to y	our DEP Re	gional Offic	e no later thai	n 10 days afte	er the	end of the month in	which you received		
			thi	s report or no	ıater tnan 10) davs a	ter the end t	i ilie report	ing penou, wi	110110 001 10 00	011011	te DEP Regional (
			itial & Date			T	Review								
		- /					ments								



Massachusetts Department Lead and Copper Analysis Report

I. P	WS INFO	RMATION	: Please re	fer to your I	DEP Lead	& Сор	per sampl	ing plai	n for approved	sampling lo	cations.					
PW	S ID #:	403	6002				City	/ Town	: BOURNE	BOURNE						
PW	S Name	: Nor	th Sagamo	re Water D	District				PV	PWS Class: COM NTNC TNC						
			Or	iginal, Resub	mitted or		T		If Res	ubmitted Repo	rt, list below:					
Rout	ine or Spe	cial Samples		Confirmation				(1) Reas	on for Resubmis	sion	(2) Collection Date	of Original Sample				
	⊠ RS	□ ss	☑ Original	Resubmitte	ed 🔲 Confir	mation	Resam	nple 🔲 F	teanalysis 🗌 Re	oort Correction						
SAN	IPLE NOTE	S – (Such as,	if a Manifold/N	fultiple sample	e, list the sou	urces th	at were on-li	ne during	sample collection	n).						
11. /	NALYTI	CAL LABO	RATORY	NFORMAT	TION:											
Prir	narv Lab	MA Cert. #:	M-RI010	Primar	y Lab Nan	ne: T	New England	d Testing	g Lab		Subcontracte	d? (Y/N) N				
	nalyte	Action Le	vel (mg/L)	Lab Me			DL (mg/L)	Anal	ysis Lab MA Ce	rt.#	Analysis Lab I	Name				
	Lead:	0.0		3113	3B		0.001		M-RI010		New England Tes	ting Lab				
(Copper:	1.	3	3120)B		0.01		M-RI010		New England Tes	ting Lab				
LAE	SAMPLE	NOTES														
	DEP	Approved S	ample Locat	ion	0-11 ::	- D-1-		LEA	D	С	OPPER	Lab Sample ID#				
(S		proved LCR pla			Collection	Date	Result (m	ng/L)	Date Analyzed	Result (mg/L) Date Analyzed	·				
1	52 Norris	Road			8/30/2	017	ND		9/2/2017	0.26	9/1/2017	7H31014-01				
2	55 Bourr	nedale Road			8/29/2	017	ND		9/2/2017	ND	9/1/2017	7H31014-02				
3																
4																
5																
6																
7								-	***							
8																
9 10																
11								-								
12																
13																
14																
15																
16																
17						4,444										
18																
19					-	-		-								
20		1 0011001	DECLUTO - "	ested in accor	dance with 3	10 CM	22.068 (7)	(a)0 bolo	v. Do not use the	se school result	s in 90 th percentile cald	L culations.				
_	Re	poπ SCHOOL	KESULIS COII	ected in accor	uance with 3	, TO CIVIF	\ ZZ.00B (1)((a)a belot	. Do not use the	S SOLIOO TOSUIT	porcontino dano					
2					-											
3	-															
4	 															
	rtify under r	penalties of law	that I am the	nerson author	ized to	Prima	arv Lab D	irector	Signature:	Bahowa						
fill o	out this formurate and co	m and the info omplete to the	ormation conta best extent of	ained herein i my knowledge	s true, e.				Date:	9/7/2017	1					
If r			thi	s report or no i	ater than 10	days a	fter the end (ot the rep	orting perioa, wri	ichever is soone	he end of the month in er.					
	C	COM & NTNC	Public Wate	er Suppliers r	must subm	it Form	s LCR-D o	r LCR-E	with this form	to the approp	riate DEP Regional	Office.				
DE	P REVIEV	V STATUS (I	nitial & Date)		1	Review									
	Accepted		_ Disap	proved		Com	nments									
											Page	of				
												Page 6 of 6				



Massachusetts Department Copper Analysis Report

WS ID #:	4	4036	002				City	/ Town:	BOURNE	:		
WS Name	: T	North	Sagamo	re Water D	istrict				PV	/S Class:	COM 🛛 NTNC	☐ TNC ☐
		T	Or	iginal, Resub	mitted or				If Res	ubmitted Repo	rt, list below:	
outine or Spe	ecial Samp	oles		Confirmation				1) Reason	for Resubmis	ssion	(2) Collection Date	of Original Sample
⊠ RS	□ ss		☑ Original	Resubmitte	ed 🔲 Confirm	nation	Resam	ple 🔲 Rea	nalysis 🔲 Re	oort Correction		
		h as, if	a Manifold/N	/ultiple sample	e, list the sou	rces tha	t were on-li	ne during sa	mple collection	n).		
ANALVI	ICAL L	AROR	ATORY	INFORMAT	ION-							
		Г	M-RI010	7		. N	ew England	d Testing L	ah		Subcontracted	12 (Y/N) N
rimary Lab	_				y Lab Nam			_		[(1714)
Analyte	Action		l (mg/L)	Lab Me			L (mg/L)	-	s Lab MA Ce	rt.#	Analysis Lab N New England Test	
Lead:		0.015	5	3113			0.001		M-RI010 M-RI010		New England Test	
Copper:		1.3		3120)B		0.01		IVI-RIU IU		New England Tes	ing Lab
AB SAMPLE	NOTES											
			nple Locat		Collection	Date		LEAD			OPPER	Lab Sample ID#
(See DEP ap		CR plan	for sampling	g locations)	0.107.101	247	Result (m	-	e Analyzed	Result (mg/L	9/1/2017	7H28041-01
23 Norri 20 Dian					8/27/20		ND ND		9/2/2017 9/2/2017	0.35 0.13	9/1/2017	7H28041-01 7H28041-02
					8/25/2017		ND		9/2/2017	0.15	9/1/2017	7H28041-03
35 Dian					8/23/2017 8/27/2017		ND		9/2/2017	0.03	9/1/2017	7H28041-04
186 Phil					8/27/20	-	ND		9/2/2017	0.15	9/1/2017	7H28041-05
40 Pilgri					8/28/20		ND		9/2/2017	0.18	9/1/2017	7H28041-06
	dy Road				0/20/20	017	110		31212011	00	0, 1,2011	
<u> </u>												
0												
1												
2												
3												
4												
5												
3												
7												
8												
9												
0											· ooth · · · ·	
Re	eport SCH	OOL RI	ESULTS coll	ected in accor	dance with 3	10 CMR	22.06B (7)	a)9 below. [Do not use the	se school results	s in 90 th percentile calc	uiations.
1												
2												
3												
1												
out this for ccurate and c	rm and the complete to	e inforr o the be	mation conta est extent of	person author ained herein i my knowledge	s true, e.				ignature: Date:	9/5/2017		
If not submitt	ing these r	results (electronically	y, mail <u>ONE</u> co	opy of this replater than 10	port to ye	our DEP Re	gional Offic of the report	e no later thar ing period, wh	n 10 days after th ichever is soone	ne end of the month in er.	which you received
	COM & N	ITNC F	Public Wate	er Suppliers	nust submi	t Forms	s LCR-D o	r LCR-E w	ith this form	to the appropr	iate DEP Regional	Office.
			itial & Date				eview					
IEP KEVIE		,				1						
Accepted			☐ Disap	proved		Comi	ments					



Lead and Copper Analysis Report

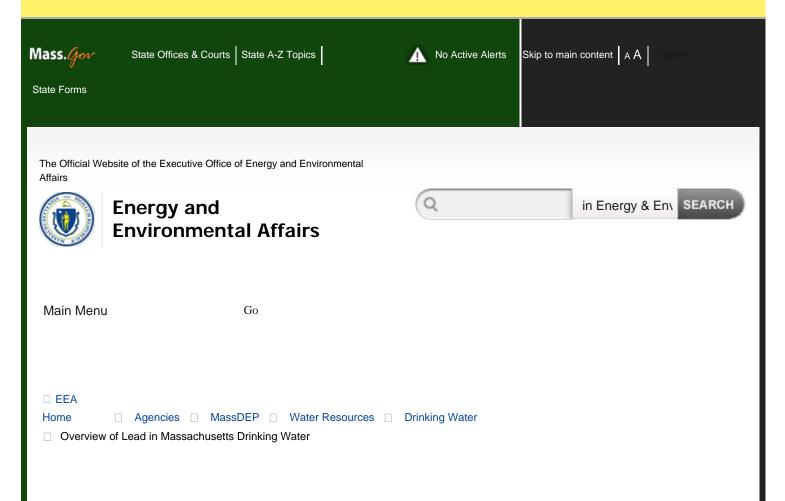
I. PWS INFO	ORMATI	ON:	Please re	fer to your I	DEP Lead	& Сор	per samp	ling pla	an for approved	I sampling loc	ations.	
PWS ID #:	4	1036	002]			City	/ Tow	n: BOURNE			
PWS Name	: N	North	n Sagamo	ore Water D	District				PV	/S Class: (COM X NTNC	☐ TNC ☐
_			Or	riginal, Resub	mitted or				If Res	ubmitted Repor	t, list below:	
Routine or Spe	cial Samp	les		Confirmation				(1) Rea	son for Resubmis	ssion	(2) Collection Date	of Original Sample
⊠ RS				Resubmitte								
SAMPLE NOTI	ES – (Such	n as, if	a Manifold/N	Multiple sample	e, list the sou	rces th	at were on-l	ine durir	ng sample collection	n).		
II. ANALYT	ICAL LA	BOF	RATORY	INFORMAT	TION:						_	
Primary Lab	MA Cert	. #:	M-RI010	Primar	y Lab Nam	ne: [New Englar	nd Testi	ng Lab		Subcontracted	d? (Y/N) N
Analyte	Action	Leve	el (mg/L)	Lab Me	thod	ME	DL (mg/L)	An	alysis Lab MA Ce	rt.#	Analysis Lab N	lame
Lead:		0.01	5	3113	3B		0.001		M-RI010		New England Tes	ting Lab
Copper:		1.3		3120)B		0.01		M-RI010		New England Tes	ting Lab
LAB SAMPLE	NOTES											
			mple Locat		Collection	Date	_	LE/			Date Analyzed	Lab Sample ID#
(See DEP ap		R plan	n for sampling	g locations)			Result (r		Date Analyzed	Result (mg/L)	9/7/2017	7106013-01
1 346 Phil	lips Rd				9/4/20	017	ND		9/7/2017	0.02	9/7/2017	7100013-01
2												
3												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
20					-							
Pa	enort SCHO	OOLR	ESULTS col	lected in accor	dance with 3	10 CMF	R 22.06B (7)(a)9 bel	ow. Do not use the	se school results	in 90 th percentile calc	culations.
1				2	T							
2												
3												
4												
I certify under pill out this for accurate and course and the submitting of the submitted of the submitting of the submitted of the submitting of the submitted of t	m and the complete to	e infor	mation conta est extent of	ained herein i my knowledge	s true, e. onv of this rei	port to	vour DEP R	egional	or Signature: Date: Office no later than apporting period, when the second in the se	9/13/2017 10 days after the ichever is soone	e end of the month in	which you received
(COM & N	TNC	Public Wate	er Suppliers	must submi	t Form	s LCR-D	or LCR	E with this form	to the appropri	ate DEP Regional	Office.
DEP REVIE							Review					
☐ Accepted		(☐ Disap			1	nments					
											Page	of
												Page 6 of 6



Lead and Copper Analysis Report

I. PWS	INFOR	MATION	: Please re	fer to your l	DEP Lead	& Cop	per samplii	ng pla	n for approved	I sampling loo	cations.				
PWS II	D #:	403	6002				City /	Town							
PWS N	lame:	Nor	th Sagamo	re Water I	District				PWS Class: COM ⊠ NTNC ☐ TNC ☐						
Routine o	or Special	Samples		iginal, Resub Confirmation			(1	If Resubmitted Report, list below: (1) Reason for Resubmission (2) Collection Date of							
\boxtimes	RS 🗆	SS	☑ Original	Resubmitte	ed 🗌 Confirr	nation	Resam	ple 🔲 F	Reanalysis 🗌 Re	oort Correction					
SAMPLE	NOTES -	(Such as,	if a Manifold/N	fultiple sample	e, list the sou	rces tha	at were on-lin	e durin	g sample collection	n).					
II. ANA	LYTICA	L LABC	RATORY	NFORMA	ΓΙΟΝ:						7				
Primary	y Lab MA	Cert. #:	M-RI010	Primar	y Lab Nam	ie: N	lew England	Testin	g Lab		Subcontracted	i? (Y/N) N			
Analy	rte	Action Lev	vel (mg/L)	Lab Me	ethod	MD	L (mg/L)	Ana	lysis Lab MA Ce	rt.#	Analysis Lab N	lame			
Le	ead:	0.0	15	311	3B		0.001		M-RI010		New England Tes	ting Lab			
Сор	per:	1.	3	3120	OB		0.01		M-RI010		New England Tes	ting Lab			
LAB SAI	MPLE NOT	ES													
	DEP Apr	roved Sa	ample Locat	ion	Celland	D-4-		LEA	D	CC	OPPER	Lab Sample ID#			
			an for sampling		Collection	Date	Result (mg	g/L)	Date Analyzed	Result (mg/L)	Date Analyzed	Eub Gumpio 15 ii			
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11								_							
12								-							
13								-							
14															
15					-			_							
16															
17					-			_							
18															
20															
20	Report	SCHOOL	RESULTS coll	ected in accor	dance with 3	10 CMF	R 22.06B (7)(a	a)9 belo	w. Do not use the	se school results	in 90 th percentile calc	ulations.			
1 10) Williston				9/15/2		ND		9/27/2017	0.18	9/26/2017	7118018-01			
) Williston				9/18/2		ND		9/27/2017	0.08	9/26/2017	7118018-02			
3									- V						
4															
I certify u fill out th accurate	his form a e and comp	nd the info lete to the	that I am the ormation contains best extent of	ained herein i my knowledge	is true, e. onv of this rea	oort to v	our DEP Red	nional C	r Signature: Date:	9/27/2017 10 days after th	re end of the month in	which you received			
II NOL SI			thi.	s report or no	later than 10	aays al	ter the end o	r tne rep	porting period, with	ichever is soone	1.				
					must submi	t Form	s LCR-D or	LCR-	E with this form	to the appropri	iate DEP Regional	Office.			
		TATUS (I	nitial & Date				Review ments								
Acc	epted		☐ Disap	proved							Page	of			
											. 490	Page 6 of 6			

This is a page on our old website. You may be seeing outdated content. Please search the <u>new website</u> to check for the most recent information.



Overview of Lead in Massachusetts Drinking Water

In order to help protect the public, in 1991 EPA published a regulation to control lead and copper in drinking water. This regulation is known as the Lead and Copper Rule (also referred to as the LCR). Massachusetts DEP has been given primacy to oversee and the implement federal Safe Drinking Water Act requirements, including the LCR. Below are some frequently asked questions about the applicable requirements and the actions that are being taken here in Massachusetts.

1. Where does lead in drinking water come from and why is it a problem?

- Lead primarily enters drinking water through plumbing materials and service lines. Source waters are rarely the cause of elevated lead levels in finished drinking water.
- Corrosive (e.g., low pH or acidic) water can result in the leaching of lead from service lines and plumbing materials into drinking water.
- Over-exposure to lead may cause health problems ranging from stomach distress to brain damage.



2. What is the Lead and Copper Rule (LCR)?

- The LCR is a federal regulation implemented by the U.S. EPA and State environmental agencies (MassDEP).
- LCR is designed to minimize the ingestion of lead and copper through drinking water by reducing the corrosiveness of finished water.
- LCR applies to all Community and Non-Transient Non-Community Water Systems (CWS and NTNCWS) statewide (approximately 800 systems in Massachusetts).
- There is no maximum contaminant level (MCL) for lead. However, the LCR does establish an Action Level and a corrosion control Treatment Technique for both lead and copper.
- The Action Level for lead is 0.015 milligrams per liter (mg/L), a.k.a. 15 parts per billion (ppb).
- The Action Level is compared to the 90th percentile value of all sampling results collected during each
 monitoring period. (Meaning, that if more than 10 out of 100 samples taken exceed 15 ppb, then the
 Action Level is triggered.)
- Exceeding the Action Level is not a violation.
- If the 90th percentile value exceeds the lead action level, additional actions are required; these are described in more detail below:
 - Collection of additional water quality data, including a sample of the source water
 - Conduct public education
 - Evaluate corrosion control treatment and install it if needed. If corrosion control treatment was in place at time of exceedance, commence lead line replacements

3. How is LCR Implemented in Massachusetts?

- CWS and NTNCWS public water systems (PWSs) work with MassDEP to develop a sampling plan. This sampling plan is based on an evaluation of materials used in the distribution system and service lines. This sampling plan identifies service locations (single and multi-family residences) that are most likely to have high levels of lead due to the presence of lead service lines, lead interior plumbing, or copper pipes with lead solder.
- The number of samples that need to be collected depends on the population served. For example, a PWS that serves less than 100 people must collect 5 samples, whereas a PWS that serves over 100,000 people must collect 100 samples.
- The PWS asks homeowners/occupants to volunteer to collect water samples from the taps at the
 identified service locations (taps must be used regularly, such as kitchen taps); these samples must be
 analyzed by a state-certified laboratory.
- PWSs must provide all owners and/or occupants of homes and buildings sampled for lead with the sample results (whether they are above or below the action level).
- Initially, PWSs must collect one set of samples during two consecutive six month periods. If the PWS
 does not exceed the lead or copper Action Levels during those two six-month periods, the PWS is
 eligible for annual monitoring (rather than semi-annual). PWSs on annual monitoring can apply for a
 waiver to go to a three-year monitoring schedule if they have three annual monitoring periods without
 exceeding the lead or copper Action Level.

Is There Lead In My Tap Water?

Where lead comes from, what you can do about it, and how to get lead service line information from your local water department.

Lead in Drinking Water

Specific information on lead in drinking water for the general public, schools and day care facilities, and public water suppliers.

Contaminants

Information and resources on lead, copper, mercury, perchlorate, and other drinking water contaminants.

Assistance for Lead in School Drinking Water

Information and resources available from MassDEP concerning testing for lead in school drinking water.

What happens if the Action Level is exceeded?

- The PWS must go back to semi-annual monitoring until the 90 th percentile results are below the Action Level for two consecutive six-month periods.
- The PWS must take all applicable follow-up actions:
- Collect additional water quality parameters (pH, alkalinity, calcium, conductivity, orthophosphate, silica, and temperature) during the monitoring period in which the lead action level was exceeded (if the PWS is not already collecting this information). These parameters can help to determine if corrosion control treatment is operating properly or to develop an optimal corrosion control treatment if one isn't currently in place.
- Submit an optimal corrosion control treatment recommendation to the state if the PWS has not already done so (systems serving more than 50,000 customers have all submitted these recommendations).
- Collect a source water lead sample to determine if the source water is contributing to the elevated lead levels.
- Conduct public education to inform all consumers about steps that the PWS has taken, steps that the
 consumer should take to protect their health, and to let the consumer know that they may have to
 replace lead service lines under their control.
- If the PWS has corrosion control in place and has still exceeded the lead action level, the PWS must update its material evaluation to identify all lead service lines and goosenecks and replace 7 percent of these service lines within 12 months of the exceedance, and continue this practice until monitoring results no longer exceed the lead action level.

When is a PWS that Exceeds the Action Level in Compliance with LCR?

When the lead Action Level has been exceeded, if the PWS fulfills all required follow-up actions
listed above within the timelines laid out in the Rule, then the PWS remains in compliance with the
Rule.

When is a PWS that Exceeds the Action Level Out of Compliance with LCR?

 If the PWS fails to take any of the required follow-up actions listed above, the PWS has violated the Rule and enforcement actions are initiated.

4. Additional Measures Taken in Massachusetts to Protect the Public from Ingesting Lead through Drinking Water

The Lead Contamination Control Act (LCCA)

- Established under the federal Safe Drinking Water Act in 1988 to reduce lead in the drinking water of schools and childcare facilities.
- All schools (K 12) and Early Education and Care Programs facilities are covered under the LCCA.
- MassDEP is responsible for managing the LCCA in Massachusetts. Partners include MA
 Department of Public Health (DPH), MA Department of Elementary and Secondary Education
 (ESE), MA Department of Early Education and Care (EEC) and the United States Environmental
 Protection Agency (U.S. EPA).
- MassDEP provides educational information and assistance to Early Education and Care Program and K-12 facilities covered by the LCCA. Every five years, MassDEP requests updated information

from these facility administrators about lead and copper monitoring and remediation efforts at their facilities.

 Providing this information to MassDEP is voluntary. This updated information is used to provide additional training and technical assistance opportunities.

Additional Measures for Schools and Early Education and Child Care Programs

- All Community Water Systems are required by Massachusetts Drinking Water Regulations to
 collect lead and copper samples from at least two Schools or Early Education and Care Program
 facilities that they serve in each sampling period, when they collect their LCR samples.
- Early Education and Care Programs facilities with routine plumbing changes are encouraged to
 collect and analyze additional samples to complete an evaluation of all taps within their facility at
 least once every three years.

MassDEP's Relationship with the Massachusetts Department of Public Health (DPH)

- MassDEP works closely with DPH's Bureau of Environmental Health (BEH)
- BEH oversees the Massachusetts program that requires lead screens for all children between the
 ages of 9 and 12 months and again at between 2 and 3 years for their blood lead levels. In high risk
 communities, children are tested again at age 4.
- A summary of these results is publicly available.

MassDEP's Relationship with the U.S. Environmental Protection Agency (EPA) Region 1

- MassDEP works very closely with EPA Region 1 on implementation of the Safe Drinking Water Act, including implementation of LCR. This includes routine reporting of LCR data to EPA.
- EPA Region 1 is working closely with the New England States to gather additional information from the states and to provide additional assistance and guidance.

Did you find the information you were looking for on this page? *

Yes

No

© 2018 Commonwealth of Massachusetts. EEA Site Policies Contact EEA About EEA Public Records Request

Overview of Lead in Massachusetts Drinking Water | MassDEP

Mass.Gov® is a registered service mark of the Commonwealth of Massachusetts.