



ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

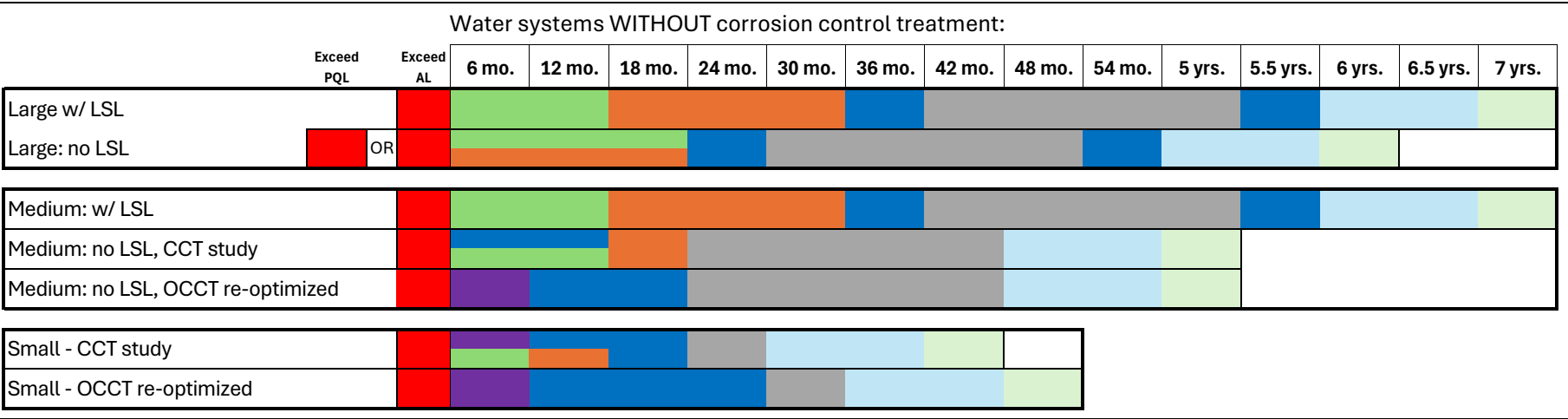
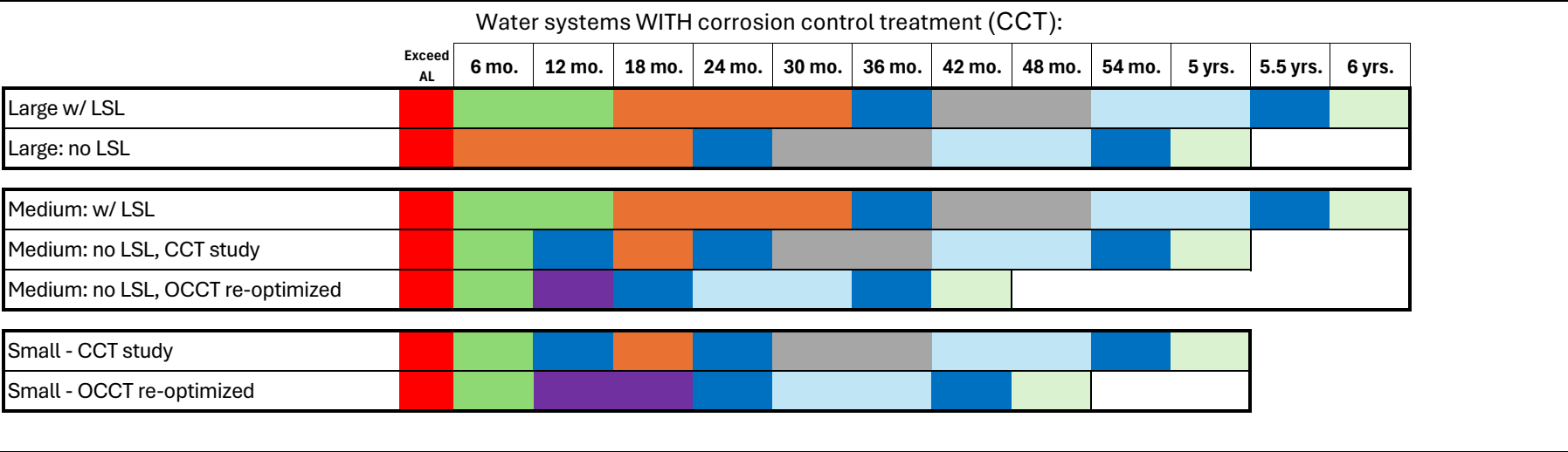
DIVISION OF WATER

300 SOWER BOULEVARD
FRANKFORT, KY 40601

LEAD AND COPPER
RULE
IMPROVEMENTS

CORROSION
CONTROL
TREATMENT
TIMELINE

PER 40 CFR 141.81 & 141.82



Key:

- Design study (find funding, hire consultant, develop plan)
- Carry out study
- DOW review and approval (initial and final)
- Install new treatment
- Modify existing treatment and re-optimize CCT
- Follow-up monitoring
- State sets optimal water quality parameters

AL Action level = 10 ppb

PQL Practical quantitation limit = 5 ppb

When is a system deemed to have Optimal Corrosion Control Treatment (OCCT)?
40 CFR 141.81(b)

- If it does not exceed the lead action level and copper action level during two consecutive six-month tap monitoring periods and then remains at or below the lead action level and copper action level in all tap sampling periods.
- And if it submits tap sampling results demonstrating that the 90th percentile lead level is less than or equal to the lead practical quantitation limit of 0.005 mg/L for two consecutive six-month tap monitoring periods, it does not exceed the copper action level for two consecutive six-month tap monitoring periods, and it does not have OWQPs designated by the State.
- It must continue to operate and maintain the corrosion control treatment and also meet any additional requirements that the State determines are appropriate to ensure OCCT is maintained.
- A small water system with CCT is not eligible to be deemed to have OCCT if the State has set optimal water quality parameters (OWQPs).

Required Timeframe and Actions: Water Systems WITH Corrosion Control Treatment					
These actions must be carried out if there is an Action Level Exceedance					
The timeframe specified is the period of time after the end of the tap sampling period in which they exceed the action level, unless otherwise specified.					
Systems WITH Corrosion Control Treatment	Large Water System		Medium Water System		Small Water System
	Trigger: Lead or Copper Action Level Exceedance (ALE)				
40 CFR 141.81(d) Treatment steps and deadlines for re-optimizing CCT	w/ LSL Lead 90%ile > 0.010 mg/L AL	w/o LSL Lead 90%ile > 0.010 mg/L AL or Copper 90%ile > 1.3 mg/L AL	w/ LSL Lead 90%ile > 0.010 mg/L	w/o LSL Lead 90%ile > 0.010 mg/L AL or Copper 90%ile > 1.3 mg/L AL	Lead 90%ile > 0.010 mg/L AL or Copper 90%ile > 1.3 mg/L AL
Step 1: Obtain funding and design mandatory study or treatment recommendation.	One year (pipe rig/loop)	No pipe rig/loop study required. Within 18 months after ALE, design and carry out CCT studies, and submit recommendation of CCT reoptimization to DOW	One year (pipe rig/loop)	6 months (develop treatment recommendation)	6 months (develop treatment recommendation)
Step 2: DOW reviews treatment recommendation and requires CCT study OR designates re-optimized OCCT	N/A		N/A	One year after ALE (require CCT study or designate re-optimized OCCT)	One year after ALE (require CCT study) or 18 months after ALE (designate re-opt. OCCT)
Step 3: Carry out study	Complete within 30 months of ALE (pipe rig/loop studies)		Complete within 30 months of ALE (pipe rig/loop studies)	Complete within 18 months of ALE (CCT studies)	Complete within 18 months of ALE (CCT studies)
Step 4: DOW timeframe to review CCT study results and designate re-optimized OCCT	6 months after step 3		6 months after step 3	6 months after step 3	6 months after step 3 or step 2
Step 5: Re-optimized OCCT installation deadlines	One year after step 4		One year after step 4	If required, one year after step 4	If required, one year after step 4
Step 6: Follow-up monitoring - All systems	At least 2 consecutive 6-month tap monitoring periods and WQP monitoring, starting on Jan 1st or July 1st (whichever is soonest after completing step 5)				
Step 7: DOW reviews re-optimized OCCT and sets optimal water quality parameters (OWQPs)- All systems	6 months after step 6				
Step 8: Systems meet OWQPs to demonstrate compliance					

Required Timeframe and Actions: Water Systems WITHOUT Corrosion Control Treatment					
The timeframe specified is the period of time after the end of the tap sampling period in which they exceed the action level, unless otherwise specified.					
Systems WITHOUT Corrosion Control Treatment	Large Water System		Medium Water System		Small Water System
	Triggers: Large systems: Lead or copper Action Level Exceedance, OR 90th percentile PQL exceedence Medium or Small systems: Lead or copper Action Level Exceedance				
40 CFR 141.81(e) Treatment steps and deadlines for adding new CCT	w/ LSL Lead 90%ile > 0.010 mg/L AL	Lead 90 %ile > 0.005 mg/L PQL or Copper 90 %ile >1.3 mg/L AL	w/ LSL Lead 90%ile > 0.010 mg/L	w/o LSL Lead 90 %ile > 0.005 mg/L PQL or Copper 90 %ile >1.3 mg/L AL	Lead 90%ile > 0.010 mg/L AL or Copper 90%ile > 1.3 mg/L AL
Step 1: Initiate mandatory pipe rig/loop or CCT study or treatment recommendation	Initiate pipe rig/loop study within one year	Initiate corrosion control study within 18 months	Initiate pipe rig/loop study within one year	Must recommend OCCT within 6 months	Must recommend OCCT within 6 months
Step 2: State requires CCT study or State designates OCCT	N/A	N/A	N/A	One year (require CCT study) or 18 months (designate OCCT)	One year (require CCT study) or 24 months (designate OCCT)
Step 3: Study duration	Pipe rig/loop study must be completed within 30 months of ALE period	18 months (CCT studies)	Pipe rig/loop study must be completed within 30 months of ALE period	CCT study must be completed within 18 months of ALE period, if required in Step 2 *	CCT study must be completed within 18 months of ALE period, if required in Step 2*
Step 4: State designation of OCCT based on CCT study results	6 months after step 3	6 months after step 3	6 months after step 3	6 months after step 3	6 months after step 3
Step 5: OCCT installation deadlines	24 months after step 4		24 months after step 4	24 months after step 4 (CCT study) or step 2 (if DOW designates OCCT) *	24 months after step 4 (CCT study) or step 2 (if DOW designates OCCT) *
Step 6: Follow-up monitoring - All systems	At least 2 consecutive tap monitoring periods and WQP monitoring, starting on Jan 1st or July 1st (whichever is earlier)				
Step 7: State sets optimal water quality parameters (OWQPs) - All systems	6 months after step 6				
Step 8: Systems meet OWQPs to demonstrate compliance					

* Any small or medium water system without CCT may avoid Step 3 or Step 5 if they do not have any lead or copper action level exceedances during two consecutive six-month tap monitoring periods prior to the required starting deadline for Step 3 (or Step 5, respectively). However, if the system has already initiated Step 5 at the time it can demonstrate 12 months with no action level exceedances, it must complete Step 5, as well as Steps 6-8. 40 CFR 141.81(g).

Systems with lead or galvanized requiring replacement service lines that can complete full service line replacement in five years or less are not required to complete these steps; consult with DOW. Conditions apply. 40 CFR 141.81(f)