

## **Illinois Environmental Protection Agency Chromium-6 Strategic Plan**

The Illinois Environmental Protection Agency (Illinois EPA) has developed a Chromium-6 strategy.

The Illinois EPA agrees with the statement made by the United States Environmental Protection Agency (U.S. EPA) Administrator Lisa Jackson:

While provocative, the EWG [Environmental Working Group] report is a self-described prevalence of chromium-6 in our drinking water. EPA will work with state and local officials to better determine how wide-spread and prevalent this contaminant is.

Illinois EPA believes that it is very important that we start with a sound understanding and assessment of what we know relative to total chromium in Illinois ground and surface water (including Lake Michigan) used as a source of public water supply. We also have a large data set relative to “finished” drinking water that can help identify any total chromium “hot” spots. Further, when U.S. EPA finishes their guidance and approved sample method for Chromium-6, it will be used to develop a network to scientifically assess the prevalence of Chromium 6 in source water (surface and groundwater), drinking water, and public water supply distribution systems. This information will help to prioritize U.S. EPA’s technical assistance and guidance. Moreover, it will also assist U.S. EPA with the question of prevalence and need to establish a drinking water standard.

Illinois EPA assembled a Chromium-6 Work Group comprised of the following persons:

1. Dave McMillan, P.G., Manager, Division of Public Water Supplies(DPWS), Illinois EPA;
2. Rick Cobb, Manager, P.G., Groundwater Section, DPWS, Illinois EPA;
3. Gregg Good, Manager, Surface Water Section, Illinois EPA;
4. Jerry Kuhn, Manager, P.E., Permit Section, DPWS, Illinois EPA
5. Mike Crumly, Manager, Drinking Water Compliance Unit, Illinois EPA;
6. Gary German, Manager, Division of Laboratories; Illinois EPA
7. Dr. Tom Hornshaw; Chief Toxicologist, Manager, Toxicity Assessment Unit, Illinois EPA
8. Ken Runkle, Manager, Division of Environmental Health and Senior Toxicologist Illinois Department of Public Health;
9. Tom Poy, Chief, Office of Groundwater and Drinking Water, U.S. EPA Region V; and
10. Rick Coffman, Budget Officer

The Chromium-6 Work Group developed the following task list and time table with deliverables:

<b>CHROMIUM-6</b>			
<b><i>Task</i></b>	<b><i>Responsible Person(s)</i></b>	<b><i>Timeline</i></b>	<b><i>Status</i></b>
Input on State Strategy	U.S. Region V	1/11-3/11	In progress
Assessment of Current Chromium-6 Levels and Hot Spots	GW SW CAS-M	12/23/10 -	In progress
DL work with U.S. EPA to find a method detection limit (MDL) to test for chromium-6	DL/ U.S. Region V	12/23/10 -	In progress
Work with labs to implement approved U.S. EPA Chromium-6 method	CAS-M	1/11-3/11	
Encourage community water supplies to step up testing of drinking water for the presence of Chromium-6 using the guidance being developed by the U.S. EPA.	CAS-M/ U.S. Region V	1/11-	In progress. U.S. EPA press release and guidance posted strongly recommending sampling by CWS
Work with U.S. EPA to provide significant technical assistance to the City of Chicago to ensure they quickly develop an effective chromium-6 specific monitoring program that makes use of the U.S. EPA-approved methods.	CAS-M/ U.S. Region V	January 27, 2011 -	In progress. Conference call held on January 27, and a preliminary sampling plan was developed.  Results from this effort may inform our approach, more so than anything we have seen.
Work with library on a literature review of drinking water treatment options	P-M	1/11-3/11	

Obtain health effects assessment from U.S. EPA (Sept. 2010 Draft Release)	TX/TX-IDPH	1/11	In progress
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Review/discuss scientific findings from U.S. EPA/California/EWG	TX/ TX-IDPH	1/11-3/11	
Circulate assessment of health effects among section managers; meet to discuss next steps	TX/ TX-IDPH	3/11-4/12	
Develop a scientifically representative network of surface and groundwater sources to evaluate Chromium-6 in public water supplies. Evaluate Chromium-6 in potential finished drinking water hot spots as discussed above. Further, identify site to assess distribution system maximum residence times for both TP/CC and DBP-MAX sites for both total chromium and chromium-6. (Sample each site twice per quarter only a few days apart. This is necessary because of suspected fluctuations in the data and the low DL.)	CAS/GW/SW	5/11-4/12	
Review U.S. EPA's final assessment	DM/TX/TX-IDPH	7/11	
Prepare cost estimates for completing the above tasks	B	4/11	
Review Data/Determine Next Steps	P-M/DM/TX/CAS-M	5/12-6/12	

<b>Abbreviations:</b>	
CAS-M	Manager Drinking Water Compliance Unit
TX	Illinois EPA Toxicologist
TX-IDPH	IDPH Toxicologist
DM	Division Manager DPWS
DL	Division of Labs
GW	Groundwater Section
SW	Surface Water Section
P-M	Permit Section
B	Budget Officer
U.S. Region V	United States Environmental Protection Agency (U.S. EPA) Region V