

Guidance for Performing Chemical Testing for a  
**NEW GROUNDWATER SOURCE**

**LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS • OFFICE OF PUBLIC HEALTH**

The goals of these requirements are to protect the consumer and the water system by ensuring the minimum quality standards of all new groundwater sources are met and to require that water well drillers verify that well owners have provided proper advance notification to the Louisiana Office of Conservation of their intent to drill respective water wells before commencing well construction operations (LAC Titles 43 and 56). To accomplish these goals, required chemical sampling constituents must be analyzed from each new groundwater source by a State Certified Laboratory. Additionally, the results must be provided for review and approval to the Louisiana Department of Health and Hospitals (LDHH) – Office of Public Health (OPH) – Engineering Services office **prior to the new groundwater source being utilized to provide water to consumers**. Lastly, the Louisiana Department of Natural Resources ‘Water Well Notification Form’, must be submitted to the Office of Conservation by the well owner and **the water well driller must verify this prior to beginning the wells construction**. This form can be found online at [dnr.louisiana.gov/assets/docs/conservation/documents/GWR-01.pdf](http://dnr.louisiana.gov/assets/docs/conservation/documents/GWR-01.pdf)

**NEW WATER WELL TESTING REQUIREMENTS**

Any Plans and Specifications which include a new well water source will be approved with the understanding that the quality of water from all finished wells shall comply with the National Primary Drinking Water Regulations promulgated by the U.S. Environmental Protection Agency. In addition, the National Secondary Drinking Water Regulations should be complied with. **The tables below list the constituents that shall be tested for by a DHH-OPH certified laboratory for Drinking Water Analyses – Chemistry. Results shall be submitted to this office for review and approval before the new water well is placed into service.** These testing requirements should be placed into all plans and specifications for new water wells. For a list of certified laboratories, please go to: <http://new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/lab/LaCertEnvironLabs/AccreditedLabs.pdf>

Plans and Specifications shall not preclude the necessity of appropriate treatment should the water not comply with these standards. And should any treatment be necessary, plans and specifications must be revised to include the appropriate treatment, and sent to the Louisiana Department of Health and Hospitals (LDHH) – Office of Public Health (OPH) – Engineering Services for review and approval.

**TABLE 1. INORGANIC CONTAMINANTS (IOCs), NITRATES/NITRITES, AND CYANIDE**

IOC CONTAMINANTS		ANALYTICAL CODE	MCL or AL (mg/L)
1	Antimony	1074	0.006
2	Arsenic	1005	0.01 – as of Jan 23, 2006
3	Barium	1010	2
4	Beryllium	1075	0.004
5	Cadmium	1015	0.005
6	Chromium	1020	0.1
7	Lead	1030	AL = 0.015
8	Copper	1022	AL = 1.3
9	Cyanide	1024	0.2
10	Fluoride	1025	4.0
11	Mercury	1035	0.002
12	Nitrate	1040	10 (as Nitrogen)
13	Nitrite	1041	1 (as Nitrogen)
	Total Nitrate and Nitrite	1038	10 (as Nitrogen)
14	Selenium	1045	0.05
15	Thallium	1085	0.002
16	Asbestos	1094	7 MFL (> 10um)

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**TABLE 2. SYNTHETIC ORGANIC CONTAMINANTS (SOCs)**

SOC CONTAMINANTS		ANALYTICAL CODE	MCL (mg/L)
1	Alachlor	2051	0.002
2	Atrazine	2050	0.003
3	Benzo [a] pyrene (PAHs)	2306	0.0002
4	Carbofuran	2046	0.04
5	Chlordane	2959	0.002
6	Dalapon	2031	0.2
7	2, 4-D	2105	0.07
8	Di [2-ethylhexyl] adipate	2035	0.4
9	Di [2-ethylhexyl] phthalate	2039	0.006
10	Dibromochloropropane [DBCP]	2931	0.0002
11	Dinoseb	2041	0.007
12	Dioxin (2, 3, 7, 8-TCDD)	2063	0.00000003
13	Diquat	2032	0.02
14	Endothall	2033	0.1
15	Endrin	2005	0.002
16	Ethylene Dibromide [EBD]	2946	0.00005
17	Glyphosate	2034	0.7
18	Heptachlor	2065	0.0004
19	Heptachlor epoxide	2067	0.0002
20	Hexachlorobenzene	2274	0.001
21	Hexachlorocyclo-pentadiene	2042	0.05
22	Lindane	2010	0.0002
23	Methoxychlor	2015	0.04
24	Qxamyl [Vydate]	2036	0.2
25	Pentachlorophenol	2326	0.001
26	Picloram	2040	0.5
27	Polychlorinated biphenyls [PCBs]	2383	0.0005
28	Simazine	2037	0.004
29	Toxaphene	2020	0.003
30	2,4,5-TP [Silvex]	2110	0.05

**TABLE 3. VOLITILE ORGANIC CHEMICALS (VOCs)**

CONTAMINANTS		ANALYTICAL CODE	MCL (mg/L)
1	Benzene	2990	0.005
2	Carbon tetrachloride	2982	0.005
3	o-Dichlorobenzene	2968	0.6
4	para-Dichlorobenzene	2969	0.075
5	1,2-Dichloroethane	2980	0.005
6	1,1-Dichloroethylene	2977	0.007
7	cis-1,2-Dichloroethylene	2380	0.07
8	trans-1,2-Dichloroethylene	2979	0.1
9	Dichloromethane	2964	0.005
10	1,2-Dichloropropane	2983	0.005
11	Ethylbenzene	2992	0.7
12	[Mono]chlorobenzene	2989	0.1
13	Styrene	2996	0.1
14	Tetrachloroethylene	2987	0.005
15	Toluene	2991	1
16	1,2,4-Trichlorobenzene	2378	0.07
17	1,1,1-Trichloroethane	2981	0.2
18	1,1,2-Trichloroethane	2985	0.005
19	Trichloroethylene	2984	0.005
20	Vinyl chloride	2976	0.002

21	Xylenes [total]	2955	10
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**TABLE 4. RADIONUCLIDES**

	<b>RADIONUCLIDE</b>	<b>ANALYTICAL CODE</b>	<b>MCLs</b>
1	Gross alpha particle	4109	15 pCi/L
2	Combined radium 226/228	4010	5 pCi/L
3	Uranium [as of 12/08/03]	4006	30 ug/L
4	Beta particle and Photon emitters	4101	4 mrem/yr <sup>1</sup>
5	Gross Beta	4100	4 mrem/yr <sup>1</sup>

<sup>1</sup> Speciation for Strontium and Tritium is required when Gross Beta exceeds 8 pCi/L.

**Results must be submitted to the following Office for review and approval:**

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