# TRANSMITTAL SHEET FOR NOTICE OF INTENDED ACTION

| Control   | 335                               |                   | Department   | or Agenc               | v <b>Enviro</b>             | nmental Managemen   | t                                       |
|---|-----------------------------------|-------------------|--|------------------------|-----------------------------|---|---|
| Rule No.  | 335-7-14                          |                   | •  | <b>.</b>               |                             |   | -                                       |
| Rule Title:   | Appendix B-Regulated Contaminates |                   |  |                        |                             |   |   |
|   | New                               | X                 | Amend  |                        | Repeal                      | Adopt by  | *************************************** |
|   | . 11000                           |                   | 7 milena   | Γ                      | сереат                      | Reference   |   |
| Would the a<br>significantly<br>welfare, or s       | harm or en                        | e propo<br>danger | psed rule<br>the public hea                        | alth,                  |                             | YES   |   |
|   | e power and                       | the pro           | nip between the otection of the                    |                        |                             | YES   |   |
| Is there and regulation at the public?              |                                   |                   | e method of<br>adequately pr                       | otect                  |                             | NO  |   |
| indirectly in                                       | creasing the                      | costs o           | e effect of dire<br>of any goods o<br>what degree? | ectly or<br>r          |                             | NO  |   |
| Is the increa<br>public than<br>absence of the      | the harm th                       | at migh           | nore harmful t<br>nt result from                   | to the                 |                             | NO  |   |
| Are all facets<br>solely for the<br>primary effec   | purpose of                        | , and so          | process design they have, as the public?           | med<br>s their         |                             | YES   |   |
| ******  | *****                             | *****             | *****  | ******                 | *****                       | ******  |   |
| Does the pro  | posed rule                        | nave an           | economic im  | pact?                  |                             | NO  |   |
| If the propos<br>accompanied<br>41-22-23, <u>Co</u> | d by a fiscal                     | note pr           | epared in acc                                      | the propo<br>ordance w | osed rule is<br>vith subsec | s required to be<br>etion (f) of section                        | RANGES                                  |
| ******  | *****                             | *****             | ******   | *****                  | *****                       | *******   |   |
| Certification                                       | of Authorize                      | ed Offic          | ial  | ,                      |                             |   |   |
| requirement   | s of Chapter<br>e filing requi    | 22, Tit<br>rement | le 41, <u>Code of</u>                              | Alabama                | 1975, and                   | l compliance with the<br>that it conforms to<br>Division of the |   |
| Signature of  | certifying of                     | ficer _           | //Mus  | Lell                   | coff                        |   | \.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.  |
| Date <u>March</u>                                   | 20, 2012                          |                   |  |                        |                             | Stamp here  | , A. B.                                 |
|   |                                   |                   |  |                        |                             |   |   |

Date Filed

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

## NOTICE OF INTENDED ACTION

AGENCY NAME:

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RULE NO. & TITLE:

335-7-14

Appendix A-Standard List of Primary

Drinking Water Contaminants for CCR

(Amend)

335-7-14

Appendix B-Regulated Contaminates (Amend)

INTENDED ACTION: The Alabama Department of Environmental Management proposes to revise division 335-7, Public Water Supply.

SUBSTANCE OR PROPOSED ACTION: Revisions to rules 335-7-14 Appendix A and Appendix B are being proposed to for technical corrections and clarification.

TIME, PLACE, MANNER OF PRESENTING VIEWS: Comments may be submitted in writing or orally at a public hearing to be held May 2, 2012, at 10:00 a.m. in the Main Hearing Room at the ADEM Central Office located at 1400 Coliseum Blvd.,

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE: May 4, 2012 at 5:00

CONTACT PERSON AT AGENCY:

George M. Cox, Section Chief

Groundwater Section [334/271-7778]

Director

## Regulated Contaminants For CCR

| Contaminant (units)  | MCLG   | MCL    | Major Sources  |
|--|--|--------|--|
| Total Coliform Bacteria (including fecal coliform and <i>E. coli</i> ) | MCLG = 0 MCL - presence of coliform bacteria in ≤5% of monthly samples, or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or <i>E. coli</i> positive |        | Human and animal fecal waste   |
| Fecal Indicators (GWR)   |  | 1      |  |
| i. E. coli   | 0  | TT     |  |
| ii. Enterococci  | None   | TT     | Human and animal fecal waste   |
| iii. coliphage   | None   | TT     |  |
| GWR TT Violations  | None   | TT     | Human and animal fecal waste   |
| Viruses, Giardia   | 0  | TT     | Human and animal fecal waste   |
| Legionella   | 0  | TT     | Found naturally in water, multiplies in heating systems  |
| Beta/photon emitters (mrem/yr)   | 0  | 4      | Decay of natural and man-<br>made deposits   |
| Alpha emitters (pCi/l)   | 0  | 15     | Erosion of natural deposits  |
| Combined radium (pCi/l)  | 0  | 5      | Erosion of natural deposits  |
| Uranium  | 0  | 30 ppb | Erosion of natural deposits  |
| Antimony   | 6 ppb  | 6 ppb  | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder  |
| Arsenic  | 0  | 10 ppb | Erosion of natural deposits;<br>Runoff from orchards; Runoff<br>from glass and electronics<br>production wastes                      |
| Asbestos (MFL)   | 7  | 7      | Decay of asbestos cement<br>water mains; Erosion of<br>natural deposits  |
| Barium   | 2  | 2 ppm  | Discharge of drilling wastes;<br>Discharge from metal<br>refineries; Erosion of natural<br>deposits                                  |
| Beryllium  | 4 ppb  | 4 ppb  | Discharge from metal<br>refineries and coal-burning<br>factories; Discharge from<br>electrical, aerospace, and<br>defense industries |

| Contaminant (units) | MCLG    | MCL           | Major Sources   |
|---------------------|---------|---------------|---|
| Cadmium             | 5 ppb   | 5 ppb         | Corrosion of galvanized pipes;<br>Erosion of natural deposits;<br>Discharge from metal<br>refineries; runoff from waste<br>batteries and paints |
| Chromium            | 100 ppb | 100 ppb       | Discharge from steel and pulp   |
| Copper              | 1.3     | AL = 1.3 ppm  | Corrosion of household<br>plumbing systems; Erosion of<br>natural deposits; Leaching<br>from wood preservatives                                 |
| Cyanide             | 200 ppb | 200 ppb       | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories   |
| Fluoride            | 4       | 4 ppm         | Water additive which promotes<br>strong teeth; Erosion of<br>natural deposits; Discharge<br>from fertilizer and aluminum<br>factories           |
| Lead                | 0       | AL = 15 ppb   | Corrosion of household plumbing systems; Erosion of natural deposits  |
| Mercury             | 2 ppb   | 2 ppb         | Erosion of natural deposits;<br>Discharge from refineries and<br>factories; Runoff from landfills;<br>Runoff from cropland                      |
| Nitrate             | 10      | 10 ppm        | Runoff from fertilizer use;<br>Leaching from septic tanks,<br>sewage; Erosion of natural<br>deposits  |
| Nitrite             | 1       | 1 ppm         | Runoff from fertilizer use;<br>Leaching from septic tanks,<br>sewage; Erosion of natural<br>deposits  |
| Selenium            | 50 ppb  | 50 <b>ppb</b> | Discharge from petroleum and<br>metal refineries; Erosion of<br>natural deposits; Discharge<br>from mines                                       |
| Thallium            | 0.5 ppb | 2 ppb         | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories   |
| Turbidity           | n/a     |               | Soil runoff   |
| 2,4-D               | 70 ppb  | 70 nnh        | Runoff from herbicide used on row crops   |
| 2,4,5-TP(Silvex)    | 50 ppb  |               | Residue of banned herbicide   |

| Contaminant (units)       | MCLG    | MCL     | Major Sources                                  |
|---------------------------|---------|---------|--|
| Acrylamide                | 0       | TT      | Added to water during                          |
| Terytamiae                |         |         | sewage/wastewater treatment                    |
| Alachlor                  | 0       | 2 ppb   | Punoff from harbinide ward                     |
|                           |         |         | row crops                                      |
| Atrazine                  | 3 ppb   | 3 ppb   | Runoff from herbicide used on                  |
|                           | o ppo   |         | row crops                                      |
|                           |         | 200 ppt | Leaching from linings of water                 |
| Benzo(a)pyrene [PAHs]     | 0       |         | 3  |
|                           |         |         | lines  |
| Carbofuran                | 40 ppb  | 40 ppb  | Leaching of soil fumigant used                 |
| Chlordon                  |         |         | on rice and alialia                            |
| Chlordane                 | 0       | 2 ppb   | Residue of banned termiticide                  |
| Dalapon                   | 200 ppb | 200 ppb | Runoff from herbicide used on                  |
|                           | * *     | 1.1.    | rights of way                                  |
| Di (2-ethylhexyl)adipate  | 400 ppb | 400 ppb | Discharge from chemical                        |
| Di (2-ethylhexyl)         |         |         | lactories                                      |
| phthalate                 | . 0     | 6 ppb   | Discharge from rubber and                      |
|                           |         | 7 ppb   | chemical factories                             |
| Dinoseb                   | 7 ppb   |         | Runoff from herbicide used on                  |
| Diquat                    | 20 ppb  | 20 nnh  | soybeans and vegetables                        |
|                           | 20 ppb  | 20 ppb  | Runoff from herbicide use Emissions from waste |
|                           | 0       | 30 ppq  | incinomatica and all                           |
| Dioxin [2,3,7,8-TCDD]     |         |         | combustion; Discharge from                     |
|                           |         |         | chemical factories                             |
| Endothall                 | 100 ppb | 100 ppb | Runoff from herbicide use                      |
| Endrin                    | 2 ppb   |         | Residue of banned insecticide                  |
|                           | 0       | TT      | Discharge from industrial                      |
|                           |         |         | chemical factories; Added to                   |
| Epichlorohydrin           |         |         | water during treatment                         |
|                           |         |         | process; An impurity of some                   |
|                           |         |         | water treatment chemicals                      |
| Glyphosate                | 700 ppb | 700 ppb | Runoff from herbicide use                      |
| Heptachlor                | 0       |         | Residue of banned pesticide                    |
| Heptachlor epoxide        | 0       | 200 ppt | Breakdown of heptachlor                        |
|                           |         |         | Discharge from metal                           |
| Hexachlorobenzene         | 0       | 1 ppb   | refineries and agricultural                    |
|                           |         |         | chemical factories                             |
| Hexachlorocyclopentadiene | 50 ppb  | 50 ppb  | Discharge from chemical                        |
|                           | oo ppb  | oo ppb  | factories                                      |
| T im days                 | 200 ppt | 200 ppt | Runoff/leaching from                           |
| Lindane                   |         |         | insecticide used on cattle,                    |
|                           |         |         | lumber, gardens                                |

| Contaminant (units)   | MCLG    | MCL     | Major Sources                   |
|-----------------------|---------|---------|---------------------------------|
|                       |         |         | Runoff/leaching from            |
| Methoxychlor          | 40 ppb  |         | ,                               |
|                       |         |         | vegetables, alfalfa, livestock  |
|                       |         |         | Runoff/leaching from            |
| Oxamyl [Vydate]       | 200 ppb | 200 ppb |                                 |
|                       | 1.1.    | PFO     | potatoes and tomatoes           |
| PCBs [Polychlorinated |         | <b></b> | Punoff from landfille.          |
| biphenyls]            | 0       | 500 ppt | Discharge of waste chemicals    |
| Dontocklonombonol     |         | 1 ppb   | Discharge from wood             |
| Pentachlorophenol     | 0       |         | preserving factories            |
| Picloram              | 500 ppb | 500 ppb | Herbicide runoff                |
| Simazine              | 4 ppb   |         | Herbicide runoff                |
|                       |         |         | Runoff/leaching from            |
| Toxaphene             | o       | 3 ppb   |                                 |
|                       |         |         | cattle                          |
|                       |         | 5 ppb   | Discharge from factories;       |
| Benzene               | 0       |         | Leaching from gas storage       |
|                       |         |         | tanks and landfills             |
|                       |         | 5 ppb   | Discharge from chemical         |
| Carbon tetrachloride  | 0       |         |                                 |
|                       | _       |         | activities                      |
| Chlorobenzene         | 1001    | 100 1   | Discharge from chemical and     |
| Cinorobenzene         | 100 ppb | 100 ppb | agricultural chemical factories |
|                       | 0       | 200 ppt | Runoff/leaching from soil       |
| Dibromochloromen      |         |         | fumigant used on soybeans,      |
| Dibromochloropropane  |         |         | cotton, pineapples, and         |
|                       |         |         | orchards                        |
| o-Dichlorobenzene     | 600     | 6001    | Discharge from industrial       |
| 0-Diemorobenzene      | 600 ppb | 600 ppb | chemical factories              |
| p-Dichlorobenzene     | 75      | 75 ppb  | Discharge from industrial       |
| p-Dictiorobetizette   | 75 ppb  |         | chemical factories              |
| 1,2-Dichloroethane    | 0       | 5 ppb   | Discharge from industrial       |
| 1,2-Dictiorocularie   |         |         | chemical factories              |
| 1,1-Dichloroethylene  | 7 nnh   | r-7 1   | Discharge from industrial       |
| 1,1-Diemoroeurylene   | 7 ppb   | 7 ppb   | chemical factories              |
| cis-1,2-              | 70 nnh  | 70      | Discharge from industrial       |
| Dichloroethylene      | 70 ppb  | 70 ppb  | chemical factories              |
| trans-1,2-            | 100 mmh | 100     | Discharge from industrial       |
| Dichloroethylene      | 100 ppb | 100 ppb | chemical factories              |
|                       | 0       | 5 ppb   | Discharge from                  |
| Dichloromethane       |         |         | pharmaceutical and chemical     |
|                       |         |         | factories                       |
| 1,2-Dichloropropane   | 0       | 5 ppb   | Discharge from industrial       |
| 1,2 Dictioroproparie  |         |         | chemical factories              |
| Ethylbenzene          | 700 aab | 700 ppb | Discharge from petroleum        |
| - CITY INCIDENTE      | 700 ppb |         | refineries                      |

| Contaminant (units)          | MCLG        | MCL            | Major Sources  |
|------------------------------|-------------|----------------|--|
| Ethylene dibromide           | 0           | 50 ppt         | Discharge from petroleum refineries                                      |
| Styrene                      | 100 ppb     | 100 ppb        | Discharge from rubber and plastic factories; Leaching from landfills     |
| Tetrachloroethylene          | 0           | 5 ppb          | Leaching from PVC pipes;<br>Discharge from factories and<br>dry cleaners |
| 1,2,4-Trichlorobenzene       | 70 ppb      | 70 ppb         | Discharge from textile-<br>finishing factories                           |
| 1,1,1-Trichloroethane        | 200 ppb     | 200 ppb        | Discharge from metal   |
| 1,1,2-Trichloroethane        | 3 ppb       | 5 ppb          | Discharge from industrial chemical factories                             |
| Trichloroethylene            | 0           | 5 ppb          | Discharge from metal degreasing sites and other factories                |
| TTHM [Total trihalomethanes] | N/A         | 80 ppb         | By-product of drinking water chlorination                                |
| Toluene                      | 1           | 1 ppm          | Discharge from petroleum factories                                       |
| Vinyl Chloride               | 0           | 2 ppb          | Leaching from PVC piping; Discharge from plastics factories              |
| Xylenes                      | 10          | 10 ppm         | Discharge from petroleum factories; Discharge from chemical factories    |
| Total organic carbon         | N/A         | ТТ             | Naturally present in the environment                                     |
| Bromate                      | 0           | 10 ppb         | By-product of drinking water chlorination                                |
| Chloramines                  | MRDLG = 4   | MRDL = 4 ppm   | Water additive used to control microbes                                  |
| Chlorine                     | MRDLG = 4   | MRDL = 4 ppm   | Water additive used to control microbes                                  |
| Chlorite                     | 800 ppb     | 1 ppm          | By-product of drinking water chlorination                                |
| Chlorine Dioxide             | MRDLG = 800 | MRDL = 800 ppb | Water addition and to another  |
| Haloacetic Acids<br>(HAA5)   | N/A         | 60 ppb         | By-product of drinking water disinfection                                |

#### Key

AL =Action Level
GWR = Ground Water Rule
MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter

mg/l = milligrams per liter, or parts per million

mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/l = picocuries per liter (a measure of radioactivity)

ppb = parts per billion or micrograms per liter

ppm = parts per million or milligrams per liter

ppq = parts per quadrillion or picograms per liter

ppt = parts per trillion or nanograms per liter

TT = Treatment Technique