

**2024 Annual Water Quality Report**  
**(Testing Performed January through December 2024)**  
**PWSID AL0001412**  
**LYNN WATER WORKS**  
**P.O. Box 145**  
**381 East Main Street**  
**Lynn, AL 35575**  
**25-893-5149**

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Water Source	Purchased water from the City of Haleyville Water and Sewer (Bear Creek Reservoir)	
Storage Capacity	Two tanks with a total capacity of 450,000 gallons.	
Number of Customers	Approximately 600	
Water Board Members	Earl Gilbert, Mayor	Tommy Chambless, Member
	Alan Barnett, Member	Daniel Dodd, Member
	Brian Heck, Member	Chris Little, Member
Employees	Joseph Bell, Superintendent/State Certified Operator	
	Marcia Manasco, Municipal (Town) Clerk	
	Kris Gray, Water Clerk	

**Source Water Assessment:** In compliance with Alabama Department of Environmental Management (ADEM), Upper Bear Creek Water, Sewer, and Fire Protection District has developed a Source Water Assessment plan that assists in protecting our water sources. This plan provides additional information such as potential sources of contamination. No sites evaluated pose a significant risk to our customers. It includes a susceptibility analysis, which classified potential contaminants as high, moderate, or non-susceptible (low) to contaminating the water source. It has been determined by the assessment that the source water susceptibility ranking has a low-risk potential. The assessment has been performed, public notification has been completed, and the plan was approved by ADEM. Please help us make this effort worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil.

**Information about Lead:** *Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. NEVER make baby formula with warm or hot tap water.* Lead is rarely found in source water. If lead is present in tap water, it is primarily from corrosion of materials that were used in older plumbing, solder that connects pipes, or from pipes connecting a house to the main water pipe in the street. Lead is no longer used in manufacturing these products, but plumbing components containing lead may still remain in some older homes and buildings. When water sits for several hours in pipes containing these older materials, lead can leach into the water. Boiling will NOT reduce the amount of lead in your water. If you choose to have your tap water tested, be sure to use a properly certified laboratory. Information on lead in drinking water, testing methods, and steps you can take to minimize your family's exposure is available from the Safe Drinking Water hotline at 800-426-4791 and from <http://www.cdc.gov/nceh/lead/tips/water.htm>.

**Lead in Drinking Water:** Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

**Lead Service Line Inventory:** Our Lead Service Line Inventory was completed and submitted by the deadline of October 16, 2024, and a copy of it is in our office as required by EPA. If any would like to review it or have any questions, please feel free to contact our office. Upon completing the lead service line inventory, Here at Lynn Water Works we are pleased to report, that we had 0 – Lead Service Lines, 0 –Galvanize Required Replacement Service Lines, 0 – Unknown, and 658 Non- Lead Service Lines.

We use an independent laboratory to analyze samples from our distribution system for lead according to a monitoring schedule set by ADEM. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials that were used in household plumbing. The EPA and the CDC make the following recommendations:

- Before using any tap water for drinking or cooking, flush your water system by running the kitchen tap (or any other tap you take

drinking or cooking water from) on COLD for 1–2 minutes. Flushing can minimize the potential for lead exposure, especially if the water has been sitting undisturbed for several hours, as in overnight.

- In all situations, especially for making baby formula, drink or cook only with water that comes out of the cold tap. Warm or hot tap water is more likely to cause lead to leach from plumbing materials.
- Periodically remove the aerator on the tip of the faucet and wash out any debris such as metal particles.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. present in source water include:

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised individuals, infants and small children, and the elderly are at greater risk of developing life-threatening illnesses. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may spread through means other than drinking water. We currently monitor for Cryptosporidium and have had none detected

Radon is a naturally occurring gas present in some groundwater. Inhaled radon has been linked to lung cancer and may pose a health risk when inhaled after the release from water into the air. This inhalation could occur during showering, bathing, washing dishes, or washing clothes. The radon gas release from drinking water is a relatively small part of the total radon found in air. One major source of radon gas is from the soil, where the gas can seep through the foundations of homes. It is not clear whether ingested (i.e. taken through the mouth) radon contributes to cancer or other adverse health conditions. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on home testing contact (insert name of local health department). Note 300 Pci/l proposed MCL.

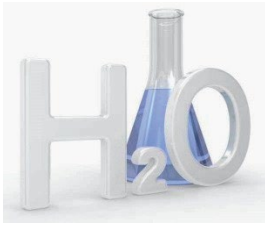
#### *UCMR Definitions:*

**UCMR Minimum Reporting Level (MRL):** The minimum concentration that may be reported by a laboratory as a quantified value for a method analyte following analysis. The MRLs were established based on the capability of the analytical method, not based on a level established as "significant" or "harmful". **UCMR Reference Concentration:** The reference concentrations are based on publicly available health information found in the following EPA resources: 2018 Edition of the Drinking Water Standards and Health Advisories Tables [i.e., Health advisories (HA)] and the CCL 4 Contaminant Information Sheets [i.e., **Health Reference Levels (HRLs)**]. The primary sources of the health information used to derive the guideline values in the resources referenced above are peer-reviewed assessments from EPA or other governmental agencies. The reference concentrations are subject to change as new health assessments are completed. Reference Concentrations are not legally enforceable federal standards.

**Health Reference Levels (HRL):** The CCL process derives HRLs for screening purposes using available data and can be used in the Regulatory Determination process as risk-derived concentrations against which to evaluate the occurrence data to determine if contaminants may occur at levels of public health concern. HRLs are not final determinations about the level of a contaminant in drinking water that is necessary to protect any particular population and, in some cases, are derived prior to development of a complete exposure assessment using the best available data. HRLs are not legally enforceable federal standards

**Health Advisories (HA):** Has provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to State agencies and other public health officials on health effects, analytical methodologies and treatment technologies to assist with risk management decisions.





**General Information:** All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a List of Definitions in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, storm water run-off, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

Our source water is also tested for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animal or human waste. For people who may be immuno-compromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at [www.epa.gov/safewater/crypto.html](http://www.epa.gov/safewater/crypto.html) or from the Safe Drinking Water Hotline at 800-426-4791. All test results were well within state and federal standards. *Cryptosporidium and Giardia have not been detected in our finished drinking water.*

**Questions:** If you have any questions about this report or concerning your water utility, please contact Joseph Bell or Kris Gray in Lynn Town Hall at 205-893-5250. We want our valued customers to be informed about their water utility. If you want to learn more, and attend any of our regularly scheduled meetings, please call the office to inquire about the time and place of our next scheduled meeting.

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).



## Monitoring Results

LYNN WATER WORKS Detected Drinking Water Contaminants						
Contaminants	Violation	Level Detected	Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	0.90-2.07	ppm	4	4	Water additive used to control microbes
Copper	NO	0.041 *	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion; leaching from wood preservatives
Lead	NO	ND	ppm	0.015	AL=.015	
Total trihalomethanes (TTHM)	NO	LRAA 35.08 (14.0-59.0)	ppb	0	80	By-product of drinking water chlorination
Total haloacetic acids (HAA5)	NO	LRAA 30.83 (12.0-44.0)	ppb	0	60	By-product of drinking water chlorination

\* Figure shown is 90<sup>th</sup> percentile and # of sites above Action Level (AL) = 0

As you can see by the table below, our system had no violations. We have learned through our monitoring and testing that some constituents have been detected. We are pleased to report that our drinking water meets federal and state requirements. The tables below show only those contaminants that were detected.

Upper Bear Creek Detected Drinking Water Contaminants						
Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	1.36-2.6	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
Turbidity	NO	0.24	NTU	n/a	TT	Soil runoff
Total Coliform Bacteria	NO	<5%	Present/ Absent	0	5% of monthly samples	Naturally present in the environment
Total Organic Carbon	NO	2.4	ppm	n/a	TT	Soil runoff
Barium	NO	0.02	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Combined Radium	NO	0.3+/-0.5	PCi/l	0	5	Erosion of natural deposits
Nitrate (as Nitrogen)	NO	0.572	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM -Total trihalomethanes	NO	LRAA 16.0	ppb	0	80	By-product of drinking water chlorination
HAA5 -Total haloacetic acids	NO	LRAA 19.0	ppb	0	60	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>						
Chloroform	NO	12.8	ppb	n/a	n/a	Naturally occurring; industrial discharge; agricultural runoff
Bromodichloromethane	NO	1.6	ppb	n/a	n/a	Naturally occurring; industrial discharge; agricultural runoff
<b>Secondary Contaminants</b>						
Aluminum	NO	0.0304	ppm	n/a	0.2	Erosion; treatment with water additives
Chloride	NO	9.31	ppm	n/a	250	Naturally occurring; industrial discharge; agricultural runoff
Hardness	NO	30.7	ppm	n/a	n/a	Naturally occurring; treatment with water additives
pH	NO	7.2	S.U.	n/a	n/a	Naturally occurring; treatment with water additives
Sulfate	NO	11.9	ppm	n/a	250	Naturally occurring; industrial discharge; agricultural runoff
Total Dissolved Solids	NO	70	ppm	n/a	500	Naturally occurring; industrial discharge; agricultural runoff
Zinc	NO	0.32	ppm	n/a	5	Erosion; refinery or factory discharge; landfill runoff

HALEYVILLE WATER WORKS Detected Drinking Water Contaminants						
Contaminants	Violation	Level Detected	Msmt	MCLG	MCL	Likely Source of Contamination
Copper	NO	0.080 *	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion; leaching from wood preservatives
Total trihalomethanes (TTHM)	NO	16.0	ppb	0	80	By-product of drinking water chlorination
Total haloacetic acids (HAA5)	NO	19.0	ppb	0	60	By-product of drinking water chlorination

\* Figure shown is 90<sup>th</sup> percentile and # of sites above Action Level (AL) = 0

## Monitoring Violation

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 4<sup>th</sup> quarter 2024, we did not monitor or test for PFAS, and therefore cannot be sure of the quality of your drinking water during that time. However, Upper Bear Creek Water, Sewer, and Fire Protection District did sample for PFAS the other three quarters of 2024, in which we received a Non-Detect on all of our samples.

## PFAS Contaminants

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that were used in manufacturing and in other industrial and consumer applications. Below is a list of PFAS contaminants for which our system monitored in 2024 as required and the results of that monitoring. For more information about PFAS contaminants, please consult <http://epa.gov/pfas>. PFAS was not detected in our drinking water.

Contaminant	Unit Msmt	Level Detected	Contaminant	Unit Msmt	Level Detected
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ppb	ND	Perfluoroheptanoic acid	ppb	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ppb	ND	Perfluorohexanesulfonic acid	ppb	ND
4,8-dioxa-3H-perfluorononanoic acid	ppb	ND	Perfluorononanoic acid	ppb	ND
Hexafluoropropylene oxide dimer acid	ppb	ND	Perfluorooctanesulfonic ac	ppb	ND
N-ethylperfluorooctanesulfonamidoacetic acid	ppb	ND	Perfluorooctanoic acid	ppb	ND
N-methylperfluorooctanesulfonamidoacetic acid	ppb	ND	Perfluorotetradecanoic acid	ppb	ND
Perfluorobutanesulfonic acid	ppb	ND	Perfluorotridecanoic acid	ppb	ND
Perfluorodecanoic acid	ppb	ND	Perfluoroundecanoic acid	ppb	ND
Perfluorohexanoic acid	ppb	ND	Total PFAS	ppb	ND
Perfluorododecanoic acid	ppb	ND			



## Definitions

**Action Level-** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.  
**Coliform Absent** (ca)- Laboratory analysis indicates that the contaminant is not present.

**Cryptosporidium-** a microscopic parasite that can cause disease, mainly diarrhea, if swallowed.

**Disinfection byproducts** (DBPs)- are formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.

**Distribution System Evaluation** (DSE)-a 4-quarter study to identify distribution system locations with high concentrations of DBPs.

**Maximum Contaminant Level** (MCL) is the highest level of a contaminant that is allowed in drinking water.

**Maximum Contaminant Level Goal** (MCLG)- the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level** (MRDL)- the highest level of a disinfectant allowed in drinking water

**Maximum Residual Disinfectant Level Goal** (MRDLG) the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Millirems per year** (mrem/yr)-measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit** (NTU)-a measure of the clarity of water.

**Non-Detect** (ND)- laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

**Parts per billion** (ppb) or Micrograms per liter (µg/l)-one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per million** (ppm) or Milligrams per liter (mg/l)-one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per quadrillion** (ppq) or Picograms per liter (picograms/l)-one part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

**Parts per trillion** (ppt) or Nanograms per liter (nanograms/l)-one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Picocuries per liter** (pCi/L)-picocuries per liter is a measure of the radioactivity in water.

**Running Annual Average** (LRAA)-yearly average of all the DPB results at each specific sampling site in the distribution system.

**Standard Units** (S.U.)-pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas.

**Treatment Technique** (TT)- a required process intended to reduce the level of a contaminant in drinking water.

**Variances & Exemptions** (V&E)-State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing where applicable. These contaminants were not detected in your drinking water unless they are also listed in the Detected Drinking Water Contaminants table elsewhere in this report.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS						
Contaminant		MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
Bacteriological Contaminants				cis-1,2-Dichloroethylene	70	ppb
Total Coliform Bacteria	<5%	presenUabsent		trans-1,2-Dichloroethylene	100	ppb
Fecal Coliform and E.coli	0	presenUabsent		Dichloromethane	5	ppb
Turbidity	TT	NTU		1,2-Dichloropropane	5	ppb
Cryptosporidium	TT	Cale organisms/l		Di (2-ethylhexyl)adipate	400	ppb
Radiochemical Contaminants				Di (2-ethylhexyl)Phthalate	6	POb
Beta/photon emitters	4	mrem/yr		Dinoseb	7	ppb
Alpha emitters	15	pCi/1		Dioxin [2,3,7,8-TCDD]	30	oob
Combined radium	5	oCi/1		Diquat	20	ppb
Uranium	30	pCi/1		Endothall	100	ppb
Inorganic Chemicals				Endrin	2	ppb
Antimony	6	ppb		Eoichlorohydrin	TT	TT
Arsenic	10	ppb		Ethylbenzene	700	ppb
Asbestos	7	MFL		Ethylene dibromide	50	ppt
Barium	2	ppm		Glphosate	700	ppb
Beryllium	4	ppb		Heptachlor	400	ppt
Cadmium	5	ppb		Heptachlor epoxide	200	ppt
Chromium	100	oob		Hexachlorobenzene	1	cob
Coccar	AL=1.3	oom		Hexachlorocvcloentadiene	50	cob
Cyanide	200	opb		Lindane	200	ppt
Fluoride	4	oom		Methoxvchlor	40	oob
Lead	AL=15	ppb		Oxamyl IVvdotel	200	ppb
Mercury	2	ppb		Polychlorinated biphenyls	0.5	ppb
Nitrate	10	ppm		Pentachlorophenol	1	ppb
Nitrite	1	oom		Picloram	500	ppb
Selenium	.05	oom		Simazine	4	oob
Thallium	.002	ppm		Styrene	100	ppb
Organic Contaminants				Tetrachloroethylene	5	oob
2,4-D	70	ppb		Toluene	1	ppm
Acrylamide	TT	TT		Toxaphene	3	ppb
Alachlor	2	oob		2,4,5-TP(Silvexl	50	cob
Atrazine	3	oob		1,2,4-Trichlorobenzene	.07	ppm
Benzene	5	ppb		1,1,1-Trichloroethane	200	oob
Benzo(a)lovene [PAHsl	200	oot		1,1,2-Trichloroelhane	5	oob
Carbofuran	40	ppb		Trichloroethvlene	5	ppb
Carbon tetrachloride	5	ppb		Vinyl Chloride	2	ppb
Chlordane	2	ppb		Xylenes	10	ppm
Chlorobenzene	100	oob	Disinfectants & Disinfection Byproducts			
Dalaoon	200	oob	Chlorine	4	ppm	
Dibromochloropropane	200	opt	Chlorine Dioxide	800	ppb	
1,2-Dichlorobenzene	1000	ppb	Chloramines	4	ppm	
1,4-Dichlorobenzene (para)	75	ppb	Bromate	10	ppb	
o-Dichlorobenzene	600	ppb	Chlorite	1	ppm	
1,2-Dichloroethane	5	ODb	HAA5 Total haloacetic acids	60	oob	
1,1-Dichloroethylene	7	ppb	THM Total trihalomethanes	80	ppb	
LIST OF SECONDARY CONTAMINANTS						
Alkalinity, Total (as CA, Co3)	Copper	ManQanese	Specific Conductance			
Aluminum	Corrosivity	Odor	Sulfate			
Calcium, as Ca	Foaming agents (MBAS)	Nickel	Total Dissolved Solids			
Carbon Dioxide	Hardness	pH	Zinc			
Chloride	Iron	Silver				
Color	Maanesium	Sodium				
LIST OF UNREGULATED CONTAMINANTS						
Aldicarb	Chloroethane	Dieldrin	Prooachlor			
Aldicarb Sulfone	Chloroform	Hexachlorobutadiene	N-Propylbenzene			
Aldicarb Sulfoxide	Chloromethane	3-HydroxYcarboturane	Propachlor			
Aldrin	0-Chlorotoluene	Isocrovlbenzene	1,1,1,2-Tetrachloroethane			
Bromoacetic Acid	P-Chlorotoluene	o-Isocrooyltoluene	1,1,2,2-Tetrachloroethane			
Bromobenzene	Dibromochloromethane	M-Dichlorobenzene	Tetrachloroethene			
Bromochloromethane	1,2-Dibromoethane	Methomyl	Trichloroacetic Acid			
Bromodichloromethane	Dibromomethane	Methylene chloride	1,2,3-Trichlorobenzene			
Bromoform	1,1-Dichloroethane	Methyl tert-butyl ether	Trichloroethene			
Bromomethane	1,3-Dichlorooroaoane	Metolachlor	Trichlorofluoromethane			
Butachlor	2,2-Dichlorooroaoane	Metribuzin	1,2,3-Trichlorocroaoane			
N-Butylbenzene	1,1-Dichlorooroaoene	MTBE	1,2,4-Trimethylbenzene			
Sec-Butylbenzene	1,3-Dichloroprooene	Naphthalene	1,3,5-Trimethylbenzene			
Teri - Butylbenzene	Dicamba	1-Naphthol				
Carbaryl	Dichlorodifluoromethane	Paraquat				