



# EVESHAM MUNICIPAL UTILITIES AUTHORITY

"Working With You To Protect The Environment"

# ANNUAL

## CONSUMER CONFIDENCE REPORT

### EXECUTIVE DIRECTOR'S MESSAGE

Dear Consumer:

The Evesham Municipal Utilities Authority (EMUA) is pleased to provide you with the 2013 Consumer Confidence Report (CCR).

Since our inception on March 3, 1959, the EMUA has been committed to providing its customers with reliable service and cost-effective high quality drinking water. We are once again proud to report to our consumers that your drinking water met or surpassed all requirements of the federal Safe Drinking Water Act (SDWA) every single day in 2013. In accordance with the SDWA, community water systems are required to issue an annual water quality report to promote consumer awareness of the quality of their drinking water. Included in this CCR are water quality results from the preceding calendar year, details about where your water comes from and how it compares to United States Environmental Protection Agency (USEPA) standards. The summary tables list both regulated and unregulated contaminants that were detected in the treated water, even if the detected level was below the regulated maximum level set by the USEPA.

If you have any questions regarding our 2013 CCR, please contact us at (856) 983-1878. To view an electronic copy of this report or to obtain additional information about the EMUA, please visit us online at [www.eveshammua.com](http://www.eveshammua.com).

Sincerely,

Jeffrey Rollins  
Executive Director

**NOTE: Industrial and commercial customers, including hospitals, medical centers, and health clinics, please forward this report to your Environmental Compliance Manager.**

#### EMUA BOARD MEMBERS

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The Evesham M.U.A. meets the first  
Wednesday of each month at 7:00 pm.  
Meetings are held in Room 211 at the Township Municipal Building,  
984 Tuckerton Road, Evesham, New Jersey  
Office Hours are Monday through Friday 8:30 am to 4:30 pm

**AFTER HOUR EMERGENCIES (856) 983-1878**

[www.eveshammua.com](http://www.eveshammua.com)

# EVESHAM MUNICIPAL UTILITIES AUTHORITY

PWS ID # 0313001

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. These people 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## TABLE OF DETECTED CONTAMINANTS

Contaminant	Units	MCL	MCLG	Highest Level Detected	Range of Detection	Major Sources in Drinking Water
<b>INORGANIC CONTAMINANTS</b>						
Antimony	ppb	6	6	0.69 (2011)	ND - 0.69	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar
Arsenic	ppb	5	0	4.2 (2011)	ND - 4.2	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Barium	ppm	2	2	0.131 (2011)	0.0506 - 0.131	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	ppb	100	100	0.058	ND - 0.058	Naturally occurring element; used in making steel and other alloys; plating, dyes and pigments, leather tanning, and wood preservation
Copper	ppm	AL = 1.3	1.3	90th percentile value = 0.232 (2012)	0 sites exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Flouride	ppm	4	4	ND	ND	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	ppb	AL = 15	0	90th percentile value = 9.4 (2012)	0 sites exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits
Mercury ( Inorganic)	ppb	2	2	1.18 (2011)	ND - 1.18	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Selenium	ppb	50	50	11 (2011)	ND - 11.0	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

## RADIOACTIVE CONTAMINANTS

Alpha emitters	pCi/l	15	0	10.7 (2011)	2.63 - 10.70	Erosion of natural deposits
Radium 226	pCi/l	5	0	1.08 (2011)	0.37 - 1.08	Erosion of natural deposits
Radium 228	pCi/l	5	0	1.14 (2011)	ND - 1.14	Erosion of natural deposits
Uranium	ug/L	30	0	ND	ND	Erosion of natural deposits

## DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Chlorine	ppm	MRDL = 4	MRDLG = 4	0.99	0.02 - 0.99	Water additive used to control microbes
Haloacetic Acids (Stage 2)	ppb	60	n/a	3.7 Average	ND - 12.2	By-product of drinking water disinfection
Total trihalomethanes (Stage 2)	ppb	80	n/a	18.2 Average	3.8 - 35.3	By-product of drinking water disinfection
Bromodichloromethane (stage 2)	ppb	n/a	n/a	8.2	2.1 - 8.2	By-product of drinking water disinfection
Dibromochloromethane (stage 2)	ppb	n/a	n/a	3.8	ND - 3.8	By-product of drinking water disinfection

## TABLE OF UNREGULATED CONTAMINANTS

Iron	ppm	n/a	n/a	0.3	ND - 0.30	n/a
Manganese	ppm	n/a	n/a	0.0082	ND - 0.0082	n/a

## UNREGULATED CONTAMINANTS MONITORING (UCMR3)

Parameter	Units	Average	Highest Level Detected	Range of Detection	Typical Source
Chlorate	ppb	111	292	ND - 292	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chloride.
Chromium-6	ppb	0.012	0.13	ND - 0.13	Naturally occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
1,1-Dichloroethane	ppb	0.042	0.042	ND - 0.042	Halogenated alkane; used as a solvent.
Strontium	ppb	685	1250	116-1250	Naturally occurring element; historically commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.

# MT. LAUREL MUNICIPAL UTILITIES AUTHORITY

PWS ID # 0324001

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. These people 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## TABLE OF DETECTED CONTAMINANTS

Contaminant	Units	MCL	MCLG	Highest Level Detected	Range of Detection	Major Sources in Drinking Water
<b>INORGANIC CONTAMINANTS</b>						
Arsenic	ppb	5	0	0.39	0.18 - 0.39	Erosion of natural deposits; Runoff from orchards
Barium	ppm	2	2	0.083	0.057 - 0.083	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper	ppm	AL = 1.3	1.3	90th Percentile value = 0.0823	0 sites exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Flouride	ppm	4	4	0.14	ND - 0.14	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	ppb	AL = 15	0	90th Percentile value = 0.21	0 site exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits
Selenium	ppb	50	50	1	0.59 - 1	Discharge from petroleum and metal refineries; Erosion of natural deposits.
<b>SECONDARY CONTAMINANTS (RUL) RECOMMENDED UPPER LIMIT</b>						
Sodium	ppm	50	n/a	29.3	28.7 - 29.3	Naturally present in the environment
<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>						
Total trihalomethanes Stage 2	ppb	80	n/a	15 Average	2.45 - 17.46	By-product of drinking water disinfection
Haloacetic Acids Stage 2	ppb	60	n/a	5 Average	ND - 6.9	By-product of drinking water disinfection
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.60 Average	0.40 - 0.64	Water additive used to control microbes
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
Total Coliform Bacteria		Presence of coliform bacteria in < 5% of monthly samples	0	2.33%	N/A	Naturally present in the environment

Regulated Substances							
Parameter	Units	Compliance Achieved	MCLG	MCL	Highest Level Detected	Range Detected	Typical Source
<b>Inorganics</b>							
Barium (2011) <sup>1</sup>	ppm	Yes	2	2	0.1	ND to 0.1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel (2011) <sup>1</sup>	ppb	Yes	NA <sup>2</sup>	NA <sup>2</sup>	14	ND to 14	Erosion of natural deposits
Chromium	ppb	Yes	100	100	1.8	ND to 1.8	Naturally-occurring element; used in making steel and other alloys; plating, dyes and pigments, leather tanning, and wood preservation
Nitrate	ppm	Yes	10	10	2.12	ND to 2.12	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
<b>Turbidity</b>							
Turbidity <sup>3</sup>	NTU	Yes	NA	TT = 1 NTU	0.11	0.05 to 0.11	Soil runoff
	%	Yes	NA	TT = % of samples <0.3 NTU	100%	NA	Soil runoff
<b>Treatment Byproducts Precursor Removal</b>							
Total Organic Carbon (TOC)	%	Yes	NA	TT ≥35% Removal	44% <sup>4</sup>	21% to 62%	Naturally present in the environment.
<b>Disinfectants</b>							
Chlorine	ppm	Yes	MRDLG = 4	MRDL = 4	0.51 <sup>5</sup>	ND to 2.02	Water additive used to control microbes
<b>Disinfection By-Products</b>							
Bromate	ppb	Yes	0	10	5	ND - 5	By-product of drinking water disinfection
<b>Radiologicals</b>							
Alpha Emitters	pCi/L	Yes	0	15	6.7	ND - 6.7	Erosion of natural deposits
Combined Radium (226/228)	pCi/L	Yes	0	5	1.92 <sup>6</sup>	ND to 1.92	Erosion of natural deposits
<b>Footnotes</b>							
<sup>1</sup> The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.							
<sup>2</sup> Nickel monitoring is required. Currently there is no established MCL or MCLG.							
<sup>3</sup> 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water and an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.							
<sup>4</sup> Data represents the lowest removal of Total Organic Carbon (TOC)							
<sup>5</sup> Data represents the highest quarterly running annual average							
<sup>6</sup> Data represents the highest locational quarterly running annual average							

Unregulated Contaminants Monitoring (UCMR3)						
Parameter	Units	Average	Highest Level Detected	Range Detected	Typical Source	
1,1-Dichloroethane	ppb	0.09	0.09	ND to 0.09	Halogenated alkane; used as a solvent	
1,2,3-Trichloropropane	ppb	0.04	0.04	ND to 0.04	Halogenated alkane; used as an ingredient in paint, varnish remover, solvents and degreasing agents	
1,4-Dioxane	ppb	0.34	0.39	ND to 0.39	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos	
Bromochloromethane	ppb	0.09	1.2	ND to 1.2	Used as a fire-extinguishing fluid, an explosive suppressant, and as a solvent in the manufacturing of pesticides	
Chlorate	ppb	235	400	ND to 400	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chloride dioxide	
Chromium (VI)	ppb	1.1	1.28	ND to 1.28	Naturally-occurring element; used in making steel and other alloys; chromium -3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation	
Cobalt	ppb	4.2	7.2	ND to 7.2	Naturally-occurring element found in the earth's crust and at low concentrations in seawater, and in some surface and ground water; cobaltous chloride was formerly used in medicine as a germicide	
Molybdenum	ppb	1.45	1.7	ND to 1.7	Naturally-occurring elemental found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent	
Strontium	ppb	1317	1390	1390	Naturally-occurring element; historically commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions	
Vanadium	ppb	2	2	ND to 2	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst	

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Evesham Municipal Utilities Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## SOURCE WATER ASSESSMENT

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, Mt. Laurel MUA, and New Jersey American Water Company, which is available at [www.state.nj.us/dep/swap/](http://www.state.nj.us/dep/swap/) or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on our 11 sources determined the following:

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors					
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L			
Wells - 11			11			11			11			11			10	1			10	1			11			10	1

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to [http://www.nj.gov/dep/watersupply/dwc\\_quality.html](http://www.nj.gov/dep/watersupply/dwc_quality.html) or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens reacts with dissolved organic material (for example leaves) present in surface water.

If a system is rated highly susceptible for a contamination category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

NJDEP found the following potential contaminant sources within the source water assessment area for our sources: Underground Storage Tank Permits.

If you have questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at [swap@dep.state.nj.us](mailto:swap@dep.state.nj.us) or 609-292-5550.

## DEFINITION OF TERMS

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**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. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

**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 contamination.

**n/a:** Not applicable.

**Not Detected (ND):** The contaminant was either not detected or was below the level which could be measured in a sample of water using the best available analysis techniques.

**Parts Per Billion (PPB):** One part per billion corresponds to one minute in 2000 years, or a single penny in \$10,000,000.

**Parts Per Million (PPM):** One part per million corresponds to one minute in 2 years, or a single penny in \$10,000.

**Picocurie (pCi/l):** A unit used to describe the level of activity of decay of a radioactive element.

**RUL:** Recommended Upper Limit

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

*Where a date follows a set of results in the table of detected contaminants, this indicates the most recent testing done in accordance with Federal and State regulations. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.*

*Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. The EMUA received a monitoring waiver for synthetic organic chemicals.*

## EDUCATIONAL INFORMATION

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, in some cases, radioactive material, and 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 stormwater runoff, 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, urban stormwater runoff, and residential uses.
-  Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
-  Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water hotline (1-800-426-4791).

## Where Does My Water Come From?



The Evesham Municipal Utilities Authority (EMUA) water supply is a blend composed of groundwater and treated surface water. The primary sources for the groundwater supply in Evesham are ten wells that draw their water from the Potomac-Raritan-Magothy (PRM) and the Wenonah Mt. Laurel aquifers. The wells range in depth from 300 to 623 feet. Although the State strictly regulates the water being pumped from the PRM aquifer, it is depleting at a faster rate that it can be recharged naturally. In 1996, the EMUA water allocation was reduced by 22%. To supplement its water supply, the EMUA purchases drinking water from Mt. Laurel Township Municipal Utilities Authority (MLTMUA) and New Jersey American Water Company (NJAWC). The MLTMUA pumps water from three wells within the PRM to their two water treatment plants, while NJAWC water comes from the Delaware River and from groundwater wells. This is why we ask for your cooperation in conserving water year round.

Water restrictions are in effect from May 1 through September 30 of each year. The odd/even watering system does not depend upon your house address. If you live on the North (Wal-Mart) side of Route 70, you may water on ODD Days. If you live on the South (Produce Junction) side of Route 70, you may water on EVEN days. Limited hours are also in effect on your assigned day. You may water from midnight to 8:00 a.m. and from 6:00 p.m. until midnight. No one can water from 8:00 a.m. to 6:00 p.m. on any day.



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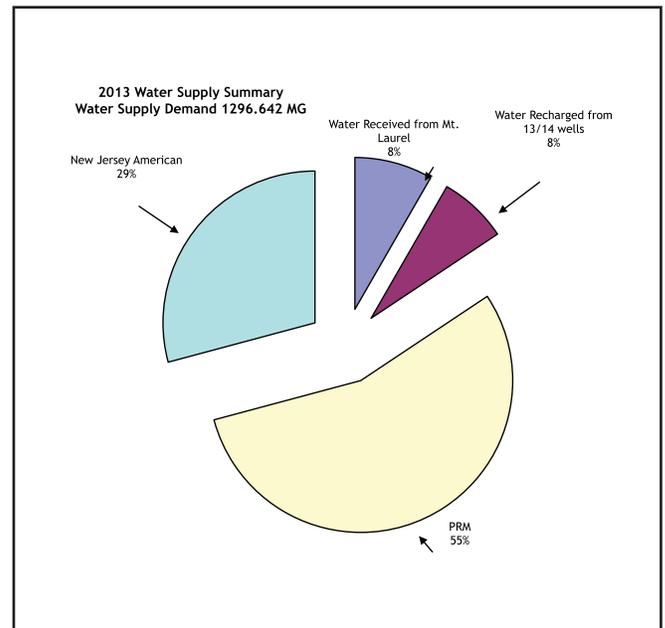
**For additional information contact:**

NJDEP Bureau of Safe Drinking Water  
**(609) 292-5550**

[www.state.nj.us/dep/watersupply](http://www.state.nj.us/dep/watersupply)

EPA Safe Drinking Water Hotline  
**(800) 426-4791**

[www.epa.gov/safewater](http://www.epa.gov/safewater)



**We Rely on Clean Water to Protect Our Health, Environment and Quality of Life**

Much of our water infrastructure — the systems that treat, distribute, collect and clean water — was built nearly 100 years ago. Significant investments are critical to keep pace with growing needs and environmental challenges. Protect your community by supporting initiatives to invest in our water and wastewater systems. Together, we can keep our lifeline flowing.

*Drinking water and wastewater utilities will need to invest hundreds of billions of dollars in their capital infrastructure over the next two decades, according to EPA, CBO, and the Water Infrastructure Network.*

*Projected needs range from \$485 billion to nearly \$1.2 trillion.*

-- General Accounting Office, Water Infrastructure: Comprehensive Asset Management Has Potential to Help Utilities Better Identify Needs and Plan Future Investments (March 2004), p. 13. <http://www.gao.gov/new.items/d04461.pdf>

