

27 July 2007

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Division of Solid Waste Management  
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401 Church Street  
Nashville, TN 37243-1535

VIA ELECTRONIC MAIL (AS AN ATTACHMENT) & US POSTAL SERVICE

RE: Scientific Inquiry/Public Comments to the Tennessee Solid Waste Advisory Committee concerning the disposal of solid waste with "extremely low levels of radioactivity" at the Allied Waste (formerly BFI) Middlepoint Landfill in Murfreesboro (Rutherford County), Tennessee

Dear Joyce Dunlap,

How are you?

My name is Irucka Embry and I am writing this scientific inquiry/public comment as a concerned citizen with regards to the disposal of solid waste with "extremely low levels of radioactivity" at the Allied Waste (formerly BFI) Middlepoint Landfill in Murfreesboro (Rutherford County), Tennessee.

I would like to begin this inquiry by addressing some common points that we can hopefully agree upon:

- 1) The main exposure pathways for the transmission of disease symptom-inducing agents and/or the transfer of chemicals into the human body, including radionuclides, are: absorption through the skin, adsorption through the skin, entry through a cut and/or wound in the skin, ingestion, inhalation, and injection<sup>1</sup>.
- 2) "Ionizing radiation causes the ionizations of atoms which may affect molecules which may affect cells which may affect tissues which may affect organs which may affect the whole body<sup>2</sup>."
- 3) The chemicals in the landfill and surrounding environment are subject to the following types of chemical interactions: additive, synergistic, potentiation, and antagonism<sup>3</sup>.

There are several questions that I would like for the Solid Waste Advisory Committee to answer for the benefit of the public-at-large: the Tennessee Legislature and the people of the State of Tennessee concerning the Bulk Survey for Release Program (BSFR) and the disposal of solid waste with "extremely low levels of radioactivity."

- 1) In terms of the solid waste with the "low levels of radioactivity," which radionuclides are present in this waste?
- 2) Which decay process(es) exist(s) for those particular radionuclides: the emission of alpha particles, beta particles, and/or gamma rays<sup>4</sup>?
- 3) What are the half-lives of those radionuclides?
- 4) Does "low-level radioactive" waste stored in a municipal solid waste landfill in a separate section pose any possible ecological risks, including human health, and/or effects now and in the future<sup>5</sup>?
- 5) If so, then what are the ecological risks and/or effects now and in the future?
- 6) What are any possible human health effects associated with the exposure to those radionuclides based on all of the possible exposure pathways; i.e. what are the possible biological effects of low-level radiation<sup>6</sup>?
- 7) What are any possible ecological effects associated with the interactions of those radionuclides with the biological and chemical materials in the soil (including other wastes and gases), in the air, in the water (groundwater and surface water), and in biological bodies?
- 8) If the radionuclides interact with other radionuclides and/or non-radioactive chemicals, then what happens to the previous measured levels of radiation?
- 9) What is the biogeochemical fate of the radionuclides as those chemicals disperse through the soil to the groundwater (and to surrounding surface water bodies) and to terrestrial organisms?
- 10) What risks are possible with the bioaccumulation of those radionuclides into the ecological food web?
- 11) What is the biogeochemical fate of the radionuclides as those chemicals disperse through the air?
- 12) Concerning the study being conducted by the Solid Waste Advisory Committee, how many years do(es) the model(s) project into the future in terms of the risks associated with this disposal?
- 13) Which physiological characteristics of an exposed person will be assessed to properly determine the full extent of risks to everyone in the areas around these 5 landfills in the State of Tennessee?

- 14) Who will be most at risk due to this disposal?
- 15) Will this study review acute, intermediate, and chronic exposure durations?
- 16) Will this study assess acute, subacute, and chronic health effects?
- 17) Does this study review the possible effects if the leachate seeps through the liner into the groundwater and beyond?

I am submitting this scientific inquiry/public comment along with the resources in Appendix A to stimulate further discussion and prompt more scientific inquiry focusing on the disposal of solid waste with "extremely low levels of radioactivity" in Tennessee.

Thank-you in advance.

Sincerely,

Mr. Irucka Embry

## APPENDIX A

### LANDFILLS

<http://www.zerowasteamerica.org/Landfills.htm>  
Landfills: Hazardous to the Environment

<http://www.atsdr.cdc.gov/HAC/landfill/html/intro.html>  
Landfill Gas Primer: An Overview for Environmental Health Professionals

<http://www.gfredlee.com/>  
G. Fred Lee & Associates

<http://www.gfredlee.com/plandfil2.htm>  
Recent Publications on Landfills - Solid and Hazardous Waste and Groundwater Quality Protection: G. Fred Lee & Associates

<http://www.gfredlee.com/landfill.htm>  
Landfills - Solid and Hazardous Waste and Groundwater Quality Protection: G. Fred Lee & Associates

<http://www.members.aol.com/annejlee/LF-DredgedSed.pdf>  
Disposal of Contaminated Sediments/Soils in MSW Landfills: Need to Consider the True Cost: G. Fred Lee & Associates

[http://www.gfredlee.com/lf\\_birth\\_2001.pdf](http://www.gfredlee.com/lf_birth_2001.pdf)  
"Landfill link to birth defects strengthened"

<http://www.members.aol.com/apple27298/SubtitleDFlawedTechnPap.pdf>  
Flawed Technology of Subtitle D Landfilling of Municipal Solid Waste: G. Fred Lee & Associates

<http://www.members.aol.com/annelhome/EnvironHealthDiabetes.pdf>  
Increased Rate of Hospitalization for Diabetes and Residential Proximity of Hazardous Waste Sites

<http://www.members.aol.com/annejlee/HazChemSites-Illness.pdf>  
Association Between Hazardous Chemical Sites and Illness

[http://www.grn.org/landfill/usnrc\\_06-30-03.html](http://www.grn.org/landfill/usnrc_06-30-03.html)  
Re: Proposed 10 CFR PART 20: Comments by the Grassroots Recycling Network in Opposition to Proposed Rule -- permit low level radioactive waste to enter general commerce and/or be disposed of in municipal solid waste landfills

<http://www.ejnet.org/rachel/rhwn069a.htm>  
Landfilling Low-Level Radioactive Waste Is A Problem For All States

<http://www.ejnet.org/rachel/rhwn037.htm>  
EPA Says All Landfills Leak, Even Those Using Best Available Liners

## **"LOW-LEVEL" & "HIGH-LEVEL" RADIOACTIVE WASTE**

[http://www.checnet.org/healthhouse/education/articles-detail.asp?Main\\_ID=961](http://www.checnet.org/healthhouse/education/articles-detail.asp?Main_ID=961)  
Low Levels of Ionizing Radiation May Cause Harm

[http://books.nap.edu/catalog.php?record\\_id=11340#toc](http://books.nap.edu/catalog.php?record_id=11340#toc)  
Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2

[http://www.ag.ohio-state.edu/~rer/rerhtml/rer\\_44.html](http://www.ag.ohio-state.edu/~rer/rerhtml/rer_44.html)  
Lessons Learned from Existing Low-Level Radioactive Waste Disposal Facilities: The Ohio State University

<http://www.nirs.org/radwaste/llw/llwhome.htm>  
"Low-Level" Radioactive Waste

<http://www.nirs.org/radwaste/recycling/recyclinghome.htm>  
Radioactive Waste and Materials being used to make Household Items

<http://www.besafenet.com/NuclearRecycling.pdf>  
Nuclear Power & Weapons Waste In Everyday Household Items & Landfills: Prevent Radioactive Waste from Entering the Marketplace & Trash

[http://www.motherjones.com/news/outfront/2002/07/radioactive\\_recycling.html?welcome=true](http://www.motherjones.com/news/outfront/2002/07/radioactive_recycling.html?welcome=true)  
"Radioactive Recycling: If the Department of Energy has its way, the nation's nuclear garbage could end up in everyday items like bicycles, frying pans, and baby strollers."

<http://www.nirs.org/radwaste/outofcontrol/outofcontrol.htm>  
Out of Control - On Purpose: DOE's Dispersal of Radioactive Waste into Landfills and Consumer Products

<http://www.nirs.org/radwaste/hlw/hlw.htm>  
Highly Radioactive Waste

<http://www.nv.doe.gov/default.htm>  
U.S. Department of Energy National Nuclear Security Administration Nevada Site Office

<http://www.atsdr.cdc.gov/2p-hazardous-waste-sites.html>  
Hazardous Waste Sites (U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry)

<http://www.atsdr.cdc.gov/HAC/oakridge/index.html>  
Oak Ridge Reservation: Public Health Home (U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry)

## **BIOLOGICAL EFFECTS OF IONIZING RADIATION**

<http://www.ieer.org/reports/badtothebone/index.html>

Bad to the Bone: Analysis of the Federal Maximum Contaminant Levels for Plutonium-239 and Other Alpha-Emitting Transuranic Radionuclides in Drinking Water

By: Arjun Makhijani, Ph.D.

Institute for Energy and Environmental Research

August 2005

<http://www.icsu-scope.org/downloadpubs/scope50/contents.html>

Scope 50: Radioecology after Chernobyl - Biogeochemical Pathways of Artificial Radionuclides

<http://www.wrongdiagnosis.com/risk/radiation.htm>

Risk Factor: Radiation: WrongDiagnosis.com

[http://www.wrongdiagnosis.com/artic/ninds\\_cephalic\\_disorders\\_information\\_page\\_ninds.htm](http://www.wrongdiagnosis.com/artic/ninds_cephalic_disorders_information_page_ninds.htm)

NINDS Cephalic Disorders Information Page: NINDS: WrongDiagnosis.com

[http://www.wrongdiagnosis.com/r/radiation\\_sickness/intro.htm](http://www.wrongdiagnosis.com/r/radiation_sickness/intro.htm)

Radiation sickness: WrongDiagnosis.com

<http://www.ratical.com/radiation/>

The Health Costs of Low-Level Ionizing Radiation

<http://www.ratical.com/radiation/NRBE/index.html>

*No Immediate Danger: Prognosis for a Radioactive Earth* by Dr Rosalie Bertell

<http://www.ratical.com/radiation/CNR/>

The Committee For Nuclear Responsibility (CNR)

<http://www.ratical.com/radiation/CNR/HEIRreports.html>

The Committee for Nuclear Responsibility's Health Effects of Ionizing Radiation (HEIR) Reports

<http://www.ratical.com/radiation/CNR/NoSafeThresh.html>

What Is Factually Wrong with This Belief: "Harm from Low-Dose Radiation Is Just Hypothetical --- Not Proven"

<http://www.ratical.com/radiation/CNR/RIC/>

*Radiation-Induced Cancer From Low-Dose Exposure: An Independent Analysis* by John W. Gofman, M.D., Ph.D.

<http://www.ratical.com/radiation/CNR/synapse.html>

Gofman on the health effects of radiation: "There is no safe threshold"

<http://www.ratical.com/radiation/CNR/synapse.html#Part2>

Gofman on the health effects of radiation: Challenging The Nuclear Establishment

<http://www.ratical.com/radiation/CNR/CAmonthly.html>

California Q&A: A Conversation with John Gofman, Ph.D. '43: A conversation with the Berkeley scientist who helped to build the atomic bomb and to unbuild this country's nuclear energy program.

By Russell Schoch

<http://www.ratical.com/radiation/CNR/PlowboyIntrv.html>

The Plowboy Interview John Gofman: Nuclear And Antinuclear Scientist

<http://www.ratical.com/radiation/inetSeries/nwJWG.html>

Nuclear Witnesses, Insiders Speak Out: John W. Gofman, Medical Physicist

<http://www.ratical.org/radiation/DU/KYagasakiOnDU.pdf>

Depleted Uranium Shells, The Radioactive Weapons - Perpetuation of War Damage by Radiation -YAGASAKI Katsuma Group of Peace Education Against Nuclear Weapon, University of the Ryukyus

<http://www.nuclearpolicy.org/index.cfm>

Nuclear Policy Research Institute

<http://www.nirs.org/home.htm>

Nuclear Information and Resource Service & World Information Service on Energy

<http://www.citizenstoendit.org/>

Citizens to end Nuclear Dumping in TN (ENDIT)

<http://www.ananuclear.org/>

Alliance for Nuclear Accountability

<http://www.helencaldicott.com/articles.htm>

Helen Caldicott, MD: Articles

<http://www.nsbri.org/Radiation/HumanAffects.html>

Radiation: Affects on Humans

[http://www.jlab.org/div\\_dept/train/rad\\_guide/intro.html](http://www.jlab.org/div_dept/train/rad_guide/intro.html)

Radiation Worker Training (RWT)

[http://www.jlab.org/div\\_dept/train/rad\\_guide/effects.html](http://www.jlab.org/div_dept/train/rad_guide/effects.html)

Radiation Biological Effects

<http://www.nrc.gov/reading-rm/basic-ref/teachers/09.pdf>

Biological Effects of Radiation: The U.S. Nuclear Regulatory Commission (NRC)

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/bio-effects-radiation.html>  
The U.S. Nuclear Regulatory Commission (NRC) Fact Sheet on Biological Effects of Radiation

<http://www.nsc.org/issues/rad/risks.htm>  
National Safety Council: The Risk: Health Effects

<http://www.hps.org/publicinformation/ate/q647.html>  
Health Physics Society: Relative biological effectiveness (RBE)

<http://www.bt.cdc.gov/radiation/ars.asp>  
Acute Radiation Syndrome

<http://physics.bu.edu/~duffy/PY106/NuclearReactions.html>  
Nuclear reactions

<http://web.princeton.edu/sites/ehs/osradtraining/biologicaleffects/page.htm>  
Open Source Radiation Safety Training: Module 3: Biological Effects

<http://web.princeton.edu/sites/ehs/radiation/index.html>  
Princeton University: Radiation Safety

<http://www.cehs.siu.edu/radiological/Training%20Modules/biological.htm>  
Southern Illinois University Carbondale (SIUC) Center for Environmental Health and Safety:  
Module 3: Biological Effects of Radiation

<http://www.cehs.siu.edu/sitemap.htm>  
Southern Illinois University Carbondale (SIUC) Center for Environmental Health and Safety

<http://www.chemcases.com/2003version/nuclear/nc-14.htm>  
Nuclear Chemistry: The Biological Effects of Nuclear Radiation

<http://www.fas.org/nuke/guide/usa/doctrine/dod/fm8-9/1ch5.htm>  
FM 8-9: NATO Handbook On The Medical Aspects Of NBC Defensive Operations: AMedP-6(B): Chapter 5: Biophysical And Biological Effects Of Ionizing Radiation

## **RADIATION**

<http://www.bt.cdc.gov/radiation/glossary.asp>  
Department of Health and Human Services Centers for Disease Control and Prevention: Glossary of Radiological Terms

<https://www.orau.gov/ddsc/>  
The Decontamination & Decommissioning Science Consortium (DDSC)

<http://hps.org/>  
Health Physics Society



<http://chemed.chem.purdue.edu/genchem/topicreview/bp/ch23/radiation.php>  
Ionizing Radiation

[http://en.wikipedia.org/wiki/Atomic\\_radiation](http://en.wikipedia.org/wiki/Atomic_radiation)  
Ionizing radiation

<http://chemed.chem.purdue.edu/genchem/topicreview/bp/ch23/natural.php>  
Natural Versus Induced Radioactivity

[http://www.sc.doe.gov/ober/ober\\_top.html](http://www.sc.doe.gov/ober/ober_top.html)  
U.S. Department of Energy Office of Biological & Environmental Research

<http://www.lowdose.energy.gov/>  
U.S. Department of Energy Low Dose Radiation Research Program

<http://www.sc.doe.gov/ober/LSD/lowdose.html>  
U.S. Department of Energy Office of Biological & Environmental Research Low Dose Radiation

<http://www.nsc.org/issues/radisafe.htm>  
National Safety Council: Understanding Radiation

[http://hacd.jsc.nasa.gov/projects/space\\_radiation.cfm](http://hacd.jsc.nasa.gov/projects/space_radiation.cfm)  
NASA Human Adaption and Countermeasures Division Space Radiation Project

## **NUCLEAR POWER**

<http://www.topix.net/tech/nuclear-energy>  
Nuclear Energy News from *The Daily News Journal*

[http://www.ucsusa.org/clean\\_energy/nuclear\\_safety/](http://www.ucsusa.org/clean_energy/nuclear_safety/)  
Nuclear Safety

<http://www.fas.org/ssp/fc/>  
The Nuclear Fuel Cycle

[http://ccnr.org/open\\_letter.html](http://ccnr.org/open_letter.html)  
The Dangers of Nuclear Power: An Open Letter to Physicists

<http://www.i-sis.org.uk/ESIGW.php>  
Energy Strategies in Global Warming: Is Nuclear Energy the Answer? Nuclear energy makes economic nonsense and ecological disaster and provides great opportunities for terrorists.

<http://www.i-sis.org.uk/DTNPM.php>  
Deconstructing the Nuclear Power Myths

<http://www.i-sis.org.uk/ESIGW.php>  
Energy Strategies in Global Warming: Is Nuclear Energy the Answer?

<http://www.i-sis.org.uk/SNGNP.php>  
Safe New Generation Nuclear Power?: The Pebble Bed Modular Reactor

<http://www.i-sis.org.uk/LITD.php>  
Nuclear Power: A Leap into the Dark Energy Chasm

<http://www.progress.org/2006/nuclear09.htm>  
Cold War Nuclear Plant Created Secret Dump, Set Own Rules

<http://www.nukewatch.com/>  
Nukewatch

<http://www.nukewatch.com/pathfinder/spring02/sp0221.html>  
“New Law Won’t Keep UK Nukewatchers Quiet”

<http://www.besafenet.com/>  
The Center for Health, Environment & Justice's BE SAFE campaign: BE SAFE, Center for Health, Environment & Justice

<http://www.nirs.org/about/edasner41504.htm>  
“An Angry Man Talks About Nuclear Power”

[http://www.usatoday.com/news/washington/2004-03-29-nuclear-gns\\_x.htm](http://www.usatoday.com/news/washington/2004-03-29-nuclear-gns_x.htm)  
Report: Nuclear sites put drinking water sources at risk

## **RISK ASSESSMENT**

[http://www.biotech-info.net/paradigm\\_shift.html](http://www.biotech-info.net/paradigm_shift.html)  
"A Paradigm Shift: Rethinking Environmental Decision Making and Risk Assessment"

<http://www.envirotools.org/exposurepathways.shtml>  
Exposure Pathways (EnviroTools)

<http://www.envirotools.org/index.html>  
EnviroTools Home

<http://www.atsdr.cdc.gov/>  
U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry

<http://www.atsdr.cdc.gov/mrls/index.html>  
Minimal Risk Levels (MRLs) for Hazardous Substances [U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry]

<http://www.epa.gov/ceampubl/>  
Exposure Assessment Models (EPA)

<http://www.epa.gov/iris/>  
Integrated Risk Information System (EPA)

<http://www.epa.gov/region5superfund/ecology/index.html>  
Ecological Risk Assessment and the Ecological Technical Center (EPA)

## **SCIENTIFIC INTEGRITY**

<http://www.cspinet.org/integrity/>  
Center for Science in the Public Interest: The Integrity in Science Database

<http://www.cspinet.org/>  
Center for Science in the Public Interest

[http://www.ucsusa.org/scientific\\_integrity/](http://www.ucsusa.org/scientific_integrity/)  
Union of Concerned Scientists Scientific Integrity Program

<http://ori.hhs.gov/>  
U.S. Department of Health and Human Services Office of Research Integrity (ORI)

<http://www.ieer.org/index.html>  
Institute for Energy and Environmental Research (IEER): Where Science and Democracy Meet

<http://www.ieer.org/clsroom/index.html>  
IEER On-Line Technical Training Classroom

<http://www.ieer.org/fctsheet/index.html>  
IEER's Fabulous Factsheet File

<http://www.ieer.org/links.html>  
Links

## **BOOKS**

*Multiple Chemical Interactions*  
Edward J. Calabrese

*Our Stolen Future: Are We Threatening Our Fertility, Intelligence and Survival? A Scientific Detective Story*  
Theo Colborn, Dianne Dumanoski, John Peter Meyers

*No Immediate Danger: Prognosis for a Radioactive Earth*  
Dr. Rosalie Bertell

*Introduction to Biological Radiation Effects: An Overview of Terrestrial and Space Radiation Effects on Humans*  
U. L. Prens

*Radiation And Human Health*

John W. Gofman, M.D., Ph.D.

*X-Rays: Health Effects of Common Exams*

John W. Gofman, M.D., Ph.D.

*Radiation-Induced Cancer From Low-Dose Exposure: An Independent Analysis*

John W. Gofman, M.D., Ph.D.

*Chernobyl Accident: Radiation Consequences for This and Future Generations*

John W. Gofman, M.D., Ph.D.

*Unacceptable Risk: The Nuclear Power Controversy*

McKinley C. Olson

*Living With Nuclear Weapons*

The Harvard Nuclear Study Group: Albert Carnesale, Paul Doty, Stanley Hoffmann, Samuel P. Huntington, Joseph S. Nye, Jr., Scott D. Sagan

*Living Without Landfills: Confronting the Low-Level Radioactive Waste Crisis*

Marvin Resnikoff

1

<http://www.bt.cdc.gov/radiation/glossary.asp#e>  
Exposure pathway definition (Department of Health and Human Services Centers for Disease Control and Prevention: Glossary of Radiological Terms)

<http://www.envirotools.org/exposurepathways.shtml>  
Exposure Pathways: EnviroTools

[http://en.wikipedia.org/wiki/Absorption\\_\(skin\)](http://en.wikipedia.org/wiki/Absorption_(skin))  
Absorption (skin)

<http://en.wikipedia.org/wiki/Adsorption>  
Adsorption – Wikipedia

<http://www.wrongdiagnosis.com/medical/adsorption.htm>  
Adsorption: WrongDiagnosis.com

*American Red Cross First Aid: Responding To Emergencies*  
American Red Cross

2

<http://www.nrc.gov/reading-rm/basic-ref/teachers/09.pdf>  
U.S. Nuclear Regulatory Commission (NRC) Technical Training Center Biological Effects of Radiation Manual

3

[http://zoology.muohio.edu/oris/ZOO462/notes/05\\_462.html](http://zoology.muohio.edu/oris/ZOO462/notes/05_462.html)  
Chemical Interactions -- Dr. James T. Oris of Miami University

<http://www.ourstolenfuture.org/NewScience/synergy/mixtures.htm>  
The Impacts of chemical mixtures – *Our Stolen Future* website

<http://www.ourstolenfuture.org/NewScience/synergy/synergy.htm>  
New scientific studies of mixtures and synergy – *Our Stolen Future* website

*Multiple Chemical Interactions*  
Edward J. Calabrese

*Our Stolen Future: Are We Threatening Our Fertility, Intelligence and Survival? A Scientific Detective Story*  
Theo Colborn, Dianne Dumanoski, John Peter Meyers

4

<http://www.bt.cdc.gov/radiation/glossary.asp#r>  
Radioactivity definition (Department of Health and Human Services Centers for Disease Control and Prevention: Glossary of Radiological Terms)

5

<http://www.gfredlee.com/>

G. Fred Lee & Associates

<http://www.gfredlee.com/plandfil2.htm>

Recent Publications on Landfills - Solid and Hazardous Waste and Groundwater Quality Protection: G. Fred Lee & Associates

<http://www.gfredlee.com/landfill.htm>

Landfills - Solid and Hazardous Waste and Groundwater Quality Protection: G. Fred Lee & Associates

<http://www.members.aol.com/annejlee/LF-DredgedSed.pdf>

Disposal of Contaminated Sediments/Soils in MSW Landfills: Need to Consider the True Cost: G. Fred Lee & Associates

[http://www.gfredlee.com/lf\\_birth\\_2001.pdf](http://www.gfredlee.com/lf_birth_2001.pdf)

"Landfill link to birth defects strengthened"

<http://www.members.aol.com/apple27298/SubtitleDFlawedTechnPap.pdf>

Flawed Technology of Subtitle D Landfilling of Municipal Solid Waste: G. Fred Lee & Associates

<http://www.members.aol.com/annelhome/EnvironHealthDiabetes.pdf>

Increased Rate of Hospitalization for Diabetes and Residential Proximity of Hazardous Waste Sites

<http://www.members.aol.com/annejlee/HazChemSites-Illness.pdf>

Association Between Hazardous Chemical Sites and Illness

[http://www.grrn.org/landfill/usnrc\\_06-30-03.html](http://www.grrn.org/landfill/usnrc_06-30-03.html)

Re: Proposed 10 CFR PART 20: Comments by the Grassroots Recycling Network In Opposition to Proposed Rule -- permit low level radioactive waste to enter general commerce and/or be disposed of in municipal solid waste landfills

<http://www.ejnet.org/rachel/rhwn069a.htm>

Landfilling Low-Level Radioactive Waste Is A Problem For All States

<http://www.ejnet.org/rachel/rhwn037.htm>

EPA Says All Landfills Leak, Even Those Using Best Available Liners

6

See the internet resources under the heading of BIOLOGICAL EFFECTS OF IONIZING RADIATION in Appendix A.