

OAK RIDGE DOE/ORO/2204 Reservation

Annual Site Environmental Report

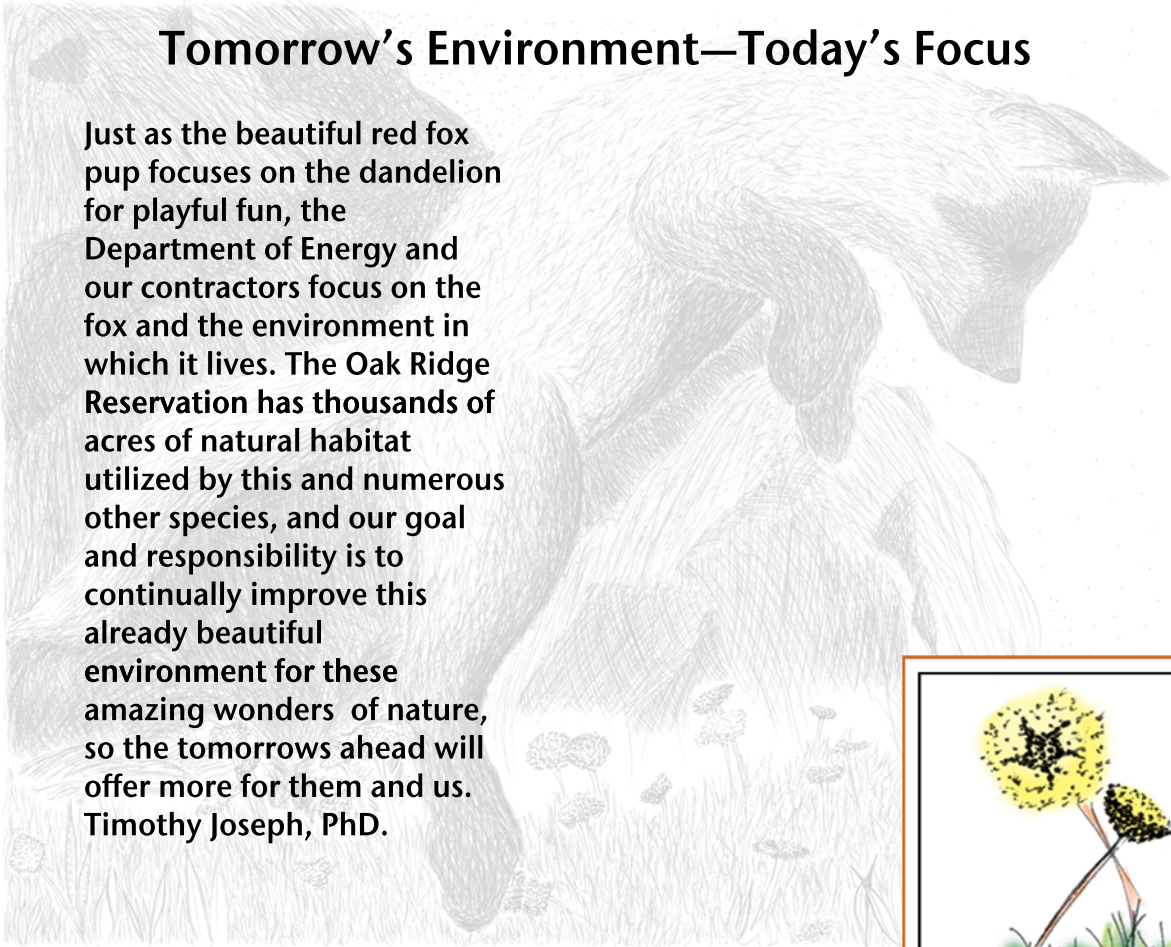


Tomorrow's Environment - Today's Focus

ABOUT THE COVER:

Tomorrow's Environment—Today's Focus

Just as the beautiful red fox pup focuses on the dandelion for playful fun, the Department of Energy and our contractors focus on the fox and the environment in which it lives. The Oak Ridge Reservation has thousands of acres of natural habitat utilized by this and numerous other species, and our goal and responsibility is to continually improve this already beautiful environment for these amazing wonders of nature, so the tomorrows ahead will offer more for them and us.
Timothy Joseph, PhD.



ORR ASER 2004

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**Oak Ridge Reservation Annual Site
Environmental Report for 2004**

on the World Wide Web
<http://www.ornl.gov/aser>

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Date published: September 2005

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Oak Ridge National Laboratory
P.O. Box 2008, Oak Ridge, TN 37831-2008
Managed by UT-Battelle, LLC
for the U.S. Department of Energy under Contract No. DE-AC05-00OR22725
and by
the Y-12 National Security Complex
Oak Ridge, TN 37831-8169
Managed by
BWXT Y-12, L.L.C.
for the U.S. Department of Energy under Contract No. DE-AC05-00OR22800
and by
East Tennessee Technology Park
P.O. Box 4699, Oak Ridge, TN 37831-4699
Managed by Bechtel Jacobs Company LLC
for the U.S. Department of Energy under Contract No. DE-AC05-98OR22700

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Acronyms and Abbreviations

AIHA	American Industrial Hygiene Association
ALARA	as low as reasonably achievable
AMP	Annual Monitoring Plan
ANSI	American National Standards Institute, Inc.
ASER	annual site environmental report
ATDD	Atmospheric Turbulence and Diffusion Division
BCG	biota concentration guide
BCK	Bear Creek kilometer
BFK	Brushy Fork kilometer
BJC	Bechtel Jacobs Company LLC
BMAP	Biological Monitoring and Abatement Program
BNFL	British Nuclear Fuels Ltd.
CAA	Clean Air Act
CBOD	carbonaceous biochemical oxygen demand
CX	categorical exclusion
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	chlorofluorocarbon, chlorinated fluorocarbon
CFR	Code of Federal Regulations
CNF	Central Neutralization Facility
CRK	Clinch River kilometer
CROET	Community Reuse Organization of East Tennessee
CWA	Clean Water Act
CY	calendar year
CYRTF	Coal Yard Runoff Treatment Facility
DCG	derived concentration guide
DNAPL	dense nonaqueous phase liquid
DOE	U.S. Department of Energy
DOE-EM	DOE Office of Environmental Management
DOE-HQ	DOE Headquarters
DOE-ORO	DOE Oak Ridge Office
dps	disintegrations per second
DWI	David Witherspoon, Inc.
EC	Environmental Compliance
EDE	effective dose equivalent
EFK	East Fork Poplar Creek kilometer
EIS	environmental impact statement
EM	(DOE Office of) Environmental Management
EMC	event mean concentration
EMS	environmental management system
EMWMF	Environmental Management Waste Management Facility
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act

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EPT	Ephemeroptera, Plecoptera, and Trichoptera (taxa)
ETTP	East Tennessee Technology Park
EWQP	ETTP Water Quality Program
FCK	First Creek kilometer
FFK	Fifth Creek kilometer
FY	fiscal year
HFIR	High Flux Isotope Reactor
HQ	hazard quotient
HSWA	Hazardous and Solid Waste Amendments
HVAC	heating, ventilation, and air conditioning
IC ₂₅	inhibition concentration for 25% of organisms
ICP	inductively coupled plasma
ICP-MS	inductively coupled plasma mass spectrometry
ID	identification (number)
INEEL	Idaho National Engineering and Environmental Laboratory
ISMS	Integrated Safety Management System
ISO	International Organization for Standardization
LC ₅₀	concentration of an aqueous sample lethal to 50% of test organisms in a given time span
LEED	Leadership in Energy and Environmental Design
LLLW	liquid low-level radioactive waste
LLW	low-level radioactive waste
MACT	Maximum Achievable Control Technology
MDA	minimum detectable activity
MEK	Melton Branch kilometer
MIK	Mitchell Branch kilometer
MLLW	mixed low-level waste
MRF	Multiprogram Research Facility
MSDS	material safety data sheet
MSRE	Molten Salt Reactor Experiment
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NIST	National Institute of Standards and Technology
NNSA	National Nuclear Security Administration
NOAA	National Oceanic and Atmospheric Administration
NOEC	no-observed-effect concentration
NOV	notice of violation
NPDES	National Pollutant Discharge Elimination System
NTRC	National Transportation Research Center
NWTK	Northwest Tributary kilometer
ODS	ozone-depleting substance
ORAU	Oak Ridge Associated Universities
OREIS	Oak Ridge Environmental Information System
ORGDP	Oak Ridge Gaseous Diffusion Plant

ORISE	Oak Ridge Institute for Science and Education
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
ORSSAB	Oak Ridge Site Specific Advisory Board
OST	Office of Secure Transportation
OSTI	DOE Office of Scientific and Technical Information
PAM	perimeter air monitoring
PCB	polychlorinated biphenyls
PM10	particulate matter less than 10 microns in diameter
PWTC	Process Waste Treatment Complex
QA	quality assurance
QC	quality control
R&D	research and development
RAM	remote air monitoring
RCK	Raccoon Creek kilometer
RCRA	Research Conservation and Recovery Act
REDC	Radiochemical Engineering Development Center
RfD	reference dose
SADA	spatial analysis and decision assistance
SARA	Superfund Amendments and Reauthorization Act
SBMS	Standards-Based Management System
SDWA	Safe Drinking Water Act
SF	slope factor
SNS	Spallation Neutron Source
sodar	sonic detection and ranging
SWSA	solid waste storage area
TDEC	Tennessee Department of Environment and Conservation
TRU	transuranic
TSCA	Toxic Substances Control Act
TSP	total suspended particulate
TVA	Tennessee Valley Authority
TWRA	Tennessee Wildlife Resources Agency
UST	underground storage tank
UT	University of Tennessee
VMF	Vehicle Maintenance Facility
VOC	volatile organic compound
WAG	waste area grouping
WBK	Walker Branch kilometer
WCK	White Oak Creek kilometer
WIPP	Waste Isolation Pilot Plant
WQC	Water quality criteria
Y-12	Y-12 National Security Complex

Acknowledgments

The ASER technical coordinators and project team wish to thank those who participated in the publication of the *Annual Site Environmental Report*. Although we cannot name everyone involved in the environmental monitoring program, we would like to also thank and acknowledge those conducting sampling and analytical support.

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