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DRAFT ENVIRONMENTAL ASSESSMENT

**INSTALLATION OF EMISSION CONTROL EQUIPMENT
AND ASSOCIATED FACILITIES
GALLATIN FOSSIL PLANT
Sumner County, Tennessee**

PREPARED BY:
TENNESSEE VALLEY AUTHORITY

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Symbols, Acronyms, and Abbreviations

µm	micrometer
ACI	activated carbon injection
AMSL	above mean sea level
APE	area of potential effect
ARAP	Aquatic Resource Alteration Permit
avdp	avoirdupois
BIP	balanced indigenous populations
BMP	best management practice
Btu	British thermal unit
°C	degrees Celsius
C&D	construction and demolition
CAA	Clean Air Act
Ca(OH)₂	calcium hydroxide (pebble lime)
CCC	criterion continuous concentration
CCP	coal combustion product
CCW	condenser cooling water
CDS	circulating dry scrubber
CEMS	continuous emission monitoring systems
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH₄	methane
CO	carbon monoxide
CO₂	carbon dioxide
CO₂e	carbon dioxide equivalent
CRAC	Cumberland River Aquatic Center
CRM	Cumberland River Mile
CT	combustion-turbine
CY	calendar year
CWA	Clean Water Act of 1972
dB	decibels
dBA	A-weighted decibels
DNL	day/night average sound level
EA	environmental assessment
EHS	extremely hazardous substance
EIS	environmental impact statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERP	Emergency Response Plan

ESA	Endangered Species Act of 1973
ESP	electrostatic precipitator
ETSZ	East Tennessee Seismic Zone
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FF	fabric filter
FFCA	Federal Facilities Compliance Agreement
FGD	flue gas desulfurization
FICON	Federal Interagency Committee on Noise
FICUN	Federal Interagency Committee on Urban Noise
FR	<i>Federal Register</i>
ft	feet
ft²	square feet
GAF	Gallatin Fossil Plant
GCC	global climate change
GHG	greenhouse gas
GPD	gallons per day
GPS	Global Positioning System
GWh	gigawatt-hour
HELP	Hydrologic Evaluation of Landfill Performance
HEPA	high-efficiency particulate air
HFCs	hydrofluorocarbons
Hz	hertz
IB	industrial boiler
ID	induced draft
ILB	Illinois Basin
IPCC	Intergovernmental Panel on Climate Change
IPPP	Integrated Pollution Prevention Plan
IRP	Integrated Resource Plan
Jh	hydraulic gradient
kg	kilograms
kg/L	kilograms per liter
km	kilometers
kWh	kilowatt-hour
lb	pound
lbm	pound-mass
LBP	lead-based paint
LCS	leachate collection system
L_{eq(8)}	continuous equivalent sound level over 8-hour period
LOD	limit of disturbance
LOS	level of service
MACT	maximum achievable control technology
MATS	Mercury and Air Toxics Standards

MCL	maximum contaminant level
MGD	million gallons per day
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mi²	square miles
MMBtu	million British thermal units
MSDS	Material Safety Data Sheet
MW	megawatt
MWhr	megawatt-hour
N₂O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NH₃-N/L	ammonia nitrogen
NHPA	National Historic Preservation Act of 1966
NID	novel integrated desulfurization
NIOSH	National Institute for Occupational Safety and Health
NM	noise measurement
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NRI	Nationwide Rivers Inventory
NRL	North Rail Loop
NSR	New Source Review
O&M	operations and maintenance
O₃	ozone
OSHA	Occupational Safety and Health Administration/Act
OWS	oil/water separator
PA	Programmatic Agreement
Pb	lead
PFCs	perfluorocarbons
PJFF	pulse jet fabric filter
PM_{2.5}	particulate matter whose particles are less than or equal to 2.5 micrometers
PM₁₀	particulate matter whose particles are less than or equal to 10 micrometers
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
PRB	Powder River Basin
PSI	pounds per square inch
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act of 1976
RFAI	Reservoir Fish Assemblage Index

RM	river mile
RMP	Risk Management Plan
ROW	right-of-way
s.u.	standard unit
SAMI	Southern Appalachian Mountains Initiative
SCR	selective catalytic reduction
SDA	spray drying absorber
SF₆	sulfur hexafluoride
SGLP	Synthetic Groundwater Leaching Procedure
SHPO	State Historic Preservation Officer
SO₂	sulfur dioxide
SPCC	spill prevention control and countermeasures
SR	State Route
SRA	sensitive receptor area
SRL	South Rail Loop
SWPPP	Storm Water Pollution Prevention Plan
TBtu	trillion British thermal units
TCA	Tennessee Code Annotated
TCLP	Toxicity Characteristic Leaching Procedure
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TL	transmission line
TPY	tons per year
TRC	TRC Environmental Corporation
TRI	Toxic Release Inventory
TRV	toxicity reference value
TSP	total suspended particulate
TVA	Tennessee Valley Authority
TVARAM	TVA Rapid Assessment Method
TWRA	Tennessee Wildlife Resources Agency
U.S.	United States
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
WMA	wildlife management area
wt%	weight percent
WWC	wet weather conveyance

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