



KAYENTA
MINE PERMIT
(AZ-0001D)
RENEWAL

ENVIRONMENTAL
ASSESSMENT



AUGUST 2011

ENVIRONMENTAL ASSESSMENT

Kayenta Mine Permit Renewal (Navajo County, Arizona)

U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
(Western Region)

August 2011

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LIST OF ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
ADWR	Arizona Department of Water Resources
af	acre-feet
af/yr	acre-feet per year
AGFD	Arizona Game and Fish Department
AML	Abandoned Mine Land
APS	Arizona Public Service
ASU	Arizona State University
bgs	below ground surface
BIA	Bureau of Indian Affairs
BTCA	best technology currently available
Ca	calcium
CEQ	Council on Environmental Quality
cfs	cubic feet per second
CH ₄	methane
CHIA	Cumulative Hydrologic Impact Analysis
CIAA	cumulative impacts analysis area
Cl	chloride
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
D aquifer	Dakota aquifer
dB	decibels
dBA	A-weighted decibels
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GIS	geographic information system
gpd	gallons per day
gpm	gallons per minute
lux	lumens/m ²
m/s	meters per second
Mg	magnesium
mg/L	milligrams per liter
MMt	million metric tons
mph	miles per hour
MSHA	Mine Safety and Health Act
MSL	mean sea level

MSO	Mexican spotted-owl
N ₂ O	nitrous oxide
NO _x	nitrous oxides (general)
Na	sodium
N aquifer	Navajo aquifer
National Register	National Register of Historic Places
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGS	Navajo Generating Station
NNEPA	Navajo Nation Environmental Policy Act
NNEPA	Navajo Nation Environmental Protection Agency
NNDFW	Navajo Nation Department of Fish and Wildlife
NNHP	Navajo Natural Heritage Program
NPDES	National Pollutant Discharge Elimination System
NRC	U.S. Nuclear Regulatory Commission
NRCS	Natural Resource Conservation Service
NTUA	Navajo Tribal Utility Authority
O ₃	ozone
OSHA	Occupational Safety and Health Administration
OSM	Office of Surface Mining Reclamation and Enforcement, Western Region
PAC	Protected Activity Center
pm	particulate matter
PWCC	Peabody Western Coal Company
SAR	Sodium Adsorption Rations
SMCRA	Surface Mining Control and Reclamation Act
SO ₄	sulfate
TDS	total dissolved solids
tpy	tons per year
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
WACM	Western Alkaline Coal Mining