

**Table 8-2. Summary of Environmental Impacts from Coal-Fired Generation—
Once-Through Cooling**

Impact Category	Impact	ANO Site		Alternative Greenfield Site	
		Impact	Comments	Impact	Comments
Land Use	MODERATE		Approximately 700 ha (1700 acres), (including an additional 217 ha [536 acres] adjacent to existing site)	MODERATE to LARGE	200 ha (500 acres) to 800 ha (2000 acres), including transmission lines
Ecology	MODERATE		Uses undeveloped areas in current ANO site, other nearby land, and rail corridor	MODERATE to LARGE	Impact will depend on ecology of site
Water Use and Quality					
- Surface Water	SMALL		Uses existing intake and discharge structures	SMALL to MODERATE	Impact will depend on volume and other characteristics of receiving water
- Groundwater	SMALL		No groundwater is currently used by ANO-1. This practice likely would continue	SMALL to LARGE	Impact will depend on site characteristics and availability of groundwater
Air Quality	MODERATE		SO _x - 1820 MT*/yr - allowances required NO _x - 850 MT/yr - allowances required Particulate - 120 MT/yr (filterable) - 30 MT/yr (unfilterable) Carbon monoxide - 580 MT/yr Trace amounts of mercury, arsenic, chromium, beryllium and selenium	MODERATE	Same impacts as ANO site, although pollution control standards may vary
Waste	MODERATE		Total waste volume would be estimated around 800,000 MT/yr of ash and scrubber sludge	MODERATE	Same impacts as ANO site; waste disposal constraints may vary
Human Health	SMALL		Impacts considered minor	SMALL	Same impact as ANO site
Socioeconomics	MODERATE		1200 to 2500 additional workers during peak period of the 5-year construction period, followed by reduction from current ANO workforce of 573 to less than 200	MODERATE TO LARGE	Construction impacts would be relocated. Community near ANO would still experience reduction from 573 persons to a minimal maintenance size
Aesthetics	MODERATE to LARGE		Visual impact of large industrial facility and stacks would be significant	MODERATE to LARGE	Alternate locations could reduce aesthetic impact if siting is in an industrial area
Historic and Archaeological Resources	SMALL		Affects previously developed parts of current ANO site, nearby land, and 13 to 16 km (8 to 10 mi) rail corridor	SMALL	Alternate location would necessitate cultural resource studies

Alternatives

Table 8-2. (contd.)

Impact Category	Impact	ANO Site	Alternative Greenfield Site	
		Comments	Impact	Comments
Environmental Justice	MODERATE	Impacts on low income and minority communities should be similar to those experienced by the population as a whole. Some impacts on housing are likely.	SMALL to LARGE	Impacts will vary depending on population distribution and make up

*Metric tons