



Palo Verde Nuclear  
Generating Station

Scott A. Bauer  
Department Leader,  
Regulatory Affairs

Tel. 623-393-5978  
Fax 623-393-5442  
e-mail: sbauer@apsc.com

Mail Station 7636  
PO Box 52034  
Phoenix, Arizona 85072-2034

102-04564-SAB/TWN/CJJ  
April 27, 2001

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-37  
Washington, DC 20555-0001

Dear Sir:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Units 1, 2, and 3  
Docket Nos. STN 50-528/529/530  
Annual Environmental Operating Report for 2000**

Enclosed please find a copy of the Annual Environmental Operating Report for 2000. This report covers the operation of PVNGS Units 1, 2, and 3 during 2000, and is being submitted pursuant to Section 5.4.1 of Appendix B to the Operating License.

No commitments are being made to the NRC in this letter. If you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely,

SAB/TNW/CJJ

Enclosure

cc: E. W. Merschoff (all w/o enclosure)  
J. N. Donohew  
J. H. Moorman  
A. V. Godwin (ARRA)

IE25  
11

**ENCLOSURE**

**ANNUAL ENVIRONMENTAL OPERATING REPORT FOR 2000**

**FOR**

**PALO VERDE NUCLEAR GENERATING STATION**

# **2000 Annual Environmental Operating Report**

## **I. INTRODUCTION**

The Palo Verde Nuclear Generating Station (PVNGS) is located in Maricopa County, Arizona, approximately 50 miles west of the Phoenix metropolitan area. The PVNGS site comprises approximately 4050 acres. Site elevations range from 890 feet above mean sea level at the southern boundary to 1030 feet above mean sea level at the northern boundary. The station consists of three pressurized water reactor electrical generating units with a nominal generating capacity of 1270 MWE per Unit.

PVNGS was issued low power operating licenses NPF-34, NPF-46 and NPF-65 for Units 1, 2 and 3 by the United States Nuclear Regulatory Commission (NRC) on December 31, 1984, December 9, 1985, and March 25, 1987, respectively. The Unit 1 full power operating license NPF-41 was issued June 1, 1985. The Unit 2 full power operating license NPF-51 was issued April 24, 1986. The Unit 3 full power operating license NPF-74 was issued November 25, 1987. Appendix B to these operating licenses is entitled the "Environmental Protection Plan (Non Radiological)". The Environmental Protection Plans (EPP) of each of the current operating licenses are identical.

The EPP is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the station is operated in an environmentally acceptable manner, as established by the FES (Final Environmental Statement) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and Local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and actions taken to control those effects.

This Annual Environmental Operating Report is required by Section 5.4.1 of the EPP. This report describes the activities during the year 2000 related to the PVNGS EPP. For purposes of this report, references to the EPP are considered to be the EPP of NPF-41, NPF-51, and NPF-74.

# **2000 Annual Environmental Operating Report**

## **II. ENVIRONMENTAL MONITORING SUMMARIES AND ANALYSIS**

### **A. Cultural Resources**

Section 4.2.1 of the EPP requires that an archaeological survey be performed when final alignment of the PVNGS-to-Saguaro transmission line is completed. As of the date of this report, plans for this transmission line have been indefinitely suspended. Therefore, there has been no activity with regard to this requirement of the EPP.

### **B. Terrestrial Ecology Monitoring**

As communicated in a letter from William F. Conway, APS, to NRC, dated December 30, 1991, the salt deposition monitoring program was discontinued at the end of 1991.

## **III. PLANT DESIGN AND OPERATION CHANGES**

Section 3.1 of the EPP allows changes in station design or operation or the performance of tests or experiments affecting the environment provided that such changes, tests, or experiments do not involve an unreviewed environmental question and do not involve a change to the EPP. Changes, tests, or experiments in which all measurable non-radiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction or in which the environment is not affected are exempt from the evaluation and reporting requirements of Section 3.1.

Section 3.2 of the EPP also exempts changes, tests, or experiments, which are required to comply with other Federal, State, or local environmental regulations.

Thirty-nine design and operation changes were evaluated in 2000 to determine if they involved either an unreviewed environmental question or constituted a change in the EPP. Table III-1 summarizes the results of these evaluations. None of these changes involved an unreviewed environmental question or a change in the EPP.

## **IV. EPP NON-COMPLIANCES**

There were no instances of non-compliance with the EPP identified during 2000.

## **V. NON-ROUTINE REPORTS**

There were no non-routine reports required by Section 5.4.2 of the EPP submitted during 2000.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-004	PR 204871	Rental of Aggreko Air Compressor and Associated Equipment for Unit 1 ILRT	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-006	PR 207388	Purchase of Vac-U-Blast Unit	The purchase and use of this equipment could potentially increase dust emissions.	The FES does not address dust emissions from blasting equipment.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-008	WO 915650	WRSS April 2000 Pipe Repair and Inspection Outage	Inspection and repair activities involves the rental of diesel driven pumps that could potentially increase effluent emissions. It also involves offsite excavation and construction activities.	The FES does not address portable emission sources. The equipment purchased will be permitted and operated in accordance with county environmental regulations.  Impacts from offsite excavation and construction during necessary pipeline repairs were evaluated in the FES.	There was no unreviewed environmental question because the combustion equipment will be permitted and operated in accordance with county environmental regulations.  The FES concludes that any disturbance of the land resulting from necessary repairs will be practically no concern and temporary.
00-010	T-Mod AO-NG- 2000-001	Supply temporary power from load center AENGNL44 using portable diesel generator.	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-012	PR 218014	Rental of 20K Hydrolaser	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-013	DFWO 00916319	Louver removal in Unit 1 Towers 1, 2, and 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-014	DFWO 00916338	Louver removal in Unit 3 Towers 1, 2, and 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-015	PR 212801	Purchase of gas engine powered pressure washer	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-017	DFWO 00916338	Louver removal in Unit 3 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-019	WDP- TB- 450 and PO 500231541	Use of diesel driven equipment to shotcrete drainage ditches that were excavated during the installation of the TBMU	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-020	DFWO 00923369	Louver removal in Unit 2 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-021	WDP-AB-411	Use of diesel driven equipment for Acid Tank replacement for AB and DW systems	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-023	WBS CG4EK997 PR 224685	Purchase of Street Sweeper Replacement	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel and increase in dust emissions.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations. The equipment contains systems to reduce dust emissions and therefore will not significantly increase any dust emissions that had already been evaluated in the FES.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-024	PO 500231200 & PO 500226854	Use of portable combustion equipment for fence repairs for WRSS & CTMU excavations	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-026	Procedure 74TI-9FW02	Feedwater Portable Corrosion Product Monitor Test Instruction	The use of portable corrosion monitors has the potential to increase groundwater withdrawal. Discharges from the monitors has potential to affect groundwater quality by increasing the probability for inadvertent discharges or increases in evaporation pond levels as a result of increased flows to existing systems used to manage water releases.	The FES addresses groundwater use and quality. The installation of the coolers will not cause groundwater use to exceed any quantity allotted by the state.  The systems used to manage water discharges from the site were evaluated and found capable of handling the increased flow. Therefore the use of the equipment would not impact groundwater quality by increasing the probability for unintentional discharges or by significantly increasing evaporation ponds levels.	There was no unreviewed environmental question because the groundwater use was within the current allotment from the state. In addition, discharges from the monitors would not impact systems used to manage water releases.



## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-027	Procedure 74OP-9SC02	Secondary Sampling Instructions	The use of portable corrosion monitors has the potential to increase groundwater withdrawal. Discharges from the monitors has potential to affect groundwater quality by increasing the probability for inadvertent discharges or increases in evaporation pond levels as a result of increased flows to existing systems used to manage water releases.	The FES addresses groundwater use and quality. The installation of the coolers will not cause groundwater use to exceed any quantity allotted by the state.  The systems used to manage water discharges from the site were evaluated and found capable of handling the increased flow. Therefore the use of the equipment would not impact groundwater quality by increasing the probability for unintentional discharges or by significantly increasing evaporation ponds levels.	There was no unreviewed environmental question because the groundwater use was within the current allotment from the state. In addition, discharges from the monitors would not impact systems used to manage water releases.
00-028	PR 229965	Purchase of gas engine driven pressure washer for hi line insulator and transformer bushing cleaning	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-029	PR 218073	Use of portable combustion equipment for road maintenance at PVNGS for year 2000	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-030	PR 231775	Use of portable combustion equipment for roof repair at the Chemical Production Building	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-032	DFWO 00916319	Louver removal in Unit 1 Towers 1, 2, and 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-033	DFWO 00916338	Louver removal in Unit 3 Towers 1, 2, and 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-034	DFWO 00923369	Louver removal in Unit 2 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-035	DFWO 00912462	Louver removal in Unit 1, Tower 2	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-037	WO 2304783 & Contractor Contracts	WRSS October 2000 Pipe Repair and Inspection Outage	Inspection and repair activities involves the rental of diesel driven pumps that could potentially increase effluent emissions. It also involves offsite excavation and construction activities.	The FES does not address portable emission sources. The equipment purchased will be permitted and operated in accordance with county environmental regulations.  Impacts from offsite excavation and construction during necessary pipeline repairs were evaluated in the FES.	There was no unreviewed environmental question because the combustion equipment will be permitted and operated in accordance with county environmental regulations.  The FES concludes that any disturbance of the land resulting from necessary repairs will be practically no concern and temporary.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-042	WDP-ZZ-535	Install Site Storm Drainage Ditch Concrete Barrier	The installation of a barrier in the drainage ditch would cause temporary pools of standing water to collect upstream of the barrier. These pools could impact groundwater quality due to releases through the gunnite lined the ditches.	The FES addresses impacts on groundwater quality. The amount of material that could seep past the gunnite-lined ditches would be insignificant and could not impact groundwater quality. The installation of the barrier would reduce the potential for groundwater impacts by preventing unintentional discharges from reaching the sedimentation basin.	There was no unreviewed environmental question because the amount of water potentially seeping past the gunnite-lined ditches could not impact groundwater quality.
00-043	Temporary Mod 2308715	Connect ILRT Equipment to Unit 2 Containment	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-045	ENG WO 2314453	Louver removal in Unit 2 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-046	WDP-GF-363	Use of portable combustion equipment for the fabrication and installation of gravity filter sump cover	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-047	PR 250483	Hydroblaster Rental	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-048	DMWO 228402	Addition of Switchyard Bay 7 Transmission Line	The scope of work involved the addition of transmission lines on site property.	The environmental impacts associated with transmission lines and transmission line corridors were previously evaluated in the FES. The proposed modification would run an additional transmission line in an already evaluated corridor. Therefore there would be no new or unreviewed environmental impacts.	There was no unreviewed environmental question because the transmission lines would be in an existing transmission line corridor that has already been evaluated in the FES.
00-049	TMWO 2328218	The use of portable combustion equipment to supply temporary power to support pressurizer heater A06 Repair	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-051	CW6SR637	The use of portable combustion equipment to support CTMU Repair	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-052	WO 2335481	WRSS December 2000 Pipe Inspection Outage	Inspection and repair activities involve the rental of diesel driven pumps that could potentially increase effluent emissions. It also involves offsite excavation and construction activities.	The FES does not address portable emission sources. The equipment purchased will be permitted and operated in accordance with county environmental regulations.  Impacts from offsite excavation and construction during necessary pipeline repairs were evaluated in the FES.	There was no unreviewed environmental question because the combustion equipment will be permitted and operated in accordance with county environmental regulations.  The FES concludes that any disturbance of the land resulting from necessary repairs will be practically no concern and temporary.
00-055	Process Test LS 00-004	Recalcined Lime Feed Modification	The modification installs equipment for use in handling lime at the storage silos. It has the potential to increase particulate emissions.	The FES does evaluate the impacts of emissions from various industrial sources at the site. It does not address lime handling specifically. The use of the equipment contains dust control devices such that any emissions are insignificant compared to other sources. The use of the equipment will be in accordance with existing county air regulations.	There was no unreviewed environmental question. The use of the equipment will not significantly increase emissions and will be conducted in accordance with county regulations.

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-056	WDP-ZO-248	1998 WRSS Flood Control Pipe Reinforcement Outage (note evaluation was performed for work done in 1998)	Inspection and repair activities involves the rental of diesel driven pumps that could potentially increase effluent emissions. It also involves offsite excavation and construction activities.	<p>The FES does not address portable emission sources. The equipment purchased will be permitted and operated in accordance with county environmental regulations.</p> <p>Impacts from offsite excavation and construction during necessary pipeline repairs were evaluated in the FES.</p>	<p>There was no unreviewed environmental question because the combustion equipment will be permitted and operated in accordance with county environmental regulations.</p> <p>The FES concludes that any disturbance of the land resulting from necessary repairs will be practically no concern and temporary.</p>

## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-057	WDP-TB-559	Redhawk Pipeline Construction	<p>The work package involved the construction and installation of an underground pipeline between PVNGS and the Redhawk Power Plant to supply treated effluent water. The evaluation was only for the construction and not operation of the pipeline. The installation of the pipeline has the potential for air, water, and land use impacts.</p>	<p>With respect to air emissions, all excavation activities and portable combustion equipment use would be in accordance with county regulations. The associated air impacts as a result of construction would be within the scope of the impacts already assessed for past construction at the site as described in the FES.</p> <p>With respect to land use, the potential to disturb archeological sites or harm endangered vegetation / animals were evaluated. The actual construction site was inspected and no archeological or endangered species of plants / animals were identified.</p> <p>The construction would transgress an existing ephemeral wash that is classified as a waterway of the US. As a result, any construction activities in these areas will be conducted in accordance with existing state and federal requirements.</p>	<p>There was no unreviewed environmental question because all construction activities will be performed in accordance with existing federal, state, and county requirements. All necessary permits and plans will be submitted to the appropriate regulatory agency prior to conducting work in an affected area.</p>



## 2000 Annual Environmental Operating Report

TABLE III - 1  
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2000  
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
00-061	WO 2339086	Use of portable combustion equipment for sand blasting and coating clarifier 5 and 11	The purchase / rental of equipment could increase airborne emissions from the site resulting from the combustion of fossil fuel.	The FES does not address portable emission sources. The equipment purchased / rented will be permitted in accordance with county regulations.	There was no unreviewed environmental question because the equipment will be operated in accordance with county regulations.
00-063	SWMS ENG 2314440	Louver removal in Unit 1 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.
00-064	SWMS ENG 2314463	Louver removal in Unit 3 Cooling Towers 1, 2, & 3	The removal of louvers from the cooling towers has the potential to affect emissions from the cooling towers.	The FES and salt drift monitoring program identified impacts associated with cooling tower drift. The scope of work performed and the number of louvers removed would not cause a significant increase in emissions and the original impact assessments remain valid.	There was no unreviewed environmental question because the scope of work performed would not cause any significant increase in emissions. The towers will continue to be operated in accordance with county regulations.

\* FES - Final Environmental Statement; ER-OL - Environmental Report, Operating License Stage