

**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**  
**FACT SHEET**  
(Pursuant to NAC 445A.236)

**Permittee Name:** AES Industries, Inc.  
P.O. Box 781147  
Tallassee, AL 36078

**Permit Number:** NEV90033

**Location:** AES Industries, Inc.  
270 U.S. Hwy. 95A N  
Yerington (Wabuska), Lyon County, NV 89447-9726

Evaporation Ponds:  
Township 15N, Range 25E, SE $\frac{1}{4}$  of SE $\frac{1}{4}$  of Section 21  
Latitude: 39° 8' 41" N, Longitude: 119° 10' 53" W

**General:** From 1984-2003, plastic film was manufactured at this Wabuska location, first by O'Sullivan Plastics, and later by PolyOne Engineered Films. In 1991, O'Sullivan Plastics installed two single-lined (30-mil conventional polyethylene or CPE) evaporation pond. The two evaporation ponds were constructed in a series-flow arrangement and received the plant's process wastewater discharge including non-contact blow-down (cooling towers and boilers), water softener brine, Reverse Osmosis (R.O.) concentrate, and a contact wastewater stream consisting of cooling and spray wash water (process contact) from the plant's extrusion rolling mills. The first pond also operated as an emergency fire storage pond and was refilled to required fire-storage level in low process flow or hot weather periods by an onsite supply well. The plant's domestic (sanitary) wastewater was separately discharged into an on-site septic system. The smaller of the two containment ponds (pond #1) measured  $\frac{1}{2}$ -acre (surface area)  $\times$  4 ft. (operating depth), while the larger containment pond (pond #2) had the same operating depth as the first pond but twice the evaporative surface area.

In 2006, the discharge permit was transferred to AES Industries, which now owns and operates the facility as a sheet metal fabrication plant (e.g. HVAC ductwork). The current owner no longer operates the plastics manufacturing equipment or discharges any process wastewater but retains use of the first pond for fire storage. Accumulated sludge (pond #1) and salt (pond #2) from the plastics-manufacturing period remain in both pond basins. In 2010, AES Industries requested renewal of this discharge permit to allow for future use of the ponds for process wastewater storage.

**Bureau of Corrective Actions Sites:** There is no Bureau of Corrective Action (BCA) remediation site located within a one-mile radius of the AES Facility in Wabuska.

**Wellhead Protection Area:** The AES Facility operates its own supply well (< 25 employees). Located within 1,000 ft. and cross-gradient from the two evaporation ponds is Linda's Wabuska Bar. This bar operates its own Non-Community (NC) supply well and is ranked as High Vulnerability for the categories of Inorganic Contaminants (IOC) and the Total Coliform Rule (TCR). When last operated (100 employees), the plastics plant had provided potable water to its employees and process supply with a treatment system including water softening and R.O. to address elevated TDS and arsenic. The plant's potable treatment system is no longer in use.

**Receiving Water Characteristics:** The groundwater gradient is north of northwest (NNW) from the ponds. Down-gradient of the AES ponds is a wetlands feature formed from the process discharge (geothermal water) from a nearby Wabuska geothermal plant. The AES ponds are equipped with two monitoring wells. MW-1 was originally installed by O’Sullivan Plastics up-gradient of pond #1. In 2005, PolyOne Engineered Films installed MW-2 down-gradient of pond #2. MW-1 data was last reported to the Bureau of Water Pollution Control (BWPC) in 2003 by PolyOne Engineered Films. Depth to groundwater was shallow ( $\leq 10$  ft.). The average background TDS level (9,700 mg/l) is brackish and exceeds the state’s potable TDS limit (1,000 mg/l). Data from MW-2 has not been reported to BWPC. A consultant’s report from McGinley & Associates did indicate that MW-2 was cased to 20 ft. depth, so any data reported from the MW-2 well would also be from the shallow aquifer.

**Flow:** The two ponds were rated for a process wastewater discharge of 10,000 / 14,000 GPD. Per the last BWPC inspection in October 2010, pond #1 contained 3½ ft. of water (fire storage) supplied from the plant’s well, while the basin of pond #2 was nearly dry and only contained minimal rainfall storage from a past storm event. The metering flume used to measure the plant’s process wastewater flow was inactive.

**Process Wastewater Discharge Requirements:** The ponds are currently inactive, except for fire storage in pond #1. If reactivated for process wastewater storage, discharge sampling at the metering flume is to resume according to the monitoring requirements provided in Table 1 below.

**TABLE 1: DISCHARGE LIMITATIONS<sup>1</sup>**

PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30-Day Average	Daily Maximum	Sample Location	Measurement Frequency	Sample Type
Flow, Gallons per Day	10,000	14,000	Flume	Continuous	Flow Meter
pH, Std. Unit	-	M&R	Flume	Quarterly	Discrete
TDS, mg/l	-	M&R	Flume	Quarterly	Discrete
VOCs by EPA Method 8260B, report all parameters	-	M&R	Flume	Quarterly	Discrete
NDEP Profile I, report all parameters	-	M&R	Flume	Quarterly	Discrete
Oil & Grease, mg/l	-	M&R	Flume	Quarterly	Discrete
Freeboard, ft. (See Permit Part I.A.19)	-	2.0 ft. (minimum)	Each Pond	Monthly	Field Measurement

1. If no process wastewater flow was discharged into either pond during the entire quarter, indicate “No Discharge” on the DMR form.

**Process Wastewater Discharge Requirements:** Monitoring wells MW-1 and MW-2 shall be

sampled and reported according to the schedule provided in Table 2 below.

**TABLE 2: GROUNDWATER MONITORING (MW-1, MW-2)<sup>1</sup>**

PARAMETER	GROUNDWATER LIMITATIONS	MONITORING REQUIREMENTS	
		Measurement Frequency	Sample Type
TDS, mg/L	Monitor & Report	Quarterly <sup>3</sup>	Discrete
Chlorides, mg/L	Monitor & Report	Quarterly <sup>3</sup>	Discrete
Nitrate as N, mg/L	Monitor & Report	Quarterly <sup>3</sup>	Discrete
Total Nitrogen as N, mg/L	10.0 <sup>2</sup>	Quarterly <sup>3</sup>	Discrete
Depth to Groundwater, ft.	Monitor & Report	Quarterly <sup>3</sup>	Field Measurement
Groundwater Elevation, ft.	Monitor & Report	Quarterly <sup>3</sup>	Field Measurement
VOCs by EPA Method 8260B, report all parameters	Monitor & Report	Annually (4 <sup>th</sup> Quarter)	Discrete
NDEP Profile I, report all parameters	Monitor & Report	Annually (4 <sup>th</sup> Quarter)	Discrete

1. Groundwater samples shall be taken only after purging (3) well volumes of groundwater from the monitoring well.
2. See Permit Part I.A.22 for groundwater total nitrogen (TN) action levels.
3. If no process wastewater flow was discharged into either pond during the entire calendar year, the measurement frequency for all monitoring parameters specified above in Table 1 shall be reduced to annually (4<sup>th</sup> Quarter) for the monitoring wells MW-1 and MW-2.

**Schedule of Compliance (SOC): (all SOC deliverables shall be addressed to the attention of the Compliance Coordinator, Bureau of Water Pollution Control):**

- The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- The Permittee shall notify the Division in writing not more than fourteen (14) calendar days prior to the resumption of the discharge of process wastewater into the evaporation ponds.
- Prior to the resumption of the discharge of process wastewater into the evaporation, the Permittee shall have the pond liners inspected and evaluated by a licensed engineer (Nevada P.E.) and have submitted a copy of the inspection report to the Division for its review and approval.

**Procedures for Public Comment:** The Notice of the Division's intent to renew discharge permit NEV90033, subject to the conditions contained within the permit is being sent to the **Mason Valley News** and **Reno Gazette-Journal** newspapers for publication. The notice is also being electronically mailed to all interested persons requesting listing on our public notification mailing list. Anyone wishing to comment on the proposed permit can do so in writing within a period of thirty (30) calendar days of the date of publication of the public notice in the newspapers. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **Monday, May 30, 2011, by 5:00 P.M. PST.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination:** The Division has made the tentative determination to renew discharge permit NEV90033 for a five-year permit term.

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Bureau of Water Pollution Control

Date: April 20, 2011