



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 15, 2008

In Reply Refer To: WTR-7

Russ Densmore
American AVK Company
2155 Meridian Blvd
Minden, Nevada 89423

Re: November 26, 2007 Clean Water Act Inspection

Dear Mr. Densmore:

Enclosed is the January 11, 2008 report for our inspection of the American AVK facility at the above address in Minden, Nevada. Please submit to EPA a short response letter to the Summary of Findings in Section 3.0 of this report by **February 29, 2008**. Your letter should include an individual response to each of the numbered findings in Section 3.0. Please send your letter to the attention of Anna Yen at EPA (and include the code "WTR-7" in the address above), with copies to Douglas County and Nevada Division of Environmental Protection.

The main findings are summarized below:

1. This facility is not subject to any federal categorical standards, nor is it a significant industrial user.
2. Douglas County should establish local limits and should issue the facility a permit to regulate oil and grease, pH, and any other pollutants of concern.
3. Douglas County should work with the facility to identify sample points, which are necessary for ensuring compliance with permit limits.

We would like to thank you for your helpfulness and courtesy during the inspection. We remain available to you and Douglas County to assist in any way. If you have any questions, please call Anna Yen at (415) 972-3976 or e-mail her at yen.anna@epa.gov.

Sincerely,
<Original
signed by>
Ken Greenberg
Chief, CWA Compliance Office

Enclosure

cc: Catherine Pool, Douglas County Community Development, enclosure by e-mail
Joe Maez, Nevada Division of Environmental Protection, enclosure by e-mail

**U.S. Environmental Protection Agency
Region 9
Clean Water Act Compliance Office**

NPDES Compliance Evaluation Inspection Report

Industrial User: American AVK Company
Industrial User Address: 2155 Meridian Blvd., Minden, NV 89423
Inspection Date: November 26, 2007

EPA Region 9 Inspectors: Greg Arthur, Environmental Engineer
Anna Yen, Environmental Engineer

Water Division, CWA Compliance Office

Douglas County Inspectors: Catherine Pool, Civil Engineer Senior
Steve Rippe, Utility Technician I
Tom Toflin, Utility Technician Trainee

Douglas County Community Development

State Inspector: Joe Maez, Staff III Engineer

Nevada Division of Environmental Protection, Bureau
of Water Pollution Control, Technical Services

**Facility Contacts During
Inspection:** Russ Densmore, Vice President, Operations
Randy Nelms, Production Supervisor
Mark Nagy, Maintenance Lead

Report Prepared by Anna Yen on January 11, 2008.

1.0 Scope and Purpose

The State of Nevada (“the State”) does not have delegation of the CWA authority regarding pretreatment. The local publicly owned treatment works (POTW), the Douglas County North Valley Wastewater Treatment Plant, does not discharge to surface waters. The receiving water body is groundwater via percolation from reuse irrigation. Therefore, the State’s Nevada Division of Environmental Protection (NDEP) has issued a groundwater permit and not an NPDES permit to the treatment plant.

Without an NPDES permit, the POTW does not have pretreatment requirements, and the municipality, Douglas County Community Development (“Douglas County” or “the County”), does not have a pretreatment program.¹ In effect, the discharge of industrial facilities is unregulated at the state and local levels. EPA provides pretreatment regulation of these facilities at the federal level. The purpose of the inspection on November 26, 2007 was to determine the standards and requirements that do apply to these facilities and to ensure compliance with those standards and requirements.

1.1 General and Process Description

American AVK is owned by AVK, a global company based out of Denmark. This American AVK facility was built in the beginning of 2006 and began operations in May 2007. It manufactures fire hydrants and water valves for customers in North America. This facility produces 35 to 100 fire hydrants per day and a little less than 200 valves per day.

American AVK does not perform casting; it buys already-cast parts from out-of-state and outside the country, including Indiana, China, and Venezuela. Castings are of grey iron, ductile iron, bronze, or stainless steel. The facility also purchases stainless steel and mild steel barstock. The following functions are performed at this facility: machining, assembly, powder coating, testing, packing, and shipping.

Castings are placed in a blaster to remove oxides on the surface. The blaster contains steel shot which is mechanically thrown against the metal. The resulting particulates are sent through a baghouse and then to a plantwide air filter.

Machining (e.g., turning, milling, drilling, threading, broaching) is performed on these parts as necessary for the manufacture of fire hydrants and valves. The synthetic coolant that is used in the metalworking machines is circulated in a closed-loop system and reused in the machines. The metal shavings that exit from the machines are collected in bins and sent offsite.

The clean castings are hung on hooks and transported into a housing to be powder coated by electrostatic spray and heated in a natural-gas-fired oven. The parts then continue on through an electrostatic fluidized bed dipping process, followed by heating. The parts are then cooled with air.

A. Fire Hydrants

American AVK manufactures both dry-barrel and wet-barrel fire hydrants. Dry-barrel fire hydrants are necessary in areas of freezing temperatures because these types of fire hydrants do not store water in the barrel.

¹ Douglas County has been working on establishing local limits for the past several years.

Ductile iron, bitumen-coated pipes are cut to various lengths to serve as the buried stem portion of the valve.

Once the parts are assembled, the fire hydrants receive a final coat of paint, in the color as requested by the customer. The paint is applied in a spray booth, then dried by electric infrared. There is no water discharge.

Fire hydrant hydrotesting is performed to ensure that, when installed and operating under pressure, no leaks occur. Testing is conducted by running water into the fire hydrant at pressures up to 500 psi. The pressure test water recirculates. The used water – approximately 30 gallons per day - runs into a floor trench in this testing area of the facility. *See Photo 1 in the Appendix.* A filter located in the trench catches large solids (mostly wood debris) before the wastewater flows to the sewer system.

B. Valves

American AVK manufactures water valves, primarily gate valves.

Hydrotesting of valves is similar to testing of fire hydrants. Water is run into the valve up to a certain pressure to ensure that no leakage occurs. The pressure test water recirculates. The used water runs into a trough which ultimately drains to a floor trench in this testing area of the facility. There are five testing stations, but the facility operates a maximum of three at one time. A total of approximately 100 gallons of wastewater flows to the floor trench per day. *See Photo 2 in the Appendix.* The same filter as described for the testing of fire hydrants catches large debris before the wastewater continues on to the sewer system.

1.2 Sources of Facility Wastewater and Other Wastes

This facility generates wastewater streams from the testing of fire hydrants and gate valves. The wastewater drains to a floor trench which leads to the sewer system.

Other liquid wastes are spent coolants which are hauled offsite by Safety-Kleen. Solid wastes that are hauled offsite are metal scraps from the metal machining.

1.3 Facility Process Wastewater Treatment System

No treatment system.

1.4 Wastewater Discharge

Wastewater from this facility will discharge to the Douglas County North Valley Wastewater Treatment Plant. The treatment plant is owned and operated by Douglas County. The Douglas County North Valley Wastewater Treatment Plant is operated under a State groundwater permit (No. NEV60025).

2.0 Compliance with Federal Categorical Standards

This facility is not subject to any federal categorical standards. Because the facility does not perform phosphating (a typical preparation step before powder coating) before the powder coating step, the facility is not subject to the federal categorical standard for metal finishing (40 CFR 433).

2.1 Compliance with Other Federal Pretreatment Requirements

This facility is not a significant industrial user (SIU) because it is not subject to a federal categorical standard, does not discharge an average of 25,000 gallons per day or more of process wastewater to the POTW, and has no reasonable potential for adversely affecting the POTW's operation or for violating Pretreatment Standards.

2.2 Compliance with Local Limits

Douglas County has not yet established any local limits. Douglas County should develop local limits to protect the POTW from adverse impacts and to help prevent violations of its State-issued permit.

Once the County has established local limits, it should issue the facility a permit to regulate oil and grease, pH, and any other pollutants of concern that the County identifies in the effluent. Since the County does not currently require the facility to perform routine monitoring, analysis, and reporting to demonstrate continued compliance, nor does the County perform monitoring and analysis itself, the facility does not have any sample points. The County should work with the facility to identify sample points. Sample points will be necessary for ensuring compliance with permit limits.

3.0 Summary of Findings

1. This facility is not subject to any federal categorical standards.
2. This facility is not an SIU.
3. Douglas County should issue the facility a permit to regulate oil and grease, pH, and any other pollutants of concern that the County identifies in the effluent. Douglas County will need to establish local limits prior to issuing permits.
4. Douglas County should work with the facility to identify sample points. Sample points will be necessary for ensuring compliance with permit limits.

Appendix: Photos



Photo 1

Photo #1: Floor trench at fire hydrant hydrotesting station
Taken by Greg Arthur on November 26, 2007



Photo 2

Photo #2: Trough and floor trench at a valve hydrotesting station
Taken by Greg Arthur on November 26, 2007