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

July 21, 2008

In Reply Refer To: WTR-7

Kirk Muller
Maxton Manufacturing Company
1728 Orbit Way
Minden, Nevada 89423

Re: May 21, 2008 Clean Water Act Inspection

Dear Mr. Muller:

Enclosed is the July 18, 2008 report for our inspection of the Maxton Manufacturing 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 **September 15, 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 Minden Gardnerville Sanitation District (MGSD) 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. The facility's non-domestic wastewater discharge to the sewer system appears to be low-volume and dilute.
3. The facility makes effective use of an evaporative unit to decrease the volume of its wastewater streams. EPA suggests that the facility consider also sending its high-pressure wash water to the evaporative unit, thereby becoming a zero discharger.

We would like to thank you for your helpfulness and courtesy during the inspection. We remain available to you and MGSD 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: Frank Johnson, Minden Gardnerville Sanitation District, 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:	Maxton Manufacturing Company
Industrial User Address:	1728 Orbit Way, Minden, NV 89423
Inspection Date:	May 21, 2008
EPA Region 9 Inspectors:	Anna Yen, Environmental Engineer Water Division, CWA Compliance Office
Douglas County Inspectors:	Frank Johnson, District Manager Minden Gardnerville Sanitation District
Facility Contact During Inspection:	Kirk Muller, Production Manager

Report Prepared by Anna Yen on July 18, 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 Minden-Gardnerville Wastewater Treatment Facility, 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, Minden Gardnerville Sanitation District (MGSD), does not have an approved 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 May 21, 2008 was to

[1] MGSD has enacted a sewer use ordinance that contains general prohibitions against discharges contributing to interference, pass-through, explosive conditions, public nuisance, radioactivity, cyanide over 2.0 mg/l, and pH outside 5.5 and 9.0 s.u. The ordinance does not establish any other numerical local limits to protect the sewer systems from the adverse effect of non-domestic wastewaters. It has not been reviewed by EPA as part of an approved pretreatment program.

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

Maxton Manufacturing Company ("Maxton") began operations at this facility in 1995. This facility manufactures elevator hydraulic control valves.

The facility's raw materials are aluminum barstock and castings, purchased from outside the company. The facility has nine CNC machines to perform metalworking such as milling and drilling. The facility does not perform any lathe work. There are no floor drains in the metalworking area of the facility.

A water-based coolant that is 8-10% water-soluble oil is used in the CNC machines. The coolant is recycled by decanting, oil is skimmed off the surface, the coolant is filtered, and the cleaned coolant is sent back to the CNC machines for reuse. Used oil is sent offsite to Clear Water Environmental. Once the coolant is spent, the coolant is sent to one of two 250-gallon storage bins which are piped to an evaporative unit. The water is evaporated off in the evaporative unit. The slurry left behind is hauled offsite by Safety-Kleen.

Dirty water from floor cleaning – from both the floor scrubber machine and mop buckets – are sent to the storage bins of the evaporative unit. A vacuum drum (a 55-gallon drum equipped with a hose and pump) is used to transfer the dirty water from the floor scrubber and from the CNC machines to the storage bins.

Metal shavings are hauled offsite by an outside company for recycling. This company provides the collection bins to Maxton. These bins allow shavings to drain. Maxton sends the oils to its evaporative cooler.

After machining, parts are deburred and washed. The facility does not use any water for deburring operations.

The wash room does not have any floor drains and consists of a hot tank, wash sink and hose, and a high-pressure washer. Below is a description of the wash process and how the wastewater is handled:

1. **Hot tank** (*see Photo 1 in the Appendix*) – The tank is full of a heated soapy water solution. The parts are submerged in the solution. The tank contains approximately 60 gallons of solution, which is made up of a cleaning compound diluted with water. The cleaning compound contains tallow fatty amine ethoxylate and sodium tripolyphosphate. Oil is skimmed off the surface of the solution and sent to the storage bins of the evaporative unit. Once per month, the used solution is changed out for new solution. The used solution is transferred to the storage bins of the evaporative cooler via the vacuum drum.
2. **Wash sink** (*see Photos 2 and 3*) – The parts are washed off by hose with the same type of soap solution as in #1 above. The used solution circulates in a closed loop,

from the sink to a container under the sink. The cleaning compound, with water, is originally added to this container. The solution is then pumped to a hot water heater and sent through the hose to the sink.

3. **High-pressure washer** (*see Photos 4 - 6*) – The parts are rinsed off with a high-pressure washer which uses tap water. The dirty water travels from the sink to a container under the counter. This wastewater is then pumped out of the container through a pipe that leads to the janitor room next door, finally discharging out of the pipe through a nylon sock filter to a floor drain leading to the local sewer system.

The parts are then assembled by hand. Once assembled, each elevator control valve is tested before it is shipped out. The testing station has actual elevators (but do not look like ordinary elevators because they are neither outfitted nor designed to carry people) that are controlled by computers. While a valve is being tested by running the elevator to various floors, a velocity profile is traced by computer. The facility produces valves of different hydraulic oil flow-through capacities. The valves also go through other types of testing including air testing.

The testing area has floor drains to catch any hydraulic oils that might drip to the floor. The floor drains' primary purpose is to catch hydraulic oils should there be a blowout or accident. The floor drains lead to a pit. The facility has not had any incidents, so it has not had to clean out the pit. However, if necessary, the facility would have to vacuum out the pit and send the hydraulic oil to the same filter that it currently uses for the hydraulic oil system.

The long sink-type basins in which the valves are tested catch hydraulic oils that leak out while the valve is in operation. The basins are pumped out, delivering the hydraulic oils through a filter bag to a hydraulic oil tank. Inside the hydraulic oil tank are a few 5-micron filters which filter the hydraulic oil before it is sent back for reuse.

Outside of the manufacturing area, the facility has two lunch rooms and restrooms. The floor drains in the restrooms have been capped.

1.2 Facility Wastewater Sources and Other Wastes

Maxton generates wastewater from the following sources:

- Washing of metal parts after metalworking
- Floor cleaning
- CNC machines (spent coolant)

Two wastewater streams originate from the first source above. One is from changeout of the used soap solution in the hot tank. The used solution is sent to the storage bins of the evaporative cooler. The other wastewater stream is from the high-pressure washer. The dirty rinse water drains out of the sink. This wastewater is conveyed via hard piping to the janitor room floor drain which discharges to the local sewer system.

Wastewater generated from the second and third sources listed above - dirty wash water from floor cleaning and spent coolant from the CNC machines - are sent to the evaporative unit.

Other liquid waste streams generated by the facility are used oil and hydraulic oils. Used oil is hauled offsite by Clear Water Environmental. Hydraulic oils are captured and either contained in a pit below the testing area or sent to the hydraulic oil tank where the oils are filtered and reused.

The slurry remaining in the evaporative unit is hauled offsite by Safety-Kleen for hazardous waste disposal. The only solid wastes are metal scraps from the metal machining. These solid wastes are hauled offsite by an outside company to be recycled.

1.3 Facility Process Wastewater Treatment System

No treatment system.

1.4 Wastewater Discharge

The only process-related wastewater that the facility discharges to the sewer system is dirty wash water from the high-pressure wash step of the parts-washing process. The wash water would be expected to contain aluminum from the parts that are washed, along with oil and grease from the oils used in the metalworking processes. However, the wash water is most likely dilute because the parts have already undergone two steps of the wash process prior to the high-pressure wash step.

Based on this inspection, the non-domestic wastewaters that the facility discharges to the sewer system appear to be of low volume and relatively dilute. This wastewater discharges to the Minden-Gardnerville Wastewater Treatment Facility. The treatment plant is owned and operated by the Minden Gardnerville Sanitation District. The Minden-Gardnerville Wastewater Treatment Facility is operated under a State groundwater permit (No. NEV40027).

Since the facility has only one low-volume wastewater stream discharging to the sewer system, EPA suggests that the facility consider also sending its high-pressure wash water to its evaporative unit instead of discharging into the floor drain of the janitor room. Among other considerations, the facility would need to determine if soapy residue on the parts were minimal enough to avoid inhibiting the evaporation process at the evaporative unit. By becoming a zero-discharger, the facility would be subject to fewer pretreatment regulatory requirements since its wastewater streams would not be flowing through the sewer system or ending up at a POTW.

2.0 Compliance with Federal Categorical Standards

This facility is not subject to any federal categorical standards (40 CFR 405 through 471). In particular, it is not subject to the metal finishing standard (40 CFR 433) since it does

not perform any of the six core operations listed in the applicability paragraph of the standard. The six core operations listed in 40 CFR 433 are electroplating, electroless plating, chemical coating, chemical milling/etching, anodizing, and printed circuitboard manufacturing.

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. In addition, it discharges less than 25,000 gallons per day of process wastewater to the POTW. Its wastewater is primarily wash water from the last step of a 3-step wash process for cleaning aluminum parts; therefore, it has no reasonable potential for adversely affecting the POTW's operation or for violating Pretreatment Standards.

2.2 Compliance with Local Limits

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

Though the facility's non-domestic wastewater discharge to the sewer system is currently low-volume and dilute, MGSD should have a mechanism to confirm this on a regular basis.

3.0 Summary of Findings

1. This facility is not subject to any federal categorical standards.
2. This facility is not an SIU.
3. This facility's non-domestic wastewater discharge to the sewer system appears to be low-volume and dilute.
4. The manufacturing areas of the facility that generate process-related wastewaters or other liquid waste streams do not have floor drains. One exception is the testing area, but the floor drains in this area do not connect to the local sewer system.
5. This facility makes effective use of an evaporative unit for its wastewater streams which significantly reduces the amount of wastewater discharging to the local sewer system.
6. The facility should consider sending its dirty high-pressure wash water from the wash room to the evaporative unit, thereby becoming a zero-discharger.

Appendix: Photos

Photo 1

Hot tank in wash room – Step #1 of the parts-washing process
Taken by Anna Yen on May 21, 2008

Photo 2

Wash sink in wash room – Step #2 of the parts-washing process
Taken by Anna Yen on May 21, 2008

Photo 3

Wash sink, with hot water heater and pump, in wash room – Step #2 of the parts-washing process
Taken by Anna Yen on May 21, 2008

Photo 4

High-pressure washer in wash room – Step #3 of the parts-washing process
Taken by Anna Yen on May 21, 2008

Photo 5

Floor drain in janitor room
– Discharge from Step #3 of the parts-washing process
Taken by Anna Yen on May 21, 2008

Photo 6

Floor drain in janitor room, without sink above floor drain
– Discharge from Step #3 of the parts-washing process
Taken by Anna Yen on May 21, 2008