



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

June 2, 2008

In Reply Refer To: WTR-7

Tom Wandel, Plant Director
Starbucks Coffee
Carson Valley Roasting Plant and Distribution Center
2525 Starbucks Way
Minden, Nevada 89423

Re: November 26, 2007 Clean Water Act Inspection

Dear Mr. Townsend:

Enclosed is the report for our November 26, 2007 inspection of Starbucks Coffee, Carson Valley Roasting Plant and Distribution Center.

The main findings are summarized below:

- 1 Starbucks Carson Valley does not qualify as a significant industrial user requiring permitting, or for regulation as a categorical industrial user subject to Federal standards.
- 2 Starbucks Carson Valley generates very little process-related wastewaters. The wastewaters that are generated are not high-strength, toxics-bearing, solvent-bearing, or acidic.
- 3 Starbucks has instituted numerous clean and waterless practices. Wastewater discharges can enter the sewers only through a small number of floor drains since most of the facility is constructed without floor drains.

I appreciate your helpfulness. I remain available to assist Starbucks, Douglas County, or the State of Nevada in any way. Please do not hesitate to call me at (415) 972-3504 or e-mail at arthur.greg@epa.gov.

Sincerely,

Greg V. Arthur
CWA Compliance Office

Enclosure

cc: Kathy Poole, Douglas County
Joe Maez, Nevada DEP



U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Industrial User: Starbucks Coffee
Carson Valley Roasting Plant and Distribution Center
2525 Starbucks Way, Minden, Nevada 89423
Non-Significant Industrial User

Treatment Works: Douglas County
North Valley Wastewater Treatment Facility
Nevada Permit NEV60025

Pretreatment Program: None

Date of Inspection: November 26, 2007

Inspection Participants:

US EPA: Greg V. Arthur, Region 9, CWA Compliance Office, (415) 972-3504
Anna Yen, Region 9, CWA Compliance Office, (415) 972-3976

State of Nevada: Joe Maez, Division of Environmental Protection, (775) 687-9431

Douglas County: Kathy Poole, Civil Engineer Senior, (775) 782-6274
Steve Rippe, Utility System Technician, (775) 782-9989

Starbucks Coffee: Cliff Townsend, Senior Plant Engineer, (775) 267-6207
Tom Wandel Plant Director, (775) 267-6222

Report Prepared By: Greg V. Arthur, Environmental Engineer
June 2, 2008



1.0 Scope and Purpose

On November 26, 2007, EPA, the Nevada Division of Environmental Protection (“Nevada NDEP”), and Douglas County conducted a compliance evaluation inspection of Starbucks Coffee, Carson Valley Roasting Plant and Distribution Center in Minden, Nevada (“Starbucks Carson Valley”). The purpose was to ensure compliance with the Federal regulations covering the discharge of non-domestic wastewaters into the sewers. In particular, it was to ensure:

- Classification in the proper Federal categories;
- Application of the correct standards at the correct sampling points;
- Consistent compliance with the standards; and
- Fulfillment of Federal self-monitoring requirements.

Starbucks Carson Valley is a non-significant industrial user (“non-SIU”) within the sewer service area of the Douglas County, North Valley Wastewater Treatment Facility (“WWTF”) whose compliance was assessed as part of an on-going EPA evaluation of industrial users in sewer districts and municipalities without EPA-approved pretreatment programs. The inspection participants are listed on the title page. Arthur conducted the inspection on November 26, 2007.

1.1 Process Description

Starbucks Carson Valley is a coffee roasting plant and distribution center for Starbucks outlets and dealers. The coffee roasting operations involve bean sifting to remove impurities, green bean blending, roasting followed by water cooling, de-stoning, air quenching, emergency water quench capability, grinding, packaging, and distribution sorting for shipping. Beans move through processing pneumatically by hard piping. The roasters are cleaned through bead blasting with dry ice. Roasting fumes and combustion smoke are drawn through catalytic oxidizers and afterburners. A mechanical room includes air compressors and chillers. Starbucks Carson Valley does not decaffeinate. Operations began in 2003.

1.2 Facility SIC Code

Starbucks Carson Valley is assigned the SIC codes for coffee roasting (SIC 2095) and for packing and crating (SIC 4783).

1.3 Facility Wastewater Sources

Starbucks Carson Valley generates very little process-related wastewater and as a result has only a few floor drain connections to the sewers. There is little water use because of facility wide clean operations such as air knives, pneumatic delivery, zamboni floor cleaning, waterless fume scrubbing, waterless dry ice bead blasting cleaning, and bleed-less chiller cooling. There were no floor drains found in most areas of the facility including the floor dedicated to



bean sifting, grinding, packaging, and distribution. No spoilage or product returns are drained to the sewers. The wastewaters identified to discharge to the sewers are listed below.

- zamboni tail waters to a floor drain (~100 gallons/week) in a storage room
- floor drain in the grinder room
- air compressor condensate to a floor drain in the mechanical room
- work sink in the mechanical room
- portable pressure washer tail water to a floor drain in the mechanical room

1.4 Facility Process Wastewater Handling

Composition - The process-related wastewaters that are discharged to the sewers through floor drains would be expected to contain organics related to the products, surfactants, and perhaps oily grime cleaned off of parts and equipment. There is little expectation that these few wastewaters would contain toxic metals, pesticides, toxic organics, solvents, or acids.

Delivery and Treatment - All process-related wastewaters discharge without treatment through a limited set of floor drains to the sewers.

Discharge and Sampling - There are no consolidated discharge points established for the process-related wastewaters and no sampling results.

1.5 POTW Wastewater Treatment

POTW Configuration – The North Valley WWTF is secondary treatment plant involving a hybrid of activated sludge and extended aeration ponds with anoxic zones to provide some denitrification, followed by secondary clarification, disinfection, rapid infiltration and effluent storage. The North Valley WWTF treats 0.45 million gallons per day on average, of domestic and non-domestic wastewaters, including the wastewaters generated by Starbucks Carson Valley, for disposal through irrigation and infiltration.

State and Federal Legal Authorities – Douglas County operates the North Valley WWTF under the authority of NDEP permit NEV60025 for the discharge of treated wastewater for reclaim and to the ground water. Douglas County does not possess a Federal NPDES permit issued under the Clean Water Act because the treated wastewaters do not discharge to surface waters. Nevertheless, Douglas County does qualify as a publicly-owned treatment works (“POTW”) under the Federal definition in 40 CFR 403.3(o) because the wastewater treatment plant treats mixed domestic and non-domestic wastewaters and the generated sludges are regulated under the Clean Water Act by the Federal regulations in 40 CFR 503.

1.6 Legal Authorities

NDEP Permit for Douglas County - Permit NEV60025 does not require Douglas County to obtain an approved pretreatment program nor does it impose any specific pretreatment



provisions. This is in keeping with the Federal regulations in 40 CFR 403.8(a) that allow for, but do not mandate, States or EPA to require small publicly-owned treatment works (“POTWs”) with design capacities under 5.0 mgd to obtain approved pretreatment programs. As a result, there is no local permit for the discharge from Starbucks Carson Valley to the sewers. Nevertheless, Douglas County has enacted a sewer use ordinance (Appendix D of Title 20) 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 specific numerical local limits to protect the sewer systems from the adverse effect of non-domestic waste-waters. It has not been reviewed by EPA as part of an approved pretreatment program.

1.7 Photo Documentation

Four of the six photographs taken during this inspection are depicted below. The photographs are saved as *starbucks-1.jpg through -6.jpg*.



Photo #1: Zamboni / Storage Room Floor Drain
Taken By: Greg V. Arthur
Date: 11/26/07

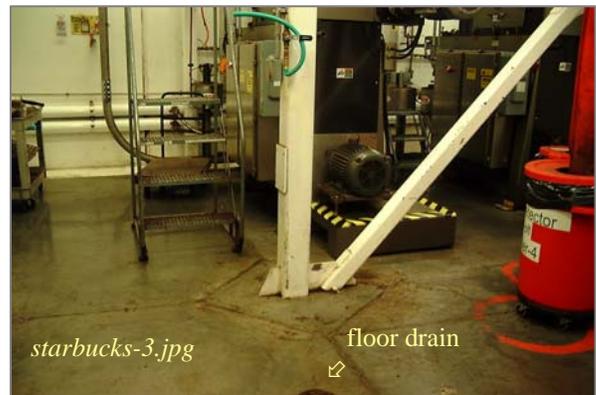


Photo #2: Grinder Room Floor Drain
Taken By: Greg V. Arthur
Date: 11/26/07



Photo #3: Air Compressor Condensate to Drain
Taken By: Greg V. Arthur
Date: 11/26/07



Photo #4: Mechanical Room Floor Drain
Taken By: Greg V. Arthur
Date: 11/26/07



2.0 Sewer Discharge Standards and Limits

Federal categorical pretreatment standards (where they exist), national prohibitions, State groundwater, and the local limits (where they exist) must be applied to the sewered discharges from industrial users. (40 CFR 403.5 and 403.6).

Summary

None of the Federal categorical standards in 40 CFR 407-471 apply to the process wastewater discharges from Starbucks Carson Valley. Douglas County has not and does not have to issue its own permit for the discharges to the sewers because Starbucks Carson Valley does not qualify as a significant industrial user as defined in 40 CFR 403.3. The application of Federal standards, national prohibitions, and local limits were determined through visual inspection.

Requirements

- None.

Recommendations

- None.

2.1 Local Limits and National Prohibitions

Local limits and the national prohibitions are meant to express the limitations on non-domestic discharges necessary to protect the sewers, treatment plants, treatment plant sludges, and their receiving waters from adverse impacts. Generally, technically-based numerical local limits supplant narrative national prohibitions.

National Prohibitions – For POTWs to surface waters, the national prohibitions in 40 CFR 403.5 prohibit discharges that can cause the pass-through of pollutants into the receiving waters, the operational interference of the treatment works, the contamination of the sewage sludge, sewer worker health and safety risks, fire or explosive risks, and corrosive damage to the sewers. However, pass-through and interference as defined in the Federal pretreatment regulations only occur when NPDES permit limits are violated. So in this case, without an NPDES permit for the Douglas County North Valley WWTF, the national prohibitions cannot prohibit discharges that result in violations of the NDEP ground water permit either through the pass-through of pollutants or through an operational interference. They do however prohibit discharges that cause interferences resulting in unpermitted discharges or bypasses to surface waters.

Local Limits – Local limits derived from 40 CFR 403.6 are meant to protect the specific POTW from adverse impacts including violations of all Federal and State permits. So far, however, while there are narrative prohibitions essentially equivalent to the national



prohibitions in the Douglas County sewer use ordinance, there are no numerical local limits in the ordinance beyond 2.0 mg/l cyanide and pH measurements outside of 5.5 to 9.0. Douglas County will have to derive and adopt local limits based on the performance of the wastewater treatment plant and the current regulatory requirements as expressed in the NDEP permit and the Federal sludge regulations. Once adopted their local limits would apply to all non-domestic discharges in its service area.

3.0 Compliance with Sewer Discharge Standards and Limits

All non-domestic wastewater discharges to the sewers must comply with Federal categorical pretreatment standards, local limits and the national prohibitions. 40 CFR 403.5(a,b,d) and 40 CFR 403.6(b).

Industrial users must comply with the provision restricting the bypass of treatment necessary to comply with any pretreatment standard or requirement. 40 CFR 403.17(d).

Starbucks Carson Valley does not qualify as a significant industrial user and no Federal categorical standards apply. The discharges to the sewers through the floor drains would not be expected to violate the national prohibitions, or any local limits to be derived in the future by Douglas County to protect its sewerage works.

Requirements

- None.

Recommendations

- None.

3.1 National Objectives

The general pretreatment regulations were promulgated in order to fulfill the national objectives to prevent the introduction of pollutants that:

- (1) cause operational interference with sewage treatment or sludge disposal,
- (2) pass-through sewage treatment into the receiving waters or sludge,
- (3) are in any way incompatible with the sewerage works, or
- (4) do not improve the opportunities to recycle municipal wastewaters and sludge.

This inspection did not include an evaluation of whether achievement of the national objectives in 40 CFR 403.2 have been demonstrated by the Douglas County wastewater treatment plant through consistent compliance with its sludge and discharge limits.



3.2 Oxygen Demanding Pollutants and The National Prohibition Against Interference

The process-related wastewaters discharged to the sewers are not expected to be high enough in organics strength or in flow rate to pose a risk of interference, with its strength expected to be significantly less than domestic sewage.

3.3 Toxics and The National Prohibition Against Pass-Through

Toxics at measurable levels would not be expected in the process wastewater discharges from Starbucks Carson Valley to the sewers.

3.4 pH and Sulfides, Flammability and The National Prohibitions Against Safety Hazards and Corrosive Structural Damage

Sewer collection system interferences related to the formation of hydrogen sulfide and the resulting acidic disintegration of the sewers are not expected because the wastewaters discharged to the sewers are not high-strength in biodegradable organics. The discharges also would not be expected to be acidic (pH <5.0 s.u.), alkaline (pH >9.0 s.u.), nor flammable.

3.5 The Prohibition Against Bypassing

The bypassing prohibition does not apply since there is no wastewater treatment.

4.0 Compliance with Federal Monitoring Requirements

Significant industrial users must self-monitor for all regulated parameters at least twice per year unless the sewerage agency monitors in place of self-monitoring. 40 CFR 403.12(e) & 403.12(g).

Each sample must be representative of the sampling day's operations. Sampling must be representative over the reporting period. 40 CFR 403.12(g) and 403.12(h).

There are no requirements to sample any process wastewater discharges to the sewer.

Requirements

- None.

Recommendations

- None.