



U.S. Environmental Protection Agency Applicability Determination Index

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Category: NSPS
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Title: Request for Alternative Fuel Usage Recordkeeping Plan
Recipient: Jimmy Mardis
Author: George Czerniak

Subparts: Part 60, A, General Provisions
Part 60, Dc, Small Indust.-Comm.-Inst. Steam Gen. Units

References: 60.17(a)(43)
60.17(a)(47)
60.17(a)(51)
60.44c(d)
60.44c(h)
60.48c(i)

Abstract:

Q: Will EPA grant Tyson Foods an alternative fuel usage recordkeeping plan under Subpart Dc?

A: Yes. The specific recordkeeping requirements for the facility are included in Attachment A to the response letter.

Letter:

(AE-17J)

Mr. Jimmy Mardis
Director, Environmental Compliance
Tyson Foods, Inc.
Ethics and Environmental Compliance Group
2210 West Oaklawn Drive
Springdale, Arkansas 72762-6999

Re: Request for Alternative Fuel Usage Recordkeeping Plan, NSPS Part 60, Subpart Dc

Dear Mr Mardis:

By letter dated March 14, 2001, you requested an alternative fuel usage recordkeeping plan (AFURP) for the Tyson Chicago/Culinary Food Plant (Plant) at 4201 South Ashland in Chicago. The Plant has two boilers subject to the New Source Performance Standards (NSPS) fuel usage requirements at 40 C.F.R. Part 60, Subpart Dc.

The requested AFURP would provide for: (1) a reduction in the required frequency of recording the amount of fuel used from daily to monthly, and (2) a proration of the monthly plant-wide fuel usage record obtained from a common fuel usage meter into a monthly fuel usage record calculated for each NSPS Subpart Dc unit.

Attachment A contains the conditions for the AFURP at the Plant. These were developed by United States Environmental Protection Agency (U.S. EPA) Region VI, in coordination with Tyson Foods and the Arkansas Department of Environmental Quality. U.S. EPA Region V approves these conditions.

These conditions were initiated by Tyson Foods' voluntary self-disclosure of actual or potential violations of Subpart Dc pursuant to U.S. EPA's Audit Policy. U.S. EPA designated Region VI as the lead region on these matters.

If you have any questions concerning the matters addressed in this letter, please contact Mr. Nicholas Autry, of my staff, at (312) 886-2258.

Sincerely,

George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

cc: Julie Armitage, Illinois Environmental Protection Agency

ATTACHMENT A
ALTERNATIVE FUEL USAGE RECORDKEEPING PLAN (AFURP)

GENERAL CONDITIONS

1. The AFURP requested herein is specific to the Tyson Foods Chicago/Culinary Food Plant (Plant), located at 4201 South Ashland, Chicago, Illinois 60609, as represented by Tyson. Two "steam generating units" subject to 40 C.F.R. Part 60, Subpart Dc were identified on-site.
2. Tyson requests to change the frequency of recording fuel usage from daily to monthly. This request is based on Tyson's agreement to fire only the fuel specified in these conditions at the Plant.
3. Tyson requests to prorate the monthly record of fuel usage to determine the amount of fuel used for each unit. This request is also based on Tyson's agreement to fire only the fuel types specified in these conditions at the Plant.

SPECIFICATIONS OF ALLOWABLE FUELS

1. "Pipeline quality natural gas" (a.k.a. "natural gas") or "low sulfur fuel oil" (a.k.a. "distillate oil") will be fired at the Plant.
2. "Natural gas" and "distillate oil" are defined in NSPS Part 60, Subpart Dc, at 40 C.F.R. Sec. 60.41c and are hereby incorporated by reference as the only fuel types acceptable for the plan.
3. Tyson is obligated to ensure that only "natural gas" rated as "pipeline quality" is allowed to be fired in the boilers. The term "pipeline quality" is defined as the kind of natural gas that has been processed through a processing plant and was sold commercially. Pipeline quality "natural gas" is termed "sweet" natural gas and is generally defined by its Sulfur or Hydrogen Sulfide content.
4. At no time should the Hydrogen Sulfide content of the natural gas fired in the boilers at the Plant exceed 0.25 grains per 100 cubic feet, determined at standard conditions of pressure and temperature.
5. The method of determination of the Hydrogen Sulfide content of the "natural gas" shall be ASTM D4084, which is incorporated by reference (IBR) as ASTM D4084-82 into NSPS Part 60, Subpart A at Sec. 60.17(a)(43).
6. Tyson is obligated to ensure that only fuel oil rated as "distillate oil" is allowed to be fired in the Plant's boilers. The fuel oil should comply with specifications No. 1 or 2, as defined by ASTM D396. Fuel oils with the specification of No. 4, 5, or 6 are not acceptable.
7. At no time should the Sulfur content of the fuel oil fired in the Plant's boilers exceed 0.50% by weight.
8. The method of determination of Sulfur content of the fuel oil shall be ASTM D129, D1552, or D4057, which are incorporated by reference (IBR) as ASTM D129-64, D1552-83, or D4057-81 into NSPS Part 60, Subpart A at Sec. 60.17(a)(47) or (a)(51), respectively.
9. When firing fuel oil rated as "distillate oil", the fuel supplier certification provision of Subpart Dc at Sec. 60.42c(h) is available.
10. When firing fuel oil rated as "distillate oil", the performance test would consist of the certification of the fuel oil's Sulfur content obtained from the fuel supplier, in accordance with Subpart Dc at Sec. 60.44c(h).

FUEL AMOUNT PRORATION METHODOLOGY

1. Proration of the monthly quantity of fuel fired in the Plant's boilers is based on the correlation of the design heat input capacity of each boiler to the fuel amount consumed by each unit.
2. There are two boilers at the Plant subject to this agreement. One is the 12.6 mmBtu/hr boiler installed in 1994. The other is a 16.8 mmBtu/hr boiler installed in 1997.
3. To determine the prorated amount of fuel for each subject boiler, Tyson will read the total fuel usage quantity on the plant-wide fuel meter once per month and enter the monthly quantity into the "fuel usage proration spreadsheet" for the Plant.
4. The approved "fuel usage proration spreadsheet" is identified by the filename "culinary.xls". This file was submitted by Tyson on March 14, 2001 and is in Excel.
5. Any time the inventory of plant combustion units changes or the heat input capacity of any boiler changes, Tyson will re-evaluate the spreadsheet methodology and make changes accordingly. A copy of the revised methodology shall be submitted to the Illinois Environmental Protection Agency (IEPA) for review.
6. If Tyson switches fuel types from "natural gas" to "distillate oil", Tyson will re-evaluate the spreadsheet methodology and make changes accordingly. A copy of the revised methodology shall be submitted to IEPA for review.

RECORDKEEPING

1. The effective date for the alternative fuel usage recordkeeping plan is to be recorded. This will be the date of the approval of this AFURP.
2. The total plant monthly fuel usage quantity will be prorated by the approved proration procedures of the plan into monthly amounts to be recorded for each boiler.
3. Tyson will update the "natural gas" or "distillate oil" proration spreadsheet monthly and maintain a record of the update on-site, in accordance with NSPS Subpart Dc at Sec. 60.48c(i).
4. The frequency of recording fuel usage is being reduced from daily to monthly as a condition of approval of the plan.
5. Recordkeeping of the types and quantities of fuel fired in the boilers shall be completed monthly and made available for inspection on-site.
6. Fuel supplier certifications of the Sulfur content of "distillate oil" should be collected and filed on-site for use in quarterly reports.
7. If Tyson switches fuel types from "natural gas" to "distillate oil", Tyson will record fuel Sulfur content in accordance with NSPS Subpart Dc at Sec. 60.42c(h)(1) and Sec. 60.44c(h).

NOTIFICATIONS AND REPORTING

1. When firing "natural gas", reporting of fuel usage is not required, as long as conditions of approval of the plan have been met.
2. When firing "distillate oil", reporting of fuel Sulfur content is required on a quarterly basis, in accordance with Subpart Dc at Sec. 60.48c(d). Quarterly reports will be submitted to IEPA, which has been delegated the authority by U.S. EPA to implement and enforce NSPS rules at 40 C.F.R. Part 60.
3. Whenever Tyson amends the Plant spreadsheet data calculation methodology for any reason, a copy will be sent to IEPA and U.S. EPA sixty (60) days before the changed unit(s) startup date(s). This submittal is not required for periodic (monthly) updates of the spreadsheet with actual measured fuel quantities.
4. If Tyson switches fuel types from "natural gas" to "distillate oil", Tyson will submit quarterly reports of fuel Sulfur content, in accordance with NSPS Subpart Dc at Sec. 60.48c(d), Sec. 60.48c(e)(11), and Sec. 60.48c(f)(1).