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June 30, 2014

Pennsylvania Environmental Quality Board
Rachel Carson State Office Building, 16th Floor
400 Market Street
Harrisburg, Pennsylvania 17101-2301

Re: AK Steel Corporation, Butler Works, Butler PA Comments Regarding: 25
Pennsylvania Code, Chapters 121 and 129 Pennsylvania Bulletin, Vol. 44, No.
16, April 19, 2014 – Additional RACT Requirements for Major Sources of
NOx and VOCs.

AK Steel appreciates the opportunity to submit the following comments on the Environmental Quality Board's proposed regulation regarding additional requirements under the Commonwealth's RACT regulations.

In short, the proposed RACT regulations are ambiguous, would likely have a negative financial impact on AK Steel's Butler Works, and require considerable effort and resources while providing little, if any, environmental benefit. Information about AK Steel's Butler Works is provided below, followed by general, and then specific, comments regarding the proposed rule's impacts on our business.

AK Steel and the Butler Works

AK Steel is a leading producer of flat-rolled carbon, stainless and electrical steels, primarily for automotive, infrastructure and manufacturing, distributors and converters, and electrical power generation and distribution markets. The company is headquartered in West Chester, Ohio, and operates facilities in Ohio, Kentucky, Indiana, and Pennsylvania.

AK Steel operates an electric arc furnace steel making mini mill in Butler, PA (the Butler Works) for production of electrical, stainless, and carbon steels. Operations include melting of steel scrap in electric furnaces, metallurgical refining, continuous casting, hot rolling and several steel finishing operations including pickling, cold rolling, annealing and surface coating. The Butler Works produces approximately 1,000,000 tons of steel annually. Much of the steel made is further processed and finished at the Butler Works. AK Steel and its predecessor companies have operated from this location since the early 1900s.

AK Steel currently employs approximately 1,500 men and women at the Butler Works with an annual payroll of more than \$135 million.

The Butler Works is located in the Northeast Ozone Transport Region and is a major source for both NO_x and VOC emissions. At the Butler Works, AK Steel has undertaken significant and environmentally beneficial projects in the past several years. In total, in excess of \$200,000,000 in capital has been invested at Butler Works to update and modernize portions of its operations. The projects included the installation of one new electric arc furnace to replace three 1960s vintage furnaces, a steel ladle metallurgical facility, and new boilers, including one designed to recover waste heat from other process operations. These projects included the installation of either LEAR or BAT for NO_x and VOC emission control. Today, the Butler Works emits less NO_x and VOC emissions per ton of steel produced than ever in its history.

General Comments

1. The current language of the proposed rule suggests that *all* combustion *sources* are subject to the presumptive RACT requirements. The term “other combustion source” does not appear to have a clear definition and the language should be removed from the rule. If the term is to remain in place, it needs to be clearly defined. The rule then needs to be re-proposed, as without this clarification, AK Steel cannot fully determine and comment on the impacts of this proposed rule.

The Butler Works has at least several hundred sources that are less than 20 MMBTU/hour. These include comfort heating furnaces, space heaters, water heaters, small steam cleaning devices, etc. As a general rule, operators want and need their combustion sources to operate properly for efficiency and reduced fuel usage and associated cost. The regulations should have a lower size threshold for which RACT do not apply, such as 10 MMBTU/hour, or state clearly that the < 20 MMBTU/hour presumptive RACT requirements do not need to be demonstrated, nor have any record keeping requirements. Otherwise, there will be a disproportionate time and effort in generating evidence and records to demonstrate compliance with the requirements that are more onerous than simply operating the combustion source appropriately.

2. In the proposed rule, the Alternative RACT Proposal and Petition (referred to as case-by-case RACT) requirements [specifically at 129.99 (b)] appear to be required for all other sources that meet the potential to emit emission thresholds of 5.0 tons/yr and 2.7 tons/yr for NO_x and VOC, respectively. This is essentially a replication of the first round of RACT proposals. These same analyses have already been completed during the first round RACT proposals and assuming a reasonable escalation for inflation, the results for a second round of case-by-case should result in the same results as the first analysis. New or modified sources since the original plans were developed have gone through BAT or LEAR. Therefore, it is requested that the requirements under 129.99 (b) be removed.

3. The cost basis that the Department will impose on the case-by-case RACT control technology analysis decisions needs to be in the rulemaking. Without this piece of information, it is unknown what the potential impact of the rule will have on the Butler Works. As in the earlier comment, this is a critical component in determining the financial implications this rule will have on the company. Therefore, both the cost basis and the rule will need to be re-proposed for AK Steel to fully analyze and comment on the proposed rule's impact on the business.
4. The definition of process heater should be the same as the Federal Boiler MACT definition. The proposed definition is confusing and seems to be in conflict with itself. As currently written, the proposed definition could include some direct heat transfer devices to be included as process heaters. The definition should clearly state that process heaters are only indirect fired heat transfer units where the products of combustion do not contact the process material and does not include any direct fired heat transfer units where the material is heated is in direct contact with the products of combustion. This is very critical for understanding exactly which process units will be subject to the presumptive RACT numerical limitations. The actual financial impact of this rule, which could be very significant, cannot be determined without unambiguous clarity for the process heater definition.
5. The federal RICE regulations already captures the same emission units that the proposed rule is intended to cover and is applicable to all RICE located in the Commonwealth. The Federal requirements are already comprehensive, complex, complicated and sufficiently confusing without overlap of state level requirements. The specific internal combustion unit requirements should be removed and the Federal guidelines referenced.

Specific Comments

1. For the purposes of this proposed rule, the definition for stationary internal combustion engine should be the same as the federal RICE rules and not include non-road (portable) engines. In the context of the proposed rule, the language will subject the entire Commonwealth to the regulatory requirements and associated burdens for portable engines.
2. The timing for the effective date for the rule should be changed to two years. Those facilities like AK Steel that are impacted by the presumptive numerical emission limitations in the proposed rule will not have sufficient time to identify the appropriate control technology or replacement equipment components that are compatible with existing equipment, secure financing, and complete installation within one year. It is likely that custom equipment will be required in retrofit applications and companies need to be able to appropriately budget for these potentially large expenditures. Quite simply, the one year timing will not allow for

appropriate corporate annual budgeting, particularly in the current business climate for the steel industry.

The case-by-case RACT proposal submittal date should be one year from the time the rule becomes final. Six months does not give companies enough time to complete the analysis in accordance with 129.92.

Finally, the timing for implementing the case-by-case RACT in 129.99 (d)(4) simply cannot be achieved within one year of the final rule if any substantive equipment needs to be part of achieving an emission limit. Instead, it is suggested that the implementation schedule to be submitted with the RACT Proposal and that schedule start date is tied directly to the date the Department provides written approval of the RACT Proposal.

3. Under 129.97(k) the paragraph appears to only allow submitting an alternative compliance schedule for installation of an air cleaning device. The paragraph should also allow for both the installation of an air cleaning device or *other equipment as necessary* to achieve compliance with the requirements or emission limits.
4. For units subject to the numeric limitations, the rule should allow operators the option to submit a petition for an alternative RACT proposal. AK Steel has an older boiler (#10 Boiler) that is used as a back-up to its primary sources of steam. The plant's primary steam sources include two waste heat boilers and two modern BAT boilers. However, the #10 Boiler emission rate is just above the proposed numeric limit of 0.08 lbs NO_x/MMBTU, causing this unit to be subject to the emission limit. It is estimated that the cost to retrofit a burner and control system for the #10 Boiler to meet the new emission limit will be in excess of \$250,000. However, in this case, due to the limited hours of operation and relatively narrow difference between the unit's actual emission rate versus the new limit, the retrofit and associated financial expenditures will result in an annual net NO_x emission reduction of less than one ton/year. As a specific example, for the year 2013, the retrofit would have resulted in a 0.020 ton NO_x reduction. Clearly, this would not meet any reasonable cost to emission reduction benefit ratio. Allowing the use of case-by case under this particular scenario would be beneficial.
5. Compliance with the language under paragraph 129.97(c) "...in accordance with the manufacturer's specifications and good engineering practice:" will not be possible in some cases, and not practical in others. Many of the process heaters and furnaces used in steel mills are specialized, and custom designed and manufactured. Many sources will not have a manufacturer's specification for this reason. Additionally, due to a unit's age, the original specifications are no longer available. Furthermore, the language "in accordance with manufacturer's specifications" is overly broad and far-reaching. Most manufacturers's operating and maintenance specifications have

nothing to do with the emissions from the source. The following language is recommended: "...in accordance with the manufacturer's specifications affecting emissions, or good engineering or pollution control practices." This comment can become significantly more important depending on the status or definition of "other combustion sources" as commented on earlier.

6. The language for tune-ups in 25 Pa Code 129.97(b)(1) should be modified to match the language for tune-ups in 25 Pa Code 129.93(b)(2).
7. The language in 25 Pa Code 129.97(g)(3) is unclear. The language should clearly state that emergency engines greater than 500 bhp are excluded from the emission limits for stationary internal combustion engines greater than 500 bhp.
8. The language in 25 Pa Code 129.100 requires facilities to be in compliance with all requirements in this rule within one year of the rule being finalized. However, AK Steel believes that one year is not a sufficient amount of time to comply with the rule, and the compliance deadline should be extended to two years.

Summary

AK Steel appreciates the opportunity to comment on the proposed regulation. We urge the Board to consider the impact that this regulation would have on the Butler Works and Pennsylvania industry in general. This regulation, in its current form, will certainly add regulatory confusion, regulatory redundancy and overlap with other standards, and based on the lack of clarity and definition, could result in significant financial impacts and considerable burdens on the Butler Works with little, if any, decrease in emissions.

If you have any questions regarding this submittal, please contact me at (724) 284-2267, or russ.dudek@aksteel.com

Sincerely,

Russell J. Dudek
Manager Environmental Affairs
AK Steel Corporation – Butler Works

cc: Cory Levengood
Adam Caldwell

AK Steel Corporation appreciates the opportunity to submit the following comments on the Environmental Quality Board's proposed regulation regarding 25 Pennsylvania Code, Chapters 121 and 129 - Additional requirements under the Commonwealth's RACT regulations.

General Comments

1. The current language of the proposed rule suggests that *all* combustion *sources* are subject to the presumptive RACT requirements. The term "other combustion source" does not appear to have a clear definition and the language should be removed from the rule. If the term is to stay, it needs to be clearly defined and that definition and the rule needs to be re-proposed as without this clarification, AK Steel cannot fully determine and comment on the impacts of this proposed rule.
2. In the proposed rule, the Alternative RACT Proposal and Petition requirements at 129.99 (b) appear to be a redo of the first round of RACT proposals. These same analyses have already been completed during the first round RACT proposals and assuming a reasonable escalation for inflation, the results for a second round of case by case should result in the same results as the first analysis. New or modified sources since the original plans were developed have gone through BAT or LEAR. Therefore it is requested that the requirements under 129.99 (b) be removed.
3. The cost basis that the Department will impose on the case-by-case RACT control technology analysis decisions needs to be in the rulemaking. Without this piece of information, it is unknown what the potential impact of the rule will have on the Butler Works. This is a critical component in determining the cost this rule will have on AK Steel. The rule will need to be re-proposed for AK Steel to fully analyze and comment on the rule's impact on the business.
4. The definition of process heater should be the same as the Federal Boiler MACT definition. The proposed definition is confusing and conflicts with itself. As currently written, the proposed definition could include some direct heat transfer devices to be included as process heaters. The actual financial impact of this rule, which could be very significant, cannot be determined without unambiguous clarity for the process heater definition.
5. The federal RICE regulations already captures the same emission units that the proposed rule is intended to cover and is applicable to all RICE located in the state. The federal requirements are already comprehensive, complex, complicated and sufficiently confusing without overlap of State level requirements. The specific internal combustion unit requirements should be removed and the federal guidelines referenced.

Specific Comments

1. For the purposes of this proposed rule, the definition for stationary internal combustion engine should be the same as the federal RICE rules and not include non-road (portable) engines.
2. The timing for the effective date for the rule should be changed to two years. The proposed rule will not allow enough time for identifying the appropriate control technology or replacement equipment components that are compatible with existing equipment, secure financing, and complete installation within one year. The one year timing will not allow for appropriate corporate annual budgeting particularly in the current business climate for the steel industry.

The case by case RACT proposal submittal date should be one year from the time the rule becomes final. Six months does not give companies enough time to complete the analysis in accordance with 129.92.

Finally, the timing for implementing the case-by-case RACT in 129.99 (d)(4) simply cannot be achieved within one year. Instead, it is suggested that the implementation schedule be submitted with the RACT Proposal and that the schedule start date is tied directly to the date the Department provides written approval of the RACT Proposal.

3. Under 129.97(k) the paragraph appears to only allow submitting an alternative compliance schedule if you are installing an air cleaning device. The paragraph should also allow for both the installation of an air cleaning device or *other equipment as necessary* to achieve compliance with the requirements or emission limits.
4. For units subject to the numeric limitations, the rule should allow operators the option to submit a petition for an alternative RACT proposal. Low use, back-up equipment that cannot quite meet the emission limitations could result in very large expenditures for very small emission reduction. Clearly this would not meet any reasonable cost to emission reduction benefit ratio. Allowing the use of case-by case under this particular scenario would be beneficial.
5. Compliance with the language under paragraph 129.97(c) "...in accordance with the manufacturer's specifications and good engineering practice:" will not possible in some cases, and not practical in others. Many of the process heaters and furnaces used in steel mills are specialized and custom designed and manufactured. Many sources will not have a manufacturer's specification for this reason. Or due to a units age the original specifications are no longer available. Furthermore, the language "in accordance with manufacturer's specifications" is overly broad and far reaching. Most manufacturers's operating and maintenance specifications have nothing to do with the emissions from the source. The following language is recommended: "...in accordance with the manufacturer's specifications effecting emissions, or good engineering or pollution control practices:"
6. The language in 25 Pa Code 129.97(g)(3) is unclear. The language should clearly state that emergency engines greater than 500 bhp are excluded from the emission limits for stationary internal combustion engines greater than 500 bhp.

Thank you for the opportunity to comment. If you have any questions please contact me at (724) 284-2267, or russ.dudek@aksteel.com