Testimony

Submitted on behalf of the
Pennsylvania Chamber of Business and Industry

New Source Review Permitting Challenges for Manufacturing and Infrastructure

Before the:
United States House of Representatives
Committee on Energy and Commerce
Subcommittee on Environment

Presented by:
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Good afternoon Chairman Shimkus, Ranking Member Tonko, and members of the committee,

My name is Kevin Sunday, director of government affairs for the Pennsylvania Chamber of Business and Industry. The PA Chamber is the largest, broad-based business advocacy organization in the Commonwealth. Our nearly 10,000 members are of all sizes, crossing all industry sectors throughout Pennsylvania. All of our members are committed to the stewardship of our state and nation’s land, air and water, and we seek to provide a thoughtful and balanced approach on ways we can continue to reduce our environmental impacts and grow the economy.

It is an honor to appear before you this afternoon to discuss the challenges our members, particularly those in the manufacturing and energy space, have faced in terms of securing permitting and authorizations under the New Source Review (NSR) program. NSR reform can and should be done in a manner that allows American businesses to re-establish their competitive advantage without regressing on the significant progress the country has made in reducing criteria pollutants in the past several decades. We applaud the Trump administration and EPA Administrator Pruitt for taking steps towards instituting thoughtful reform to this program – a program that to date has held back companies from growing their business, shoring up their competitiveness and even reducing their environmental footprint.

PA Chamber members have reported that the current process is an impediment to investing in the efficiency of their operations and improving their ability to compete abroad. Because of the costs associated with crossing NSR thresholds, companies have shelved projects that would have reduced emissions, lowered operating costs and provided an overall benefit to public health and the environment. Disputes between state and federal regulators over interpretation and application of regulatory criteria result in sizeable legal and engineering costs and leave projects in limbo for months, or years. Lenders will not sign off on financing until the revolving door of lawsuits from third-party groups over the perpetually changing universe of Best Achievable Control Technology (BACT) and Lowest Achievable Emissions Rate (LAER) controls stops spinning. Economic growth and environmental progress depend upon a well-functioning and rational regulatory system; the NSR program shows signs of being neither.

We also applaud the members of the United States House of Representatives and Senate for taking a bold stand for economic growth by sending the Tax Cut and Jobs Act to the President’s desk for his signature late last year. In particular we thank Senator Pat Toomey for his leadership in getting the bill through the Senate. In the short time since the enactment of this legislation, employers across the country have announced plans
to increase investment, hiring and wages. It is expected that in the short term, consumer spending and economic growth will increase considerably so – 4.0% in GDP growth on an annualized basis, according to the Federal Reserve Bank of Atlanta. As the economy grows, capital is repatriated, and rates on employers are reduced, manufacturers and businesses have a generational opportunity to secure a competitive advantage by re-investing into their facilities, enhancing their sustainability profiles and expanding to capture a share of the growing economy – provided, of course, that regulatory obligations do not present unnecessary obstacles.

Paired with tax reform, the unprecedented output of our nation’s natural resources and the strength of its diverse power generation portfolio of nuclear, coal, gas, oil and renewables has positioned this country to return to levels of GDP growth unseen in more than a decade. An energy-focused economic development strategy, as outlined in a recent report entitled Forge the Future, for Pennsylvania has the potential for to bring an additional $60 billion in state GDP and more than 100,000 jobs to our state. The Appalachian region, including Pennsylvania, Ohio, West Virginia and Kentucky, could become a petrochemicals and plastic manufacturing hub – according to the American Chemistry Council, more than $28 billion in economic expansion and more than 100,000 jobs could be created should the region capitalize on an ethane storage project and secure the construction and operation of several petrochemical plants.

We can ill afford to waste this opportunity by leaving up barriers to growth, such as unnecessarily burdensome permitting requirements as existed under previous administrations’ implementation of NSR regulations. Instead, let us pursue stewardship of our natural resources and secure economic growth in a thoughtful, responsible manner.
Tax Reform, Energy Infrastructure and the Expanded Use and Production of Domestic Natural Resources are Creating Generational Opportunity for Pennsylvania, the Appalachian Region and the United States

In an increasingly competitive global environment for capital investment, the United States’ corporate tax rate increasingly became a drag on investment decisions, prior to the historic reforms made with the Tax Cut and Jobs Act of 2017. Since the previous comprehensive tax reform took place in the mid-1980’s, the rest of the world spent much of the past thirty years lowering their corporate tax rates to an average considerably lower than ours, while ours stayed the same. As a result, the United States didn’t just lose a competitive edge – it lost out on real growth. From 2006 to 2015, the United States achieved a dubious historic record – going ten straight years without a single year of 3% real GDP growth. The country is in need of strong economic growth in order to provide opportunity for all.

Source: U.S. Chamber of Commerce
Fortunately, the Tax Cuts and Job Act is expected to yield a boost to growth. While there are a multitude of variables impacting the nation’s economic output, lowered rates for businesses and individuals is expected to result in a more productive economy. The Tax Foundation’s preliminary analysis of the new tax law finds that over the next decade, GDP will increase by an average of 0.29% each year, at a total average annual rate of 2.13%, compared to an expected baseline of 1.84%. While this additional 0.29% may not seem like a high number to a casual observer, even small improvements in GDP result in massive positive impacts for our nation’s economy. The standard rule of thumb applied by the Congressional Budget Office is that a mere 0.1% increase in GDP yields an aggregate $273 billion in increased economic activity over ten years.

Another credible analysis, which incorporates the impact of international trade and global flow, anticipates the tax reform framework will raise GDP by between 3 and 5 percent and real wages by between 4 and 7 percent, which translates approximately to $3,500 annually for the average American working household. Finally, most recently, the Atlanta Federal Reserve announced, in its latest forecast for the first quarter of 2018, the economy is expected to grow by a very strong 4.0% on an annualized basis.

Tax reform is not the only catalyst for economic growth in Pennsylvania or the nation. The increased development and use of oil and natural gas promises significant economic gains as well, including in some sectors that are not traditionally associated with these fuel sources. Industries such as additive manufacturing, data centers, fabricated materials, glass, electronics, fiber optics, concrete, nanofibers, steel, cement, advanced manufacturing and robotics, in addition to traditional manufactured use of petrochemicals, such as ethane, polyethylene, ammonia and inorganic chemicals, all face the opportunity to secure a global competitive advantage through the use of natural gas in their fuel source for heating, power and feedstock. To what extent was in part the subject of a recent econometric study, Forge the Future. Aggressive pursuit and use of domestic natural gas results could result in an additional $60 billion in state GDP for Pennsylvania, as it positions itself to be a national leader in manufacturing. More than 100,000 family sustaining jobs could be

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created, as well as hundreds of thousands of Pennsylvania families saving considerable amounts of money in home heating and electric costs.\(^5\)

Another report, commissioned by the Pennsylvania Department of Community and Economic Development and the Team Pennsylvania Foundation, forecasted the potential for nearly $4 billion in investment in additional opportunities for ethylene cracker plants and plastics manufacturers.\(^6\) These are industries that are very sensitive to both commodity price and consumer demand. As consumer spending increases domestically and abroad, and as sustained development of natural resources provides a stable, low-cost feedstock, these industries have a generational opportunity to capitalize on recent trends and to establish a global competitive advantage.

Pennsylvania is not the only state with the opportunity to see significant investment into new and expanded petrochemical and plastics manufacturing. A study conducted by the American Chemistry Council examined a hypothetical scenario in which the Appalachian region – Kentucky, Pennsylvania, West Virginia and Ohio – in total saw the build out of five ethane crackers and two propane dehydrogenation facilities, supported by a regional ethane storage hub in the next decade. The result: a total of $36 billion in investment, more than 100,000 jobs and $28 billion in economic expansion.\(^7\)

Tax reform, the nation’s vast energy resources, increased growth, and higher consumer spending are laying the foundations for a successful resurgence of manufacturing and for capturing a global leadership position in a wide variety of industries. However, as new facilities seek to be built and as existing facilities seek to capitalize on domestic resources or invest capital into improving the efficiency of their plants, the complex array of environmental requirements, including permitting under the New Source Review regulations, could present a barrier. Thoughtful and creative reform to NSR is needed to realize the full economic potential available to our nation; indeed such reform can and should take place in a manner that doesn’t diminish the significant progress made with respect to improving air quality across the country in the past several decades.

The New Source Review Program Is In Need of Reform

When a new industrial facility is seeking a permit to be built, or when an existing facility is seeking to expand, the project must go through the NSR and Prevention of Significant Deterioration (PSD) permitting process. The backbone of these programs are the National Ambient Air Quality Standards. NSR was established as part of the Clean Air Act to ensure that counties and regions can progress towards attaining and maintaining air quality that is protective of public health while new facilities are built and existing facilities are modified and expanded.

In practice this regulatory construct discourages expansion of existing manufacturing (and the attraction of new facilities) in non-attainment areas, despite historic improvements in air quality. In many cases, the NSR rules as applied don’t allow for significant improvements to existing facilities, as they require application of the highest Clean Air Act standard, rendering projects uneconomic due to compliance costs. Most large-scale manufacturing and industrial facilities will trigger NSR thresholds for one or more NAAQS pollutant. When these facilities seek to expand their operations, they must calculate, per NSR regulations, if there will be a significant net emissions increase as a result of the modification, compared to recent operational profiles, and EPA has established that such a calculation must assume that a source will produce its maximum possible emissions every hour of every day for the duration of its existence (referred to as “potential to emit” or PTE), even though such a calculation is not representative of any facility’s actual operations. Companies must then account for these emissions that will never be emitted by accepting a more stringent limit and installing costly control technology than would be necessary had the calculation on future net emissions be representative of actual future operational practice. In practice, this has discouraged companies from investing in installing cheaper and cleaner-burning burners in their boiler systems or other on-site heating and power units. In other words, modifications that increase a facility’s output per unit of fuel can trigger NSR thresholds, even if the overall impact is a net environmental gain.

The costs of compliance with NSR are significant – for nonattainment areas, sources must deploy Lowest Achievable Emissions Rate (LAER) technology, which are the most expensive type of control, and/or obtain Emission Reductions Credits (ERCs) – credits which have become increasingly expensive and in short supply as NAAQS requirements have been ratcheted down in recent years. In addition to these costs, the penalties for non-compliance are massive, and the costs to defend litigation against citizen suits and environmental NGO’s are also punitive. Perversely, the NSR construct encourages the wasting of resources by not encouraging facilities to make changes to become efficient.
Regulators Are Not Applying NSR With the Flexibility that the Law Provides to Account for Changing Market Conditions

In the NSR process, an existing facility’s recent output is compared to the hypothetical, 24/7 output resulting from a modification (potential actual emissions). This comparison penalizes facilities that have not been running at full capacity in the years running up to submitting its plans for NSR review. Importantly, the text of the Clean Air Act and NSR regulations allows applicants a so-called “demand growth exclusion,” which allows applicants to exclude a portion of the difference between actual baseline emissions and potential actual emissions by subtracting out emission that would have been generated but for a lack of market demand. This is a useful, common sense and necessary component of a well-functioning regulatory program to allow for operational flexibility – however, during the Obama administration, the EPA took a severely restrictive view of when the demand growth exclusion can be utilized.

As a real world example, one major manufacturer in southeastern Pennsylvania saw its operations reduced over a period of a few years due to economic challenges and fuel supply issues, even to the point of being idle for a year. This period of scaled-back operations resulted in an emissions profile that became the line that, if crossed due to almost any facility modification, will trigger NSR. When new ownership took over the facility, and macroeconomic conditions changed to the benefit of the facility, management sought to make improvements to the facility to increase output and maintain viability of the facility. Such improvements would not only allow the company to increase its output and retain its workforce, but to do so in a more efficient manner with fewer emissions. The company was able to make the business case to invest in the facility and go through, at great expense, the NSR process; but for other companies in different circumstances, NSR encourages retirement and divestment from plants that could be made more efficient and productive – and keep their workforce employed.

To cite another of many examples, one PA Chamber member has reported that they cancelled a planned fuel switch to a cleaner burning fuel at their manufacturing facility because low production rates during the recession resulted in low baseline emissions. This company operates in an industry heavily exposed to construction activity. The cleaner fuel would have resulted in lower real-world emissions compared to when the facility was running full tilt prior to the recession, but because of how NSR emissions methodologies are applied, it looked like, on paper, a significant emissions increase was going to be occurring, as compared to the temporarily low production rates that occurred during the recession. This would not have been a project-driven emissions increase, and air quality and public health would have seen a net benefit from the fuel switch.
Permit Review Times and Intragovernmental Disputes over Regulatory Interpretations Add Costs and Jeopardize Projects

The time to secure permitting through NSR is extremely lengthy. PA Chamber members report a fast-tracked process takes at minimum a year. Further, the permitting process does not allow for much operational flexibility. Too often, the business world and market conditions change faster than the NSR process is able to accommodate. If operational conditions at a facility changes, the permit may need to be modified, resulting in a long period where it is unclear if the facility is in non-compliance. Administration of the NSR program has, over the past several decades, been in constant flux as various EPA Administrators issue interpretative memoranda and regional offices make different conclusions on projects with fairly similar characteristics. PA Chamber members report this has resulted in a significant amount of regulatory gray area where it is unclear if the project will be vulnerable to enforcement by federal regulators. Companies are averse to deploying the significant amount of capital to upgrade and keep viable an existing facility if the regulatory risk is too uncertain.

There is often disagreement on interpretation of NSR requirements between state and federal regulators, putting project applicants in a bind when, fairly late in the game, EPA delivers a series of comments and questions to the state on a project. Compliance with NSR and other environmental requirements has a major impact on the business planning and operational design of facilities. Financial viability of a project depends on getting timely approvals. PA Chamber members have reported that this tension between state and federal regulators, and the lack of communication to project applicants about that tension until several months into permitting discussions, is not only extremely frustrating, but costly. What may seem like a minor dispute over the calculation of future versus actual emissions can result in tens of thousands of dollars in engineering and legal fees and a resubmitted application.

Another PA Chamber member has reported that a project to switch to a cleaner burning fuel at its manufacturing facility is in jeopardy because of how regulators are interpreting NSR requirements. The project will result in considerable reductions of one criteria pollutant (SO2), but the fuel change is triggering NSR due to a relatively small amount of increase in another criteria pollutant (NOx). The overall public health and environmental benefits from the fuel switch are clear: there will be an overall improvement in air quality as a result. But the costs involved in complying with NSR as a result of the fuel switch may render the project uneconomical, and the company has been negotiating with regulators for more than a year.
In most cases, lenders also will not sign off on financing a new or expanding facility until all permits are issued and all appeals are resolved. Not only can there be a protracted dispute between state and federal regulators regarding interpretation and application of regulatory criteria, but citizens’ suits from third-party NGOs are common. Once this potentially multi-year process of intragovernmental disagreement and litigation with third-parties concludes, the universe of what constitutes BACT or LAER for such a project may have shifted – requiring the company to change its plans, affording NGOs the opportunity to file suit again and restricting the lenders to make a final decision on financing. This is an unfortunate and unwelcome result, given that the company proposing the new build or expansion has done everything in its power to comply with the regulations from the outset. There is room within the existing regulatory and statutory framework to provide certainty to applicants by limiting the universe of relevant BACT and LAER as it existed when a final and complete application was submitted.

**Administrative Determinations Regarding Single Source Can Shunt Projects into NSR, Jeopardizing Otherwise Viable Projects**

Over many years, EPA has built up a substantial body of guidance and applicability determinations that address the circumstances under which two or more facilities must be considered a single source for purposes of air permits issued under the New Source Review and Title V programs. Far from providing clarity and consistency, these determinations have created substantial uncertainty for permitted entities and in many cases have discouraged advantageous commercial relationships and new investment.

EPA purports to base its guidance on the relevant regulatory definitions, which use a three-part test consisting of whether two facilities are in the same industrial grouping, located on contiguous or adjacent properties, and are under common control. However, because adjacency and common control are not defined in the regulations, EPA guidance has established a long list of factors that it considers relevant in determining whether two otherwise separate facilities or entities must be aggregated. One of the sectors particularly affected by these determinations is the landfill sector, which has been unduly burdened by EPA’s focus in recent years on the aggregation of landfills and nearby landfill gas-to-energy facilities. By their very nature, gas-to-energy facilities are entirely separate operations, with the landfill engaged in the management of waste and the gas-to-energy facility engaged in the production of energy. However, in order to be economically and operationally viable, gas-to-energy facilities must be located at or near the landfill facility. In some cases, EPA has pointed to the use of a pipeline for the conveyance of gas from the landfill to the energy facility as an indicator of adjacency. Additionally, EPA has created a presumption of common control for co-located entities, even where the two entities are not commonly owned. In support of this presumption, EPA has often concluded that the existence and terms of gas purchase agreements between the landfill and
gas-to-energy facility are indicators of common control. Chamber members have also seen regulatory determinations to aggregate sources in the oil and gas sector in the context of permitting compressor stations, dehydration facilities, and other associated infrastructure that is not adjacent or under common control. EPA’s analysis ignores the fact that an arms-length, mutually beneficial commercial contract should not be a basis for determining that two parties are under common control.

Over the past several years, there have been efforts in EPA Regions 1, 2 and 3 (and perhaps others) to push delegated state permitting agencies to evaluate whether landfills and gas-to-energy facilities should be aggregated. In most cases, the facilities were initially permitted and have been operating for many years as separate facilities (many under Title V permits). Most often, the issue comes up at Title V renewal, rather than in response to any modification at either facility. These efforts upset the settled expectation of the parties long after initial investments have been made, with the specter of future New Source Review permitting burdens applying in the future. These re-evaluations cause administrative burden and cost for permittees and no immediate benefit to the environment – in fact, single source determinations can serve to discourage future investment for fear of triggering New Source Review obligations. Further, these cases often highlight differences in approach between the EPA regions and delegated states within those regions, with EPA pressuring state agencies to carry out these evaluations which can take years to play out and may involve litigation at the state and federal level. Finally, when a single source determination is made (most often over the objection of the permittees), state permitting agencies often struggle to structure operating permits in a manner that accomplish the goals of Title V by providing compliance certainty – instead, two otherwise unrelated entities are forced into an unnatural joint permitting arrangement in which they share responsibility and risk for each other's operation. In the landfill sector, these determinations threaten to discourage the beneficial use of landfill gas as an energy resource.

**Federal Agencies Have Also Pointed to NSR as a Significant Challenge to Manufacturers and the Energy Economy**

PA Chamber members and the manufacturing industry writ large are not the only ones calling for reform to NSR. In a 2002 report to President George W. Bush, EPA noted that:
As applied to existing power plants and refineries, EPA concludes that the NSR program has impeded or resulted in the cancellation of projects which would maintain and improve reliability, efficiency and safety of existing energy capacity. Such discouragement results in lost capacity, as well as lost opportunities to improve energy efficiency and reduce air pollution.\(^8\)

In the Department of Energy’s “Staff Report to the Secretary on Electricity Markets and Reliability,” staff noted that, among the many pressures to power generation, the NSR had a significant impact:

*The retrofit-or-retire decision for owners is also impacted by EPA’s New Source Review (NSR) regulations that can affect owners’ ability to enhance plant efficiency due to the delay, cost, and uncertainty associated with obtaining an NSR permit. The NSR permitting program requires stationary sources of air pollution—including factories, industrial boilers, and power plants—to get permits before construction starts, whether the unit is being newly built or modified. This is an important concern for owners considering retrofitting an existing power plant with carbon capture equipment to reduce CO2 emissions, or adding new components to improve operating efficiency. These upgrades could trigger the NSR requirements of the Clean Air Act because they would constitute a “physical change,” or lead to a designation of the change as a “major modification,” subjecting the unit to NSR permitting requirements.*

*The uncertainty stemming from NSR creates an unnecessary burden that discourages rather than encourages installation of CO2 emission control equipment and investments in efficiency because of the additional expenditures and delays associated with the permitting process. Ironically, the uncertainty surrounding NSR requirements has led to a significant lack of investment in plant and efficiency upgrades, which would otherwise lead to more efficient power generation, benefits to grid management, and reduced environmental impacts.*\(^9\)

Our energy assets are providing the opportunity for many companies to improve their sustainability footprint and reduce costs via projects like distributed solar, combined heat and power (CHP), microgrids and fuel cells. Policy barriers should not impede the deployment of these technologies, nor for potential technologies such as small modular reactors (SMRs) making use of nuclear energy on a smaller scale. However, while our energy picture continues to shift, as American ingenuity and resourcefulness is put to use, the backbone of our grid remains large-scale, centralized power plants. The PA Chamber is a supporter of markets and we believe competitive energy markets have been good for consumers. We also recognize the need to ensure

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adequate capacity is available. We appreciate the Trump administration has begun a conversation, and that the independent Federal Energy Regulatory Commission and regional grid operator PJM Interconnection has continued that conversation as it relates to market design, to ensure that there are not policy barriers at work in the energy markets contributing to the premature retirement of baseload generation – nuclear, coal and otherwise.

**The Recent Pruitt Memorandum is an Important First Step to Reforming NSR**

On Dec. 7, 2017 EPA Administrator sent a memorandum to all regional administrators provided guidance on how sources may conduct emissions projects when going through the NSR program, and how EPA staff should evaluate those projections and handle enforcement. The memo is significant in that it returns application of NSR requirements closer to the plain language of the Clean Air Act and NSR regulations. It allows applicants to account for how they will actively manage future emissions and provides for more use of the demand growth exclusion, provided the applicant has complied with regulatory criteria regarding evaluation, documentation and notice without a “clear error.” The memo also includes an express prohibition on EPA staff second-guessing these analyses. EPA staff will, however, continue to evaluate if significant thresholds were crossed during five- and ten-year periods, post-project. States are free to implement a more stringent NSR program, and the memo makes clear that EPA staff should defer to state regulators’ judgments.

It is important to note that none of the contents of the memo will inhibit states’ ability to progress towards achieving and maintaining attainment of NAAQS, nor are individual companies relieved of their regulatory obligations. What the memo does do is provide more regulatory certainty to sources and to states. Less dispute between state and federal regulators means not just a streamlined permitting process for applicants, but that less public resources are being expended on intra-governmental in-fighting; more high-efficiency modifications at existing facilities also means less natural resources are being expended to produce greater economic output.

It is the sincere hope of the PA Chamber that this memo is the start of further reforms to NSR in administrative, regulatory and statutory contexts. If we a have a regulatory process that could be made more efficient, so that our plants and facilities can become more efficient, and we don’t – that is a failure. Such a result is not only bad for business, it’s bad for the environment.

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A year ago, the PA Chamber delivered testimony to this same subcommittee, identifying a number of recommendations to the nation’s air regulatory framework that will boost the productivity and competitiveness of domestic manufacturers, and, more broadly, the economy. We are pleased that a number of these recommendations have been adopted, including the rescission of the long-standing and illogical “once in, always in” HAPS guidance and rescinding the CEQ guidance on NEPA and greenhouse gas emissions. We applaud these changes, and we look forward to working with this body and the administration on the adoption of additional pro-growth policies that do not sacrifice environmental quality.