

**Initial Concerns with Draft Permit, PSD/SSM 089-50605-00121 and SPM 089-50609-00121,
U.S. Steel Corporation – Gary Works**
October 28, 2026

Virtual Public Hearing on November 4, 2026 at 6 PM CST at

<https://on.in.gov/usshear>

Meeting ID: 246 802 216 920 180

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Background:

The draft Significant Source Modification (“SSM”) and Significant Permit Modification (“SPM”) would authorize certain projects at U.S. Steel (“USS”) Gary Works, which USS and IDEM refer to as the “Primary Project” and the “WBF Project.” The “Primary Project” includes changes to the existing blast furnaces, No. 1 BOP Shop operations, and No. 2 QBOP Shop operations, and the addition of a new boiler at the Turboblower Boiler House. The “WBF Project” will replace the existing reheat furnaces in the existing hot strip mill finishing operations with an advanced walking beam (“WBF”) reheat furnace.

While the SSM/SPM briefly references the relining of Blast Furnace 14, this proposed permit does not address or otherwise authorize the reline.

Below are some initial concerns identified with IDEM’s current Draft Permit. Overall, the Draft Permit both:

- underestimates how much emissions will increase from these proposed modifications, which excuses USS from complying with the more stringent pollution-control requirements for major modifications, and
- ignores the planned co-located CarbonFree facility which will increase the combined source emissions significantly.

In addition, while IDEM is requiring USS to apply the Best Available Control Technology for Carbon Monoxide, the Draft Permit does not include proper monitoring requirements to ensure compliance with those requirements or with many other emissions limits contained in the Permit.

Initial Concerns With The Draft Permit:

Concern 1 – The emissions calculations have many issues that cast serious doubt on the proposed effects of this project

We have identified several major issues casting doubt on the calculations USS is using to show a decrease in most emissions, especially NO_x, from these projects and to avoid adding more stringent pollution control requirements to the permit.

Here is an example of the emissions calculations IDEM and USS rely on to determine these projects are not major modifications:

- USS made changes to inflate Gary Works' baseline emissions between the December 2025 and July 2026 application. For NO_x emissions-- the most critical pollutant from a steel plant in a nonattainment area—USS increased the baseline NO_x emissions from the blast furnace stoves, boilers and flares by 830 tons/year of NO_x without any explanation for the drastic change in these numbers from the two application. In both applications they cite “No.4 BH 1, 2 CEMS” as the reference, but they don't provide any explanation for why emissions from the same source would be so much high from one application to the next. This lack of transparency is unacceptable when permitting more than \$200 million of changes in an area where an increase of 40 tons/year is a significant increase requiring the addition of the best pollution controls that money can buy. The emission estimates relied upon by USS and IDEM to issue this Draft Permit are also 600-800 tons/year more than the actual emissions that USS reported to the state during the years they say they are using in this permit. By using these inflated emission baselines, IDEM is allowing Gary Works to increase real emissions in large amounts without triggering additional pollution controls.

Concern 2 – USS GW improperly includes emissions reductions unrelated to physical changes at the facility in when determining if there is a significant increase in emissions.

USS specifically states that no physical changes or changes in the method of operation will occur at Gary Works' boilers and flares and yet they take credit for 430 tons/year of NO_x reductions at these units. Only emissions increases and decreases from actual modifications at Gary Works can be included in the emission calculations used to determine if the changes are major modifications with more stringent pollution control requirements . If USS GW wants to use these boiler and flare reductions, they will need to take enforceable NO_x emission rates and restrictions on usage of blast furnace gas and apply those changes in the remainder of their emission calculations.

Concern 3 – The Primary Project, the WBF Project, and the relining of Blast Furnace 14 are all substantially related.

The company planned, announced, and permitted both the so-called “primary project” and the “Walking Beam Furnace” project at the same time, and plan to execute them over the same timeframe. At the same time, they also announced and completed the relining of Blast Furnace 14. All three of these projects are related to the overall output at the facility, the quality of the product they make, and are investments in the long-term viability of steelmaking at the mill. Blast Furnace 14 has historically represented 41% of production capacity at Gary Works and is projected to represent 48% of the capacity after these projects. The decision to rebuild the furnace, and the decision to modify the upstream and downstream equipment in the Projects covered in this Draft Permit are linked. An integrated iron and steel mill (“integrated mill”) would not financially invest in relining or the projects addressed in this Draft Permit without the other. There is no reason USS would choose to improve multiple operations at the furnace if it were not also investing in the relining. An integrated mill would not reline the furnace with new materials and make the other numerous changes in the permitted projects without a desire to increase overall steel production at Gary Works. The investment in modern reheating technology at the walking beam furnaces is only justified by a reinvestment in the largest blast furnace unit at the mill to make steel for another 20 years. So, all three Projects are substantially related and must be addressed together in this permitting action.

Concern 4 – The facility improperly applied the “capable of accommodating test” to zero out real increases at the plant associated with this project.

New Source Review under the Clean Air Act allows companies to exclude emissions they could have emitted prior to a modification if those emissions are unrelated to the modification. In this case, USS is assuming that 2/3 of the pollution increases from Blast Furnace 14 are unrelated to the increased production allowed by the Primary Project and therefore shouldn’t count towards emissions increases that must be addressed in this permitting action. By doing this, USS can make more steel and increase the emissions in the community without any consequences or additional pollution controls. However, there is nothing in USS’ application or IDEM’s permit that explain why all of the increases in production and emissions at Blast Furnace 14 aren’t related to the projects addressed in this permit. IDEM must either include such an analysis in their permit record or address all production increases and associated emissions in this permitting action.

Concern 5 – The Draft Permit’s incorporation of Best Available Control Technology (“BACT”) for Carbon Monoxide (“CO”)

While the CO BACT analysis appears to support the permit limits (generally “good” combustion or operating practices plus numeric emission limits), the permit lacks any specific requirements

that make the limits enforceable by IDEM, EPA, or the public. Specifically, the permit does not provide any detail about the “good” practices that USS must use or include the monitoring, recordkeeping, and reporting to ensure USS is meeting the specific numeric CO emission limits.

Some specific concerns with the Draft Permit’s CO BACT requirements include:

- while the permit requires CO stack testing at the Blast Furnaces initially (within 180 days) and every 5 years thereafter, the Draft Permit does not require USS to monitor, record, or report continuous CO emissions from the Blast Furnaces requirements section of the permit;
- while continuous operation of a flare at the No.1 BOP Shop is required and monitored, there are no on-going monitoring, recordkeeping, or reporting specifically used to determine compliance with the hourly emission limits for the Shop’s CO BACT limits; and
- while the CO BACT limits for the Turboblower Boiler House (“TBBH”) are determined based on the exact fuel blend used, there is no requirement for USS to monitor, record, or report that blend or to calculate resulting compliance with the numerical CO emission limits.

Concern 6 – The compliance requirements for TBBH Boiler No. 7 is contradictory

The Technical Support Document (“TSD”) states that “the source has elected to only burn natural gas to render the requirements of 326 IAC 7-1.1 not applicable”, but the new NOx RACT provisions for TBBH Boiler No. 7 require “that greater than fifty percent (50%) of the heat input is derived from blast furnace gas averaged over an ozone control period” to comply with 326 IAC 10-3-2(1). USS cannot comply with both of these inherently contradictory terms contained in the Draft Permit. IDEM must clarify which fuel sources can be used at the TBBH Boiler and ensure that Gary Works complies with the necessary Indiana rule requirements.

Concern 7 – The Draft Permit does not adequately or fully explain the modifications that are actually included in this SSM/SPM.

Neither the Draft Permit nor the TSD adequately or fully explain the modifications included in this permitting action. In fact it includes more detail on the BF 14 reline – which is NOT part of the permit – than it does on the changes supposedly authorized by the Draft Permit. IDEM summarily notes at TSD pgs. 7-8 that blast furnaces 4, 6, and 8 are approved for modification. The agency however fails to explain what exact modifications are occurring at these blast furnaces, but it provides more detail for changes from the blast furnace 14 reline at TSD pgs. 12-

14. Even the company’s application just says they may modify these other furnaces, but doesn’t commit to exactly where or what they will be doing. IDEM must fully explain the modifications at blast furnaces 4, 6, and 8, determine the emission changes resulting from them, and address those changes as required in the permit and underlying analysis.

Concern 8 – The Draft Permit does not include the Compliance Assurance Monitoring Plan.

USS is required to prepare and implement Compliance Assurance Monitoring (“CAM”) Plans for multiple emissions units covered by this Draft Permit which have the potential to emit significant amounts of regulated pollutants, are subject to an emissions limitation, and use a control device to comply with that emissions limitation.

USS must submit a CAM plan for:

- one R-H Vacuum Degasser, identified as NSVD0272, which is considered as an "other unit" for CO, and
- two Coolers, identified as ISC10385 and ISC30387, the alloy handling system, identified as G201P09, and the two slab grinder lines, identified as SG1 and SG2, which are each considered as an "other unit" for PM, PM10, and PM2.5.

Despite being required to submit and comply with the CAM plans, IDEM has failed to include the plans in the Draft Permit. IDEM must include these CAM plans as part of the Permit so that the source, the regulators, and the public can ensure that USS is complying with the requirements contained in the plans.

Concern 9 – Several Permit Conditions Failure to Adequately Assure Compliance with the Emissions Limits

As one example, several permit terms require USS to take a specific action, but do not impose a time-frame for USS to comply with that requirement. For example, Condition D.15.13(b) requires USS to install a Continuous Emission Monitoring System (CEMS) for NO_x at Turboblower Boiler House Boiler, but does not state when USS must install it. Additionally, Condition D.10.3 requires USS to shut down Nos. 1, 2, 3, and 4 reheat furnaces and Nos. 1 and 2 waste heat boilers in order to keep the net increase of PM below the PSD threshold, but does not establish a deadline for USS to shut them down.

Concern 10 – The facility improperly determined that CarbonFree is not part of the same major source

US Steel is attempting to distance itself from the clearly interconnected CarbonFree chemical facility, which IDEM recently proposed to authorize in a separate air permit.

The facilities are co-located on the same property, U.S. Steel provides the core raw materials and fuel for CarbonFree, and CarbonFree provides depleted slag back to U.S. Steel for it to sell. CarbonFree would not be able to operate with U.S. Steel, and these projects are clearly interconnected and under common control. IDEM should treat them as such and permit the

combined source accordingly, which would require an updated permit analysis and would likely result in more stringent pollution control requirements.