



Heraeus Precious Metals North America LLC
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October 5, 2023

Doug Wright
Division of Air Pollution Control
Tennessee Department of Environment & Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Subject: Heraeus Precious Metals North America, LLC
ESRN 65-0049
Permit No. 579181
Minor Modification Request – Source 13 Increase Annual Material Process Limit

Dear Mr. Wright:

With this letter, Heraeus Precious Metals North America, LLC (Heraeus) submits a minor modification request for Source 13. The Source 13 Rhodium Oil Furnace will be modified by increasing the total annual raw material input limit. The appropriate forms and calculations for this modification are attached to this letter.

Description of Change and Agreement

Source 13 includes one Rhodium Oil Furnace with baghouse. This modification requests an increased raw material input of 120.0 tons during any period of twelve consecutive months. Please update the permit to reflect this requested annual raw material input limit.

Heraeus will maintain the previous agreement to limit the PM emissions from Source 13 to 0.3 pounds per hour (lb/hr) in accordance with TAPCR 1200-.03-07-.01(5).

Emissions Estimates

The modification to the source will increase the potential VOC emissions to 76.25 lb/hr and 73.22 tons per year (tpy). A recent EPA Method 24 lab analysis was performed on the input material for Source 13 which indicated the highest concentration of VOCs is 61% as opposed to 100% previously considered when calculating the potential VOC emissions. With the increase in Source 13 VOC emissions, potential Facility wide VOC emissions will be 91.96 tpy. No change to allowable particulate emissions or sulfur dioxide emissions is requested. The facility wide HAP emissions limit has been removed, and the potential HAP emissions for this source is very low. Heraeus will continue to track HAP emissions as required in Conditions E3-5 and E3-6 of the current permit.

Suggested Permit Language

65-0049-13: Source Identification: One (1) “Rhodium-Oil” Furnace with Baghouse Control.

Baghouse catch is recycled back to process for economic recovery. Use of a wet scrubber for product capture is not considered a control device. The scrubber receives exhaust flow input from the furnace and exhausts to the baghouse.

The baghouse control is considered inherent and not in the CAM program.

E13-3. Raw Material Input Limit

The total raw material input to this source shall not exceed 120.0 tons during any period of twelve (12) consecutive months.

TAPCR 1200-03-07-.07(2), TAPCR 1200-03-10-.04(2), and agreement letter dated September 28, 2023

Compliance Method: A log of the raw material input to this source, in a form that readily shows compliance with this condition, must be maintained at the source location and kept available for inspection for the Technical Secretary. The HAPs emissions from this source shall be included in Condition E3-6. The logs shall be maintained at the source location and submitted in accordance with Condition E2.

E13-5. Volatile Organic Compounds Emission Limit

Volatile organic compounds (VOC) emitted from the Rhodium Oil Furnace shall not exceed 73.5 tons during any period of twelve consecutive months.

TAPCR 1200-03-07-.07(2).

Compliance Method: The permittee shall assure compliance with the VOC emission limitation by complying with **conditions E13-1 and E13-3**.

Minor Permit Modification Procedures

The following requirements for minor modifications to a Part 70 permit are found at TN Chapter 1200-03-09-.02(11)(f)5(ii).

(ii) Minor permit modification procedures:

(I) Minor permit modification procedures may be used only for those permit modifications that:

I. Do not violate any applicable requirement;

II. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the permit;

III. Do not require or change a case-by-case determination of an emission limitation or other standard required by the federal Act, or a source-specific determination for

temporary sources of ambient impacts as required by the federal Act, or a visibility or increment analysis as required by the federal Act;

IV. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

A. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the federal Act. Further, federally enforceable emission caps assumed to avoid classification as a modification under chapter 1200-03-11, chapter 1200-30-16, Chapter 1200-03-31, paragraph 1200-03-09-.01(4) or paragraph 1200-03-09-.01(5) are included in the criteria of this section 1200-03-09-.02(11)(f)5(ii)(I)IVA.

B. An alternate emission limit approved pursuant to section 112(i)(5) of the federal Act or rule 1200-03-31-.06;

V. Are not modifications under Title I of the federal Act or the federal regulations promulgated pursuant thereto. Further, the minor permit modification process may be used only for changes that are not modifications under chapter 1200-03-11, Chapter 1200-03-31, chapter 1200-03-16, paragraph 1200-03-09-.01(4) or paragraph 1200-03-09-.01(5); and

VI. Are not otherwise required in paragraph 1200-03-09-.02(11) to be processed as a significant modification.

I hereby certify that the increased annual raw material process limit for the source 13 rhodium oil furnace meets the criteria for a minor modification and formally request that the Division use minor modification procedures to account for these minor modifications in the Part 70 permit.

If you have questions or comments, please contact Andrew Morgan, Environmental Manager at (423) 346-1065, or my consultant, Shea Cofer, at (615) 418-1414.

Sincerely,



Uve Kupka
President HPM Americas

Attachments