|  |  |
| --- | --- |
| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | PAL-02Determination of PAL for major NSR sourcesAir Quality Permit Program*Doc Type: Permit Application* |

**Instructions on page 5**

Use this form to calculate your Plantwide Applicability Limit (PAL). Do not complete this form if you are a minor source under New Source Review (NSR) or if you are not requesting a PAL. Complete a separate form for each pollutant for which you are requesting a PAL.

|  |  |  |  |
| --- | --- | --- | --- |
| **1a)** AQ Facility ID number: |       | **1b)** Agency Interest ID number: |       |
| **2)** Facility name: |       |
| **3)** PAL pollutant: |       | **4)** Baseline period: |       |

Table A. Units/Activities which existed or were constructed during the baseline period

|  | **5a)** | **5b)**  | **5c)** |  | **5d)** |  | **5e)** | **5f)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PAL -pollutant emitting source**  | **Previous insignificant activity?** | **Baseline actual emissions****(tpy)** | **Current restricted emissions – short term****(lb/hr)** | **Restriction applied during baseline?** | **Current restricted emissions – long term****(tpy)** | **Restriction applied during baseline?** | **Emissions source category** | **Adjusted baseline actual emissions****(tpy)** |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|       | [ ]  Y [ ]  N |       |       | [ ]  Y [ ]  N [ ]  N/A |       | [ ]  Y [ ]  N [ ]  N/A |  |       |
|  |  |  |  |  |  |  | **5g) TOTAL:** |       |

Table B. Units/Activities newly constructed after the baseline

|  |  |  |  |
| --- | --- | --- | --- |
| **6a)** | **6b)** | **6c)** | **6d)** |
| **PAL -pollutant emitting source** | **Previous insignificant activity?** | **Construction date/ startup date** | **Potential emissions** | **Emission source category** |
| **(lb/hr)** | **(tpy)** |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|       | [ ]  Y [ ]  N |       /       |       |       |  |
|  |  |  | **6e)** **Total** |       |  |

Table C. Units/Activities which existed or were constructed during the baseline
and were removed after the baseline

|  |  |  |
| --- | --- | --- |
| **7a)****PAL -pollutant emitting source** | **7b)****Adjusted baseline actual emissions(tpy)** | **7c)****Date of shutdown or removal** |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
| **7d) Total** |       |  |

Table D. Proposed PAL

|  |  |
| --- | --- |
| **8)** Total baseline actual emissions from baseline period (from 5g): |        tons per year |
| **9)** Total potential emissions of units constructed after baseline (from 6e): | +       tons per year |
| **10)** Significant threshold: | +       tons per year |
| **11)** Baseline plustotal additions: | =       tons per year |
| **12)** Total baseline of removedequipment (from 7d): | -       tons per year |
| **13)** Future regulatory adjustments: | -       tons per year |
| **14)** Proposed PAL: | =       tons per year |

Table E. Additional information

The following additional information (items 15 – 25) must be included in your application **if applicable to your facility**. Please complete the following checklist to verify that you have **included** all the needed information.

|  |  |
| --- | --- |
| **15)** If you have listed emission units (EU/EQUI), tanks (TK/EQUI), or fugitive sources (FS/FUGI) that were previously considered insignificant activities, these must be numbered consecutively following the last EU, TK, or FS (EQUI or FUGI) number used for the Title V permit or listed in the Title V application. | [ ]  Form GI-05B or GI-05B-R (for EU/EQUI)[ ]  Form GI-05C or GI-05C-R (for TK/EQUI)[ ]  Form GI-05D or GI-05D-R (for FS/FUGI)[ ]  Not applicable |
| **16)** If you completed forms GI-05B, GI-05B-R, GI-05C, GI-05C-R, GI-05D, and/or GI-05D-R under item 16), and subsequently identified control equipment (CE/TREA) and/or stacks and/or vents (SV/STRU) that were not previously included in the Title V permit or permit application, these must be numbered consecutively starting with the last SV or CE (STRU or TREA) number used for the Title V permit or listed in the Title V application. | [ ]  Form GI-04 or GI-04-R (SV/STRU)[ ]  Form GI-05A or GI-05A-R (CE/TREA)[ ]  Not applicable |
| **17)** Unless the answers to items 15) and 16) were “not applicable), you need to update the facility process flow diagram and stack/vent diagram. | [ ]  Form GI-02 or GI-02-R (process flow)[ ]  Form GI-03 or GI-03-R (stack/vent)[ ]  Not applicable |
| **18)** A listing of which, if any, Federal or State applicable requirements, emissions limits, or work practices apply to each unit included in the proposed PAL. | [ ]  All applicable requirements are already listed in existing permit or[ ]  List of applicable requirements is attached |
| **19)** For each unit included in the proposed PAL, proposed monitoring methods meeting the requirements of 40 CFR § 52.21(aa)(12) – using mass balance, CEMs, CPMS/PEMS, or emissions factors.  | [ ]  Included in an attached Form CD-01 |
| **20)** Proposed calculation procedures for converting the monitoring system data to monthly and annual emissions based on a 12-month rolling total for each month as required by paragraph 40 CFR § 52.21(aa)(3)(iii). | [ ]  Included in an attached Form CD-01 |
| **21)** Proposed default maximum emissions rates (in pounds per hour as well as longer averaging periods as necessary) that will be used in calculating actual emissions when: a) monitoring data is not available as required by 40 CFR § 52.21(aa)(12)(vii); and b) no correlation can be demonstrated between the monitored parameter at a given operating range and the actual emissions (40 CFR § 52.21(aa)(12)(viii)). Include calculations and supporting documentation. | [ ]  Included in an attached Form CD-01 |
| **22)** When proposing to use non-site specific emissions factors (e.g., AP-42) to calculate actual emissions, include a) proposed adjustments to account for uncertainty; and b) proposed methods to conduct validation testing (if technically practicable) to determine a site-specific factor for significant units within six months of permit issuance. (40 CFR § 52.21 (aa)(12)(vi)(c)) | [ ]  Included in an attached Form CD-01[ ]  Not applicable |
| **23)** When using a mass balance, include a proposed validation method and frequency for verification of the content of the PAL pollutant that is contained in or created by raw materials or fuels. (40 CFR §52.21(aa)(12)(iii)(a)) | [ ]  Included in an attached Form CD-01[ ]  Not applicable |
| **24)** Propose re-validation methods and frequencies for all data used to establish the PAL as required by 40 CFR § 52.21(aa)(12)(ix). | [ ]  Included in an attached Form CD-01 |
| **25)** A proposal to eliminate previous permit limits taken to avoid major modifications under NSR as allowed by 40 CFR § 52.21(aa)(1)(ii)(c). Include any necessary supporting documentation to show that the removal does not:* adversely affect the enforceability of the PAL and
* adversely impact the NAAQS or PSD increments.
 | [ ]  Included in an attached “marked up” copy of Table A or Form CD-01 from the existing permit[ ]  Not applicable |
| **26)** An analysis of whether modeling must be done to assess ambient impacts, and the modeling results if required | [ ]  No additional modeling required per email or letter from MPCA Risk Evaluation and Ambient Modeling Unit staff. **Date** (mm/dd/yyyy):      [ ]  Included modeling results following approved modeling protocol. **Date** (mm/dd/yyyy):       |

Form PAL-02 Instructions

**1a) AQ Facility ID number --** Fill in your Air Quality (AQ) Facility identification (ID) number. This is the first eight digits of the permit number for all new permits issued under the new operating permit program. If your facility has never been issued a permit under this program, leave this line blank.

**1b) Agency Interest ID number --** Fill in your Agency Interested ID number. This is an ID number assigned to your facility through the Tempo database. If you don’t know this number, leave this line blank.

**2) Facility name --** Enter your facility name.

**3) Pollutant** – Fill in the pollutant for which you are requesting a Plantwide Applicability Limit (PAL). Choose from the following list:

|  |  |
| --- | --- |
| * Total Particulate Matter (PM)
 | * Sulfuric acid mist
 |
| * Particulate Matter smaller than 10 microns in diameter (PM10)
 | * Nitrogen Oxides (NOx)
 |
| * Particulate Matter smaller than 2.5 microns in diameter (PM2.5)
 | * Sulfur Dioxide (SO2)
 |
| * Total Reduced Sulfur including Hydrogen Sulfide (H2S)
 | * Carbon Monoxide (CO)
 |
| * Reduced Sulfur Compounds including H2S
 | * Lead
 |
| * Municipal Waste Combustor (MWC) Organics
 | * Fluorides
 |
| * Ozone/Volatile Organic Compounds (VOC)
 | * MWC Acid Gas
 |
| * Municipal Solid Waste (MSW) Landfill Gas
 | * MWC Metals
 |

1. **Baseline Period** – Fill in the range of the 24-month period from within the last five years (for Electric Utility Steam Generating Units [EUSGU]) or ten years (for anything other than a EUSGU), as allowed by 40 CFR § 52.21(b)(48)(iv) (e.g., Feb. 2000 - Jan. 2002). All PAL-pollutant emitting equipment or processes must use the same baseline period for this PAL. **If you are requesting more than one PAL, submit a separate form for each PAL-pollutant. You may use a different baseline period for different PALs.**

**Important**: In order to use the selected 24-month period as the baseline period, the facility must possess adequate documentation to allow the calculation of actual emissions throughout the selected period. The documentation must also allow the calculation of any required adjustments to actual emissions as discussed below. If documentation is missing or incomplete for any part of the selected 24-month period, a different 24-month period must be selected.

Table A. Units/Activities which existed or were constructed during the baseline period

Use this table to list and document the baseline actual emissions and adjustments for PAL-pollutant emitting units or activities that were in existence during the baseline period, or were constructed during the baseline period. This includes existing units that were modified or replaced after the baseline period. Replacement units are defined as existing units, so the baseline actual emissions for the replaced unit are used in determining the PAL.

Make copies of the table if you need more than 15 lines. Attach your calculations and all supporting documentation.

**5a) PAL-Pollutant emitting source --** Using the same codes used in your existing permit (e.g. EQUI 1, FUGI 1) or on Forms GI-05B, GI-05C, and GI-05D, list all units at the facility which emit the PAL-pollutant and either existed or were constructed during the baseline period. This includes any units or activities that were in existence and have been removed since the baseline, and any units that may have otherwise been considered “insignificant activities.” If a unit or activity emits the PAL-pollutant and the emissions are quantifiable, it is no longer considered insignificant. If the unit or activity was previously considered to be an insignificant activity, see item 15) for instructions in assigning an identification number. Indicate whether each unit listed is/was considered an insignificant activity in the absence of a PAL.

* **Example A** – a NOX PAL and a natural gas fired space heater

Natural gas fired space heaters are considered insignificant activities under Minn. R. 7007.1300, subp. 3(A). However, natural gas combustion results in NOX emissions, so if you want a NOX PAL, the space heater is no longer insignificant. You would consider the space heater to be an emission unit (EU/EQUI), and add it to Form GI-05B. If the last EQUI number used had been EQUI 10, then the space heater becomes EQUI 11. Complete all portions of Form GI-05B pertaining to EQUI 11. Submit a revised process flow diagram (Form GI-02) which includes EQUI 11. If EQUI 11 emits out a stack that has not been previously listed on Form GI-04, then fill out a new line on Form GI-04 for that stack, giving it the next consecutive STRU number, and submit Form GI-04 and Form GI-03 (stack/vent diagram) with your application.

* **Example B** – a VOC PAL and a 5000 gallon gasoline storage tank

If the total gasoline storage capacity is less than 10,000 gallons, then the 5000 gallon capacity gasoline storage tank is considered insignificant under Minn. R. 7007.1300. subp. 3(E)(1). However, a gasoline storage tank will have VOC emissions, so if you want a VOC PAL, the tank is no longer insignificant. You would consider the storage tank to be a tank (TK/EQUI), and add it to Form GI-05C. If the last EQUI number used had been EQUI 5, then the gasoline storage tank becomes EQUI 6. Complete all portions of Form GI-05C pertaining to EQUI 6. Submit a revised process flow diagram (Form GI-02) which includes EQUI 6. If EQUI 6 has an exhaust pipe that has not been previously listed on Form GI-04, then fill out a new line on Form GI-04 for that stack, giving it the next consecutive STRU number, and submit Form GI-04 and Form GI-03 (stack/vent diagram) with your application.

* **Example C** – a PM10 PAL and a sanding operation that exhausts though a baghouse that exhausts inside the building

A sander that exhausts to a baghouse that exhausts filtered air back inside the building is an insignificant activity under Minn. R. 7007.1300, subp. 3(D)2. However, this is still considered a source of emissions, so if you want a PM10 PAL, the sander is no longer insignificant. You would consider the sander to be an emission unit (EU/EQUI), and add it to Form GI-05B. If the last EQUI number used had been EQUI 19, then the sander becomes EQUI 20. Complete all portions of Form GI-05B pertaining to EQUI 20. Fill out a new line on Form GI-05A for the baghouse, giving it the next consecutive TREA number, and submit Form GI-05A with your application. Add EQUI 20 and the associated baghouse to Form GI-03 and GI-02.

**5b) Baseline actual emissions** -- Fill in the rows under column 5b) with each unit/activity's actual emissions during the baseline period. These emissions are the average actual emissions during that time period – taking into account actual materials, actual throughputs, actual emission rates (e.g., average emissions factors vs. maximum), as well as actual hours of operation. The average actual emissions are calculated as the sum of the actual emissions for each of the 24 months, divided by 2. For example, if a given unit only operated for 3 months during the baseline period, the baseline emissions would be the emissions from those 3 months, divided by 2 ([3 month @ X tons per month + 21 months @ 0 tons] ÷ 2). **If a unit or activity was in existence or was constructed during this period, but did not operate, the baseline actual emissions are zero.**

This calculation includes any air emissions control devices that were in operation. These emissions controls are included whether their operation was enforceable or voluntary. The actual emissions include fugitive emissions to the extent they are quantifiable, as well as emissions associated with startup, shutdown, and malfunction.

**Important**: In order to use the selected 24-month period as the baseline period, the facility must possess adequate documentation to allow the calculation of actual emissions throughout the selected period. The documentation must also allow the calculation of any required adjustments to actual emissions as discussed below. If documentation is missing or incomplete for any part of the selected 24-month period, a different 24-month period must be selected.

**5c) Restricted emissions – short term** – Fill in the rows under column 5c) with each emissions source’s restricted emissions, in pounds per hour. These take into account the activity’s maximum emissions, any enforceable restrictions from state or federal rules, existing permit limits, and any limits proposed in this application. It can include control efficiency requirements and short term throughput limits. (This is slightly different than the “allowable emissions” defined in 40 § 52.21(aa)(2)(ii), which does not explicitly include proposed limits.) If the applicable requirement or permit lists a short term limit in units other than pounds/hour (such as pound/million Btu heat input, or grains/dry standard cubic foot), please convert the limit to a pound per hour limit. If there are no short term limits that apply to the PAL pollutant at the emission unit/source listed in column 5a), then enter the hourly potential to emit (PTE).

**5d) Restricted emissions – long term** – Fill in the rows under column 5d) with each emissions source’s restricted emissions, in tons per year. These take into account the activity’s maximum emissions, any enforceable restrictions from state or federal rules, existing permit limits, and any limits proposed in this application. It can include control efficiency requirements and throughput limits. (This is slightly different than the “allowable emissions” defined in 40 § 52.21(aa)(2)(ii), which does not explicitly include proposed limits.) If the applicable requirement or permit lists a limit in units other than pounds/hour (such as pound/million Btu heat input, or grains/dry standard cubic foot), please convert the limit to a ton per year basis. If there are no limits that apply to the PAL pollutant at the emission unit/source listed in column 5a), then enter the PTE in tons per year.

**5e) Emissions source category –** Fill in the category for each emissions source. Choose from the following, which are based on the definitions in 40 CFR § 52.21(aa)(2)(iii), (iv), and (xi). PTE means potential to emit. ST means significant threshold or significant emission rate; these are defined in table 1 below for sources not within 10 km of a Class I area:

* small (PTE < ST)
* significant (ST < PTE < 100 ton/year)
* major (PTE > 100 tons/year)

**Table 1. Significant Thresholds (ST)**

| **Pollutant** | **ST (except within 10 km of a Class I area) (tons per year)** |
| --- | --- |
| CO | 100 |
| SO2; NOX; ozone/VOC; MWC acid gases | 40 |
| Total particulate matter (PM) | 25 |
| PM10/MWCmetals | 15 |
| PM2.5 | 10 |
| Lead | 0.6 |
| Fluorides | 3 |
| Sulfuric acid mist | 7 |
| Total reduced sulfur compounds | 10 |
| MWC organics | 3.5 x 10-6 |
| Municipal solid waste landfill gas | 50 |
| Any other regulated pollutant | Any emission rate |

**5f) Adjusted baseline actual emissions** – Fill in the rows under column 5f) with each emission source’s adjusted baseline actual emissions and a description of the adjustments that were made. All sources must adjust any actual emissions (listed under 5b)) that were not in compliance with limitations that were legally enforceable during the baseline period (40 CFR § 52.21(b)(48)(i)(b) or (b)(48)(ii)(b)). This means you must subtract off any actual emissions that were in excess of what was allowed by a permit or rule. For example, if the limited emissions during the baseline period were 5 pounds/hour and 20 tons per year, and your baseline emissions are 15 tons per year, but for 2000 hours you operated at 5.5 pounds per your (out of compliance by 0.5 pounds/hour), your baseline emissions must be adjusted downward by 0.5 tons (0.5 pound/hour x 2000 hours). Your adjusted baseline then becomes 15 tons/year – 0.5 tons/year = 14.5 tons/year.

In addition, for all ***sources other than electric utility steam generating units***, you must adjust the actual emissions down to reflect any limitations with which you ***must currently*** comply (40 CFR § 52.21(b)(48)(ii)(c)), but you didn’t have to comply with during the baseline period. For example, you need to reduce the actual emissions to account for control equipment that is now required but was not required or in operation during the baseline period. Any applicable requirements, emissions limits, or work practice requirements listed in your existing permit or proposed in this application should be accounted for in this adjustment, unless they were also applicable during the baseline period. Using the previous example, if at some point after the baseline period, a new rule became effective requiring an additional 90 percent reduction, you would have to further adjust the baseline to reflect the required 90 percent reduction: 14.5 x (1-0.9) = 1.45 tons/year = adjusted baseline.

**Include all calculations and supporting documentation for these adjustments in your submittal.**

**5g) Total Adjusted Baseline Actual Emissions** – Calculate and fill in the total tons per year by summing the emissions listed under column 5f).

Table B. Units/Activities newly constructed after the baseline

Use this table to list and document the baseline actual emissions and adjustments for all PAL-pollutant emission sources or activities that were newly constructed after the baseline period. Emissions of the PAL-pollutant from these activities are accounted for at their potential emissions, regardless of whether or not the unit or activity has started operation. Existing units that were modified or replaced after the baseline period and covered in Table A and do not get accounted for in Table B (e.g., a replacement unit constructed after the baseline is **not** accounted for at its PTE but rather is accounted for as the baseline actual emissions of the unit it replaced).

Make copies of the table if you need more than 15 lines. Attach your calculations and all supporting documentation.

PTE is the capability at maximum design capacity to emit a pollutant, except as constrained by conditions which are federally enforceable or enforceable as a practical matter (which include the effect of installed air pollution control equipment and restrictions on the hours of operation, or the type or amount of material combusted, stored or processed.) Such limits may be in a rule or permit.

**6a) PAL-Pollutant emitting source –** Using the same codes used in your existing permit (e.g. EQUI 1, FUGI 1) or on Forms GI-05B, GI-05C, and GI-05D, list all units/activities at the facility which emit the PAL-pollutant and which were constructed after the baseline period. Include any units or activities that may have otherwise been considered “insignificant activities.” If the unit or activity emits the PAL-pollutant and the emissions are quantifiable, it is no longer considered insignificant. If the unit or activity was previously considered to be an insignificant activity, see item 15) for instructions in assigning an identification number. For examples of how to include insignificant activities, see the instructions for item 5a). Indicate whether each unit or activity listed is/was considered an insignificant activity in the absence of a PAL.

**6b) Date of construction/startup –** Fill in the date of construction and initial startup for each unit listed under column 6a). Provide, at a minimum, the month and year.

**6c) Potential emissions –** Fill in the rows under column 6c) with each source’s current potential (allowable) emissions, in both pounds per hour and tons per year. These take into account the activity’s maximum emissions, any enforceable restrictions from state or federal rules, and existing or proposed permit limits. The potential emissions can often be found in documentation supporting your current air permit. ***Remember that the emissions for new units/activities that have not yet started operation are considered to be zero under the rules (40 CFR § (b)(48)(iii)).***

**6d) Emissions source category –** Fill in the category for each emissions source. Choose from the following, which are based on the definitions in 40 CFR § 52.21(aa)(2)(iii), (iv), and (xi). PTE means potential to emit. ST means significant threshold or significant emission rate; these are defined in item 5e) for sources not within 10 km of a Class I area:

* small (PTE < ST)
* significant (ST < PTE < 100 ton/year)
* major (PTE > 100 tons/year)

**6e) Total Potential Emissions** – Calculate and fill in the total tons per year of potential emissions by summing the ton/year emissions in column 6c).

Table C. Units/Activities which existed or were constructed during the baseline and were removed after the baseline

Emissions sources that were included in the baseline actual emissions in item 5g) that were permanently shutdown after the baseline period must be subtracted from the proposed PAL. Units that were shutdown as part of a replacement should not be listed in Table C if the replacement unit still exists. Whether or not a given unit has been ***permanently*** shutdown is based upon the intent of the Permittee. However, a shutdown lasting for two years or more ***or*** resulting in removal of the unit from the annual emissions inventory is presumed permanent.

Use this table to calculate the total amount that needs to be subtracted. Copy this table if more than 10 units were shutdown. **Attach your calculations and all supporting documentation.**

**7a) PAL-Pollutant emitting source –** Fill in the PAL-pollutant emitting sources from item 5a) which have been permanently shutdown or removed.

**7b) Adjusted Baseline actual emissions –** Fill in each emission source’s adjusted baseline actual emissions in tons per year from item 5f).

**7c) Date of shutdown –** Fill in each emission source’s date of shutdown. Provide, at a minimum, the month and year.

**7d) Total** -- Calculate and fill in the total tons per year by summing the adjusted baseline actual emissions in column 7c).

Table D. Proposed PAL

**8)** **Total baseline actual emissions** **for units/activities which existed or were constructed during the baseline period –** Fill in the value from 5g).

**9)** **Total potential emissions units/activities constructed after the baseline period –** Fill in the value from 6e).

**10) Significant threshold –** Fill in the amount of the applicable significant level for the PAL pollutant from 40 CFR § 52.21(b)(23) or from the Clean Air Act as amended, whichever is lower. The thresholds as defined in 40 CFR § 52.21(b)(23) are listed in the instructions for item 5e).

**11) Baseline plus total additions –** Add the numbers from items 8), 9), and 10) and enter the total here.

**12) Total baseline of removed equipment –** Fill in the value from 7d).

**13) Future regulatory adjustments** **–** Under the PAL rule, the Agency is required to include a reduced PAL, with a delayed effective date, in your permit, reflecting any applicable Federal or State regulatory requirements that are promulgated as of permit issuance, but where the compliance date has not yet passed. For example, if there is a final NSPS that will require you to control your NOx emissions to a certain level, but the compliance date is 1 year away, the permit will need to contain a PAL that becomes effective on the compliance date and that is adjusted down by the amount required by the standard. The adjustment should be made to the actual emissions, in the same was done for any other applicable requirements that went into effect after the baseline period (item 5f).

If you are aware of any final standard where the compliance date has not yet passed, but that will apply to you during the term of your permit, submit the necessary additional information showing your adjusted PAL (e.g., name of standard, effective and compliance dates, reduction required by the standard, etc.). Enter the total adjustment on line 13.

**14)** **Proposed PAL** – Calculate and fill in the proposed PAL by subtracting lines 12) and 13) from line 11).

Table E. Additional information

For items 16) – 27), be sure to include the information described, if applicable to your proposed PAL. The Minnesota Pollution Control Agency (MPCA) has not developed specific permit application forms to cover all aspects of what is required in the federal rule for a PAL application. If you have questions about a specific requirement, refer to the rule citation provided or to the MPCA’s New Source Review website at <https://www.pca.state.mn.us/air/new-source-review>, or contact the MPCA at 651-296-6300 or
800-657-3864 (within Minnesota only).