

Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Table of Contents

- Introduction
- Instructions for completing an Emission Reduction Credit Application
- Frequently asked Questions

Introduction

The Massachusetts Emission Reduction Credit Banking and Trading Program encourages the voluntary creation and trading of surplus emission reductions as Emission Reduction Credits (ERC) to be used for purposes of offsets, netting and cost effective compliance without interfering with any applicable requirements concerning attainment, reasonable further progress or any other applicable air pollution control requirement. ERC may be purchased and used by companies, individuals or businesses that want to build new facilities, expand production or use them in a compliance plan.

The purpose of this application is to certify eligible emission reductions as Emission Reduction Credits that may be used in emission banking and trading transactions.

The current online application is only designed for ERC certification from stationary sources (facilities). The regulations at 310 CMR 7.00, Appendix B also allow for creation of ERC from mobile sources and area sources. Applications for non-stationary source generated ERC should be submitted on paper after consultation with MassDEP. Please contact Yi Tian of MassDEP's Air Facilities and Permits Branch in Boston at 617-292-5871 for more information

Participation in the Massachusetts Emission Reduction Credit Banking and Trading Program is voluntary. There is no requirement to apply for Emission Reduction Credits. Emission reductions are not eligible for consideration as ERC, if said reductions are generated by an un-inventoried area source category (e.g., small bakeries) or if said reductions are generated by biogenic sources (e.g., trees).

What other requirements should be considered when applying for this permit?

An Emission Reduction Credit Application must be submitted to the Department either within six months of the end date of the period being evaluated for a retrospective discrete emission reductions or the approval date of a federally enforceable mechanism for prospective emission reductions other than 310 CMR 7.00 *Appendix B*(3).

If filing for prospective emission reductions it may be necessary to modify existing permits (e.g. New Source Review, RACT Emission Control Plan, and/or Operating Permit) prior to the certification of ERC.

If the emission reductions are to be obtained through the modification of existing equipment or installation of new equipment, additional application forms may be necessary. In such cases, please contact the appropriate MassDEP regional office for guidance before applying

Revised: 06/2017 Page 1 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Pre-Application Consultation

You should contact Yi Tian of MassDEP's Air Facilities and Permits Branch in Boston at 617-292-5871 early in the process of preparing to apply for Emission Reduction Credits. A pre-application conference can save you time, spare you frustration, and often results in faster processing by the agency. If you submit an application without scheduling such a meeting, MassDEP may require one anyway, before it can determine whether your application is administratively complete.

Instructions

The application is an online form that can be found at: https://permitting.state.ma.us/CitizenAccess

You will need to create an account to access the form. Screen by screen instruction to assist you in completing the form is available at: http://mass.gov/dep/aq-erc

Please note that when completing the form online, every field with a red asterisk is required data. You will not be able to advance to the next page in the form or submit the form without entering something in each field of the form marked with a red asterisk.

The form allows the preparer to "Save and Resume Later" any form you start. It is recommended that the first person to open a form in the online system enter the first page of data and then click "Save and Resume". This action will create a PIN that can be shared with another person (consultant, staff or signatory). Once another person activates the PIN in their account, they will be able to open the form and add information or approve it as the signatory. See http://mass.gov/dep/aq-erc for more instruction on activating a PIN and sharing a form.

The following provides general instruction on the application form by section.

Step 1: Facility and Owner Information

Provide general information such as facility name, facility owner, address, and EPA Identification number. You can search for your facility from a pre-loaded list.

The form also requires you to enter information about the facility Owner and Contact. If you have previously completed an on-line application for the same facility or owner, you may be able to look up and select ownership information.

Step 2: Application Information

Page 1

ERC General

On page 1, indicate the pollutant(s) and emission reduction strategy(ies) that will be used to generate emission reduction credits. More than one pollutant or strategy can be selected.

Page 2

ERC General

On Page 2, indicate whether the credit proposed is prospective or retrospective, whether the requested certification is for mass- or rate-based credits, and the season of credit generation (ozone season, non-ozone season or both are options).

Revised: 06/2017 Page 2 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

- Mass-based credits are credits expressed in tons, created by implementing an emission reduction for a discrete time period. Rate-based credit strategies are expressed in units of tons per year.
- Check the appropriate type of certification box. Retrospective certifications are completed after an emission reduction strategy is implemented and utilize actual emission data. Prospective certifications are completed prior to implementation of an emission reduction strategy, and utilize projected allowable emissions.

Page 3

Equipment Detail

On page 3, describe each piece of equipment that participates in creation of the ERC. Information requested includes:

- Equipment/Process Line ID Number: Indicate the equipment and/or process line ID number described by this section.
- o Type of Equipment: Describe the type of equipment, e.g. boiler
- o Manufacturer: Manufacturer of the equipment.
- Model Number: The manufacturer's model number for the equipment. Do not use the serial number.
- Date of installation: Date or dates when the equipment and/or control equipment was installed.
- MassDEP Air Quality approvals: List (i) Approval Number(s) and (ii) Date of Approval(s) for equipment.
- Pollutant affected by the approval.

Page 4

Baseline Time Period- provide the baseline period. ERC generation is usually based on the two year period immediately preceding the application, but an alternative baseline period can be requested. If an alternative baseline period is requested, then an attachment will be required. That attachment must be an explanation of why an alternative baseline period is more representative of normal facility operations than the two year period immediately preceding the application.

Page 5

Baseline Emissions - On this page, provide information that will result in calculation of baseline emissions in the units described here. There are three tables:

Baseline Capacity Utilization (CU): Based on average historical values for the two-year period immediately preceding this application or alternative baseline period. Numbers are percentages entered as decimal values (e.g. 80% is entered as 0.8)

- Allowable Capacity Utilization: List the allowable capacity utilization for the emission unit(s) seeking emission reduction credit. This would reflect any permit limitation or if not limited, a 1 should be entered.
- Actual Capacity Utilization: List the actual capacity utilization for the emission unit(s) seeking emission reduction credit.
- Baseline Capacity Utilization: The system will auto fill the lower of the two values above.

Baseline Hours of Operation (H): Based on average historical values for the two-year period immediately preceding this application or alternative baseline period.

Revised: 06/2017 Page 3 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

- Allowable Hours of Operation: List the allowable hours of operation for the emission unit(s) seeking emission reduction credit. If there is no limit on hours of operation, enter 8760.
- Actual Hours of Operation: List the actual hours of operation for the emission unit(s) seeking emission reduction credit.
- Baseline Hours of Operation: The system will auto fill the lower of the two values above

Baseline Emission Rate (ER): Based on average historical values for the factors for the two-year period immediately preceding this application or alternative baseline period. Emission rate must be converted to and entered as pounds per hour.

- Allowable Baseline Emission Rate: List the allowable baseline emission rate for the
 emission unit(s) seeking emission reduction credit. This would be a permit or applicable
 regulation limit or, if no limit exists, the maximum emission rate according to the
 equipment manufacturer.
- Actual Baseline Emission Rate: List the actual baseline emission rate for the emission unit(s) seeking emission reduction credit. Actual baseline emission rate should be the average actual emission rate during the two-year period preceding this application or alternative baseline period.
- Baseline Emission Rate: The system will auto fill the lower of the two values above.

Page 6

Calculation of Baseline Emissions: Baseline emissions will be established for each affected emission unit according to the following formula: baseline = $ER \times (CU \times H)$

If you wish to enter an alternative baseline, the system allows you to edit the table and enter an alternative baseline calculation (showing the values for each factor) as well as the total alternative baseline emissions.

Page 7

Emission Reduction Strategy

Provide a description of the emission reduction strategy that will result in generation of ERC (e.g. Over- control, shut down of emission unit). Include timelines and schedules for implementing the emission reduction strategy.

Page 8

Calculation of Post Reduction Emissions

Post reduction emissions are calculated by multiplying post reduction emission rate times post reduction operating hours and post reduction capacity utilization. Again, express emission rate in pounds per hour

Allowable/ Actual Post Reduction Emission Rate: For each emission unit identified in the table, edit the line to provide the post reduction emission rate in pounds per hour. This is the rate that will be used to calculate the emission reductions after implementation of the control strategy described above and will become an enforceable limit on emissions in the ERC approval. For prospective filings, list the federally enforceable emission rate you are proposing to create the emission reductions. For retrospective filings, list the actual emission rate that created the emission reductions.

Revised: 06/2017 Page 4 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Allowable/ Actual Post Reduction Capacity Utilization: For each unit identified in the table, edit the line to provide the capacity utilization rate, which will be used to calculate the emission reductions after implementation of the control strategy described above. Enter the number as a decimal value (e.g. 80% is entered as 0.8). For prospective filings, list the federally enforceable capacity utilization rate you are proposing to create the emission reductions. For retrospective filings, list the actual capacity utilization rate that created the emission reductions.

Allowable/ Actual Post Reduction Hours of Operation: For each unit identified in the Table, identify the hours of operation which will be used to calculate the emission reductions after implementation of the control strategy described above. For prospective filings, list the federally enforceable hours of operation you are proposing to create the emission reductions. If there is no federally enforceable limitation, enter 8760. For retrospective filings, list the actual hours of operation that created the emission reductions.

Calculation of Post Reduction Emissions: Post reduction emissions will be auto-calculated for each emission unit and carried forward into the following sections of the application.

Page 9

Other Factors

Page 9 details other factors that could affect the emission reduction eligible for creation of ERC. Do the emission reductions in the application rely on changes at the facility that trigger additional plan approval requirements (310 CMR 7.02)?

- If the application is retrospective, answer the question as to whether the emission reduction strategy involved installing new equipment or modifying existing equipment to implement the emission reduction strategy by checking the appropriate box and provide MassDEP Approval number.
- If the application is prospective, check the appropriate box, answer whether the
 emission reduction strategy involves installing new equipment or modifying existing
 equipment to implement the emission reduction strategy. If yes, briefly summarize
 the changes and provide a schedule for submittal of a plan approval application.
- Will ancillary emissions occur as a result of this application? Ancillary emissions are
 new emissions either on site or from other sources that result from a shift in
 production, necessitated by the decreased activity at the site generating the ERC. If
 yes, please explain.

Page 10

Eligible Emission Reduction (not including other factors)

Page 10 shows the emission reduction calculation. Data is transferred to this table from tables previously completed.

Page 11

Remaining Useful Life and Compliance Assurance

For an ERC application that relies on equipment shutdown only, on the final page (Page 11), indicate the remaining useful life of the equipment. Check the applicable box concerning "Remaining Useful Life." Remaining useful life shall be ten (10) years except in those cases where the Department determines a shorter period is appropriate, or the applicant demonstrates to the

Revised: 06/2017 Page 5 of 14



Massachusetts Department of Environmental Protection Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Department's satisfaction that a period of longer than ten (10) years is warranted. The Department will use the following criteria for making the determination including, but not limited to: the age of the equipment; the type of equipment; maintenance history; operating history; and industry norms. In any case, the remaining useful life shall not exceed twenty (20) years. Please provide information to the Department relative to the determination of remaining useful life.

In addition, on this page, provide the methods for assuring compliance with the reduced emission limit that generates ERC. This includes three questions that cover:

- Methods used to determine and verify baseline emissions. Baseline Method: Describe in detail the methods or sources used to verify the baseline emission rate (ER), capacity utilization (CU), hours of operation per day (H)), (e.g., stack testing, sampling, mass balance, etc.). Include a detailed description of testing frequency, quality assurance, and quality control. Use an attachment, if necessary.
- Methods used to determine post-reduction emissions. Describe in detail the methods or sources used to verify the post reduction emission rate (ER), capacity utilization (CU), and hours of operation per day (H), (e.g., stack testing, sampling, mass balance, etc.).
 Include a detailed description of testing frequency, quality assurance, and quality control. Use an attachment, if necessary.
- Records that will be kept to verify compliance with the post-reduction emissions. Describe
 in detail the type of records which will be kept to verify compliance with post reduction
 ER, CU, H, (e.g., testing/sampling results, hours of operation, etc.). Use an attachment, if
 necessary.

Step 3: Documents

The system will ask you to attach any documents needed to support the application, such as manufacturer specification for a new add-on control device or detailed calculations of an emission reduction. A list of required attachments will be provided based on answers the applicant provided in the application. Please attach additional documents if needed to support the application.

The document attachment process is very similar to attaching a document to an email. Start by clicking on the "Browse" button. This will bring up a pop-up box. Click on "Browse" again and you can search your computer for the document you want to attach. Once you have attached the document, you click "continue" which brings you back to the main screen.

On the main screen you will be asked to identify the attachment type (pick from a drop down list) and provide a brief description of the attachment (50 character limit).

Step 4: Special Fees

310 CMR 4.00 identifies certain circumstances where special fees are applied. Most applicants for ERCs will not be subject to special fees but if you are, the applicant should pick the applicable fee exemption type and provide supporting information on this page.

Revised: 06/2017 Page 6 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Step 5: Applicants and Contributors

This page is where the "Responsible Official" (hereafter called the signatory) for the application is identified. The name of the Responsible Official will be entered into the form by the system once that person logs in to review and submit the application. The first step to this process is to fill in the company name, pick the appropriate organization type (LLC, Corporation, Sole Proprietorship). This is called "Source of Signatory Authority. Then pick the appropriate title or position of the person who will be the signatory.

The Signatory or Responsible Official must create an account in ePLACE and access the application to submit it. No other person can submit the application. When the signatory logs into the application, their name as provided in their account information will show up in the box labelled "Applicant Information"

If the application is being prepared by a person who is not the signatory, the preparer will get a PIN number that they must share with the Signatory so that the responsible official can approve and submit the application.

Step 6 Application Review and Submittal

The entire application is presented for final review in this step. You can reopen the application to edit it by clicking on the "Edit Application" button at the top or, if the information provided is complete and accurate you can proceed to submit the application.

At the bottom of the review page is the applicant certification statement. The signatory must certify that the information contained on the form is true, accurate and complete by clicking a box of agreement.

The permit fee can be paid either online or by check through the mail. Please select the method preferred. If you choose to pay the fee online, an electronic check or credit card payment is allowed. Both carry a nominal handling fee. The applicant will be sent to a payment page and asked to complete information specific to the credit card of electronic check.

If you choose to pay by mail, then send a check to the address provided below in the

Once you certify, pay the application fee (or indicate that the fee will be paid by mail) and click the "Continue" button, the application is submitted. You will receive email notice of a successful submittal and, within five minutes, a printable copy of the application as submitted (minus attachments).

After Submittal

If you log into ePLACE and click on the "My Records" button, you will be able to view the status of your application through the review and approval process. The timeline for review will not start until the fee has been paid or a fee exemption (if requested) has been verified).

Revised: 06/2017 Page 7 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

If you are unable to file online, you can obtain a paper form by contacting Yi Tian at 617-292-5871.. Please return the completed form to the MassDEP Boston Office at 1 Winter Street, Boston MA 02108 and to the attention of Yi Tian, Air Permits and Facilities Branch.

<u>Frequently Asked Questions on Massachusetts Emission Reduction Credit Banking and Trading Program</u>

General

1. What is the Massachusetts Emission Reduction Credit Banking and Trading Program?

The Massachusetts Emission Reduction Credit Banking and Trading Program encourages the voluntary creation and trading of surplus emission reductions as Emission Reduction Credits (ERC) to be used for purposes of offsets, netting and cost effective compliance without interfering with any applicable requirements concerning attainment, reasonable further progress or any other applicable air pollution control requirement. ERC may be purchased and used by companies, individuals or businesses that want to build new facilities, expand production or use them in a compliance plan.

2. What makes the Massachusetts ERC Banking and Trading Program innovative?

The Massachusetts ERC Banking and Trading Program uses a market-based program to achieve clean air goals. The program allows owners and operators of facilities with air emissions to make earlier or greater reductions in emissions than would otherwise be required by the Clean Air Act, and allows inter-sector trading of ERC. This rule is voluntary in that persons and businesses can choose whether or not they wish to participate.

3. Why adopt this program in Massachusetts?

The federal Clean Air Act requires that a major new or expanded emitting facility offset increases in emissions with decreases in emissions either within the facility or from other parties. In addition, the State Implementation Plan for Ozone imposes emission control requirements on business and industry. Costs of these controls can be reduced through the use of the Massachusetts ERC Banking and Trading Program, where emissions can be reduced at one facility and the resulting ERC acquired by others whose cost of compliance may be significantly higher.

4. What pollutants are involved?

At this time, MassDEP will accept Emission Reduction Credit applications only for oxides of nitrogen (NOx), carbon monoxide (CO), and volatile organic compounds (VOC).

5. How can the MassDEP assure that this program will not interfere with attainment and maintenance of air quality standards?

The program has been set up to only allow credit for real emission reductions in excess of those required to achieve air quality standards. When ERC are used in connection with new or modified facilities, emissions increases must be offset using a greater quantity of ERC than the new emissions. New emissions must also meet Lowest Achievable Emission Rate (LAER) and will be subject to modeling to ensure that the project will not cause or contribute to air pollution.

Revised: 06/2017 Page 8 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

6. Do other states have this program?

There are existing banking and trading programs in other states including New York, New Jersey, Washington and California. The EPA has encouraged states to look into more flexible market based programs through the EPA Economic Incentive Program Guidance.

7. What prohibitions exist in the rule?

The rule does not allow inter-pollutant trading (e.g., trading NOx reductions for VOC emission increases). Interstate ERC trading can be done only if Massachusetts has executed a Memorandum of Understanding (MOU) concerning emission trading with the other state. Currently Maine and Rhode Island are the only states with which Massachusetts has an MOU.

Creation of ERC

8. What requirements do emission reductions have to meet to become certified as ERC?

To be considered for certification as ERC, emission reductions must meet five "tests." ERC will only be approved for emission reductions, which are:

- Real, as in a reduction in actual emissions released into the air.
- Quantifiable, meaning that the amount, rate, and characteristics of the reduction can be measured through a replicable method acceptable to the MassDEP and to the EPA
- <u>Surplus</u>, meaning emission reductions beyond an established baseline, which are not required by either the current State Implementation Plan or the Clean Air Act, not relied upon by any applicable National Ambient Air Quality Standard (NAAQS) attainment demonstration, and are not credited in any reasonable Further Progress (RFP) or milestone demonstration with respect to NAAQS attainment.
- <u>Enforceable</u>, meaning limitations and conditions legally enforceable by MassDEP and EPA through a regulation, permit, approval or similar mechanism.
- <u>Permanent</u>, meaning the reduction in emissions associated with the ERC creation must be assured for the life of the ERC through a federally enforceable mechanism.

9. What kinds of emission reductions may be considered for credit?

Emission reductions considered eligible for consideration as ERC include:

• Shutdown or curtailment provided that the applicant can demonstrate to the satisfaction of the Department that demand for the services or product will not or cannot shift to other similar sources in the State resulting in no net decrease in emissions from the source category. Where emission reductions from shutdowns of electric generating facilities will be used exclusively as offsets for new facilities pursuant to 310 CMR 7.00 Appendix A, the ERC will not be adjusted for shifting demand. If such reductions are to be deposited in the Mass ERC Bank, credit will be available only to the extent that the emission rate from the unit being shut down or curtailed is greater than the applicable ISO New England marginal emission rate or successor organization rate.

Revised: 06/2017 Page 9 of 14



Massachusetts Department of Environmental Protection Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

- Control of an emission unit beyond that required by Massachusetts Air Pollution Regulations or federal law and regulations.
- Seasonal Controls with the recognition that VOC and NOx emission reductions created by the application of seasonal controls will be subject to use restrictions as defined in 310 CMR 7.00: Appendix B(3)(e)8.
- Early implementation of future emission controls provided that the reductions commence before
 promulgation of the regulations establishing the new emission controls. These reductions are
 surplus only up to the effective date for compliance with the program or emission controls. Credit
 will cease to accrue upon the effective date of the new emission controls.
- Emission reductions which result from application of mobile and area source controls provided
 that the reductions meet all other requirements of 310 CMR 7.00: Appendix B including
 provisions for establishment of baseline and replicable quantification as well as compliance
 monitoring methods.
- Emission reductions are not eligible for consideration as ERC if said reductions are generated by an un-inventoried area source category (e.g., small bakeries) or if said reductions are generated by biogenic sources (e.g., trees).

10. What is the purpose of the Mass ERC Bank and the Rate ERC Bank?

ERC quantified by mass (e.g., tons) are shown in the Mass ERC Bank. ERC from the Mass ERC Bank may be used either for compliance pursuant to 310 CMR 7.00: Appendix B(3) or as offsets pursuant to 310 CMR 7.00: Appendix A with approval of the Department. ERC in the Mass ERC Bank shall not expire or cease to exist after a set period of time, even if not traded or used.

ERC certified at a continuous rate (i.e., tons per year) are shown in the Rate ERC Bank. ERC in the Rate ERC Bank may be used as offsets pursuant to 310 CMR 7.00: Appendix A. ERC in the Rate ERC Bank shall revert to the state to be retired for the benefit of the environment if they have not been used by midnight of the date 10 years from the date of Department approval.

In the event the owner of ERC in the Rate ERC Bank resulting from a shutdown wishes to transfer the ERC to the Mass ERC Bank, the Department will multiply the quantity of Rate ERC in tons per year by the years of "remaining useful life" of the shut-down facility. The resulting tons will be shown in the MassERC bank. If the ERC transferred are from shutdown of an electric generating facility, the Department will also subtract the ISO New England marginal emission rate or successor organization rate for replacement power in effect at the time of original certification of the ERC.

Mass ERC converted from Rate ERC may not be converted back to Rate ERC.

Rate ERC generated outside of the Commonwealth of Massachusetts and transferred to the MassDEP ERC Registry pursuant to an interstate MOU are not eligible for conversion to Mass ERC.

11. Can credits be created by shutdown?

Yes. ERC approved from shutdown or curtailment of an emission unit or entire facility, where the emitting operations are based on manufacturing activity and the operations, and jobs associated with the emitting activity are shifted outside of Massachusetts, are eligible for use only in Massachusetts. This provision does not apply to electric generating facilities.

Revised: 06/2017 Page 10 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

12. Can credits be created by application of state-only BACT requirements?

No. Since the state's permitting program, which requires application of BACT to modifications smaller than would otherwise be required under federal rule, is part of the State Implementation Plan, application of state BACT does not create a "surplus" emission reduction, and therefore cannot create an ERC.

13. What is the certification process?

There is a standard application form, AQ18. An application fee is required based on the amount of ERC receiving certification. The application must contain detailed information on the baseline emissions as well as the emission reductions proposed and the method for assuring the validity of the reductions.

14. What are the application fees?

The application fee for BWP AQ 18 is a function of the quantity of Emission Reduction Credit being certified.

\$1,225 greater than or equal to 5 but less than 10 tons or tons per year ERC \$6,140 greater than or equal to 10 but less than 50 tons or tons per year ERC \$9,215 greater than or equal to 50 but less than 100 tons or tons per year ERC \$15,360 greater than or equal to 100 but less than 500 tons or tons per year ERC \$18,430 greater than or equal to 500 tons or tons per year ERC

See 310 CMR 4.10 (I) 4.

You can pay online or pay by mail. If paying by mail, be sure to write your application number on the check and mail the check to:

P.O. Box 4062
Boston, MA 02211

15. What are the application review timelines?

The MassDEP has 60 days to review the applications for completeness and 60 days for a technical review. In addition, the MassDEP has 60 days after submittal of material by the applicant addressing deficiencies. Within 45 days after the close of public comment, including any public hearing, the Department shall complete public comment review and issue a final decision. See 310 CMR 4.10(I)3a. through d.

Revised: 06/2017 Page 11 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

16. What Regulations apply?

The regulations include, but are not limited to:

- Air Quality Control Regulations, 310 CMR 7.00: Appendix B
- Timely Action and Fee Provisions, 310 CMR 4.00
- Administrative Penalty Regulations, 310 CMR 5.00

17. Where can I obtain a copy of the Regulations?

The regulations may be purchased at State Bookstore
MA State House, Room 116
Boston, MA 02133

617-727-2834

State Bookstore – West 436 Dwight Street Springfield, MA 01103 413-784-1376

18. Do the reductions have to be implemented before I can apply for certification?

No, an application for certification of ERC may be submitted in advance of the time when the reduction is actually made (prospective certification) or after the reduction has been made (retrospective certification). However, the reductions have to be implemented before another party can use the credits for compliance or to offset emission increases.

19. Are there any limits on when I can apply?

Yes, for emission reductions implemented after January 1, 1994, an Emission Reduction Credit Application must be submitted to the Department either within six months of the end date of the period being evaluated for a retrospective discrete emission reductions or the approval date of a federally enforceable mechanism for prospective emission reductions other than 310 CMR 7.00 *Appendix B*(3).

20. What responsibility does the credit creator have?

The creator of the credit is responsible for making sure the credit remains valid. Since the MassDEP will be certifying credit, in some cases in advance of the reductions having been achieved, the burden of achieving the full reduction on which the credit is based is on the creator. To ensure that the credits remain valid once achieved, the credit creator will be required to keep records, test and/or monitor the post-reduction emissions from a facility or equipment that continues to operate, to show that the emission reductions on which the credit is based remain real.

21. Can one get information on credits that have been certified by the MassDEP?

Yes. Once certified, ERC are documented in the Emission Reduction Credit Registry. The registry is a simple register that provides information on the name, address and contact person for each certified credit, the pollutant on which the credit is based, and any seasonal or temporal restrictions on the credit. This information is available to anyone who requests it.

Revised: 06/2017 Page 12 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

Credit Creation: Calculating the Credit

22. How is the amount of credit determined?

Credit shall be calculated by first calculating baseline emissions, second calculating the post reduction emissions, and third multiplying the difference between the baseline emissions and post reduction emissions by the applicable compliance assurance factor. The ERC amount is the result of complete application of these three steps.

23. Once credits are certified, how long do they last?

ERC in the Rate ERC Bank shall revert to the state to be retired for the benefit of the environment if they have not been used by midnight of the date 10 years from the date of Department approval. ERC in the Mass ERC Bank shall not expire or cease to exist after a set period of time, even if not traded or used.

Use of Credits

24. How can ERC be used?

ERC may be used for purposes of offsets, netting or compliance. They may also be bought and sold or otherwise transferred among private parties. MassDEP relies on the parties to these transactions to report changes in ownership so ERC Registry may be revised accordingly.

25. Is there anything ERC cannot be used for?

ERC cannot be used to meet performance standard requirements of regulatory requirements on material handling and maintenance such as covering degreasers, proper solvent handling techniques, or to avoid having your car tested in the I/M program. Also, you cannot use credits to satisfy federal requirements for Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), Maximum Achievable Control Technology (MACT)- air toxics, New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAPS).

26. What responsibilities does an ERC purchaser have?

Any person who is permitted or regulated is responsible for meeting the requirements of the permit or regulation. If the owner or operator of a facility believes that purchasing ERC can be used for regulation or permit compliance, they need to assure that the ERC adequately provide the compliance increment needed for the time period involved. In the event a person purchases Mass ERC or ERC that cease to accrue with adoption of a new regulation, the purchaser must reevaluate and reconfirm the original compliance strategy.

27. Can ERC generated by mobile source reductions be used by industry?

Yes. Inter-sector trading is allowed. However, ERC created by reductions at stationary sources cannot be used in place of compliance with mobile source programs required under the Clean Air Act or State Implementation Plan, such as automobile inspection and maintenance, reformulated or oxygenated fuel, clean fuel fleets, ridesharing and Low Emission Vehicles.

Revised: 06/2017 Page 13 of 14



Bureau of Air and Waste- Air Quality

AQ 18

Creation of Emission Reduction Credits (ERC) Instructions and Supporting Materials

28. Can ERC be used in any amount?

Yes. However, such uses must not interfere with applicable requirements concerning attainment, reasonable further progress or any other applicable air pollution control requirement.

29. Are there any other ERC use restrictions?

Yes. **Please Note**: parties that use ERC must hold or own an amount 5% greater than that which they need to satisfy their offset or compliance calculations. The company must hold said 5% increment in escrow until the MassDEP releases it for use.

30. How many years of credits for offsets must applicants have for a complete application under New Source Review (310 CMR 7.00 Appendix A)?

ERC from the Rate ERC Bank used as offsets pursuant to a 310 CMR 7.00: *Appendix A* approval, must be retired at the approved annual offset rate regardless of the facility's annual actual emissions. ERC from the Mass ERC Bank used as offsets pursuant to a 310 CMR 7.00 *Appendix A* approval, must be obtained for the current year of operation plus four subsequent years of operation. Five years of ERC, available for use in each of those five years, must be held at all times for the approval to remain valid. ERC in the quantity of the approved (not actual) annual offset amount must be retired on December 31 of each year, beginning with the first calendar year or any portion thereof, in which the facility operates.

31. How can one use seasonal or "discrete" credits?

- If the credit was generated during the summer ozone season (May 1 through September 30) for an ozone precursor (VOC or NOx), it can be used year-round. If, however, the credit was generated in the winter or outside the ozone season for ozone precursors, it can only be used during the period October 1 through April 30. A similar provision is in place for carbon monoxide, which is a wintertime pollutant.
- Please consult with MassDEP if your proposed ERC application or plans to use ERC include seasonal considerations.

32. Are there special rules for using credits created by shutdowns?

When a facility is shut down and its production moved to an out-of-state facility, there are restrictions on the use of ERC created based on emission reductions, which occurred with the shutdown. The regulations state that these ERC can only be used within Massachusetts. It should be noted that if the company who is shutting down already has ERC in the bank from previously implemented emission reductions, these ERC are not restricted in the same manner as ERC, which are based on emission reductions from the shutdown.

33. If the party creating the ERC has not lived up to expectations but has sold the credit to someone else that is using it, will the MassDEP take enforcement action against both parties?

The MassDEP will take enforcement taken against the credit creator for failure to maintain the validity of the credit.

Revised: 06/2017 Page 14 of 14