INSTRUCTIONS

These interim forms are designed with cross references embedded to assist you in filling out the forms with the least amount of repetition as possible. The Proposed Coversheet contains all fillable fields and where fields are expected to remain the same throughout the forms (title, agency name etc.) the information you enter into the fields of the Proposed Coversheet should automatically filter through the forms once you leave the field. If you have difficulty please contact the Louise Corliss at the Office of the Secretary of State at 802-828-2863 or by email at louise.corliss@vermont.gov for assistance troubleshooting the forms.

Please only submit the coversheet and forms relevant to your current stage of filing. In other words if you are filing a final proposal do not include the coversheets for the Proposed Filing, or Adopted Filing.

If you are uncertain what forms are required for each step in the process, please see: https://www.sec.state.vt.us/administrative-rules/filing-tools/rules-at-a-glance.aspx.

P.S. Additionally, please do not include this page with filings it is for your convenience only.
Administrative Procedures – Proposed Rule Filing

Instructions:
In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the “Rule on Rulemaking” (CVR 04-000-001) adopted by the Office of the Secretary of State, this filing will be considered complete upon filing and acceptance of these forms with the Office of the Secretary of State, and the Legislative Committee on Administrative Rules.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of these forms will be used to generate a notice of rulemaking in the portal of “Proposed Rule Postings” online, and the newspapers of record if the rule is marked for publication. Publication of notices will be charged back to the promulgating agency.

PLEASE REMOVE ANY COVERSHEET OR FORM NOT REQUIRED WITH THE CURRENT FILING BEFORE DELIVERY!

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Rules regarding phase down of the use of Hydrofluorocarbons

__________________________, on 6/22/20 _____________________.

(signature) (date)

Printed Name and Title:
Julie Moore, Secretary
Agency of Natural Resources

RECEIVED BY: ________
1. TITLE OF RULE FILING:
   Rules regarding phase down of the use of Hydrofluorocarbons

2. ADOPTING AGENCY:
   Agency of Natural Resources

3. PRIMARY CONTACT PERSON:
   (A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).
   
   Name: Collin Smythe
   Agency: Agency of Natural Resources
   Mailing Address: 1 National Life Dr, Davis 4, Montpelier, VT 05620
   Telephone: 802 689 - 0003  Fax:  
   E-Mail: collin.smythe@vermont.gov
   Web URL(WHERE THE RULE WILL BE POSTED):
   https://dec.vermont.gov/air-quality/laws

4. SECONDARY CONTACT PERSON:
   (A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY
   ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE
   PRIMARY CONTACT PERSON).
   
   Name: Megan O'Toole
   Agency: Agency of Natural Resources
   Mailing Address: 1 National Life Dr, Davis 3, Montpelier, VT 05620
   Telephone: 802 249 - 9882  Fax:  
   E-Mail: megan.otoole@vermont.gov

5. RECORDS EXEMPTION INCLUDED WITHIN RULE:
   (DOES THE RULE CONTAIN ANY PROVISION DESIGNATING INFORMATION AS CONFIDENTIAL;
   LIMITING ITS PUBLIC RELEASE; OR OTHERWISE EXEMPTING IT FROM INSPECTION AND
   COPYING?)  No

   IF YES, CITE THE STATUTORY AUTHORITY FOR THE EXEMPTION:

   PLEASE SUMMARIZE THE REASON FOR THE EXEMPTION:

6. LEGAL AUTHORITY / ENABLING LEGISLATION:
   (THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE
   ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A
   SPECIFIC CITATION NOT A CHAPTER CITATION).
   Act 65 (2019)
Proposed Rule Coversheet

7. EXPLANATION OF HOW THE RULE IS WITHIN THE AUTHORITY OF THE AGENCY:
   The Agency is required to adopt these rules pursuant to Act 65, Sec. 2(a).

8. CONCISE SUMMARY (150 WORDS OR LESS):
   The purpose of this Rule is to achieve greenhouse gas emissions reductions through the phase out of high global warming potential hydrofluorocarbons (HFCs) in air conditioning and refrigeration equipment, aerosol propellants, and foam end-uses.

9. EXPLANATION OF WHY THE RULE IS NECESSARY:
   The rule is necessary to ensure a phase down in the use of high global warming potential hydrofluorocarbons (HFCs) in Vermont. HFCs are one of the fastest growing sectors of greenhouse gases in the United States and the world and are generally many times more potent than carbon dioxide in terms of their ability to warm the planet. Reducing the use of HFCs is an important step in slowing the rate of global warming and in making progress toward Vermont's greenhouse gas emissions reduction goals.

10. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY:
    This rule is not arbitrary because it incorporates phase out dates and requirements that are based on the availability of HFC substitutes, and a demonstrated need for the reduction of the use of substances with a high global warming potential.

11. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:
    This Rule applies to any person who offers a product or equipment for sale, lease, or rent, or who installs or otherwise causes any equipment or product to enter into commerce in Vermont if that equipment or product consists of, uses, or will use a prohibited substitute in an air conditioning and refrigeration equipment, aerosol propellant, or foam end-use listed in the Rule.

12. BRIEF SUMMARY OF ECONOMIC IMPACT (150 WORDS OR LESS):
    The economic impact of the phase-down of high global warming potential (GWP) HFCs varies because of the large number of effected end-uses and prohibited HFCs. Often the substitute refrigerant can be somewhat more expensive but can provide lifetime net benefits from increases in energy
efficiency. Vermont is coordinating with other states in the U.S. Climate Alliance who are adopting similar regulations to maintain consistency and to better understand impacts and concerns from industry groups. Because several surrounding states are implementing similar regulations, any potential economic impacts from this phase-down would likely occur regardless of this rule, and so this rule should have a negligible economic impact on Vermont entities. Many manufacturers of the end-use products subject to the rule have already begun phasing down high GWP HFCs and so the industry is currently working to implement the necessary phase down schedules further lessening the impact of this specific rule.

13. A HEARING IS SCHEDULED.

14. HEARING INFORMATION
(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION NEEDED FOR THE NOTICE OF RULEMAKING.

Date: 7/30/2020
Time: 03:00 PM
Street Address: Meeting will be held virtually, link to join meeting available at https://dec.vermont.gov/air-quality/laws/recent-regs
Zip Code:

Date: 
Time: AM
Street Address: 
Zip Code:

Date: 
Time: AM
Street Address: 
Zip Code:

Date: 
Time: AM
Street Address: 
Zip Code:
15. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING): 8/6/2020

16. KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

hydrofluorocarbons
climate change
HFCs
Administrative Procedures – Adopting Page

**Instructions:**

This form must accompany each filing made during the rulemaking process:

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible, the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

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1. **TITLE OF RULE FILING:**
   
   Rules regarding phase down of the use of Hydrofluorocarbons

2. **ADOPTING AGENCY:**
   
   Agency of Natural Resources

3. **TYPE OF FILING (PLEASE CHOOSE THE TYPE OF FILING FROM THE DROPDOWN MENU BASED ON THE DEFINITIONS PROVIDED BELOW):**
   
   - **AMENDMENT** - Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
   
   - **NEW RULE** - A rule that did not previously exist even under a different name.
   
   - **REPEAL** - The removal of a rule in its entirety, without replacing it with other text.

   This filing is **A NEW RULE**.

4. **LAST ADOPTED (PLEASE PROVIDE THE SOS LOG#, TITLE AND EFFECTIVE DATE OF THE LAST ADOPTION FOR THE EXISTING RULE):**
Instructions:
In completing the economic impact analysis, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule; estimates the costs and benefits for each category of people enterprises and government entities affected by the rule; compares alternatives to adopting the rule; and explains their analysis concluding that rulemaking is the most appropriate method of achieving the regulatory purpose.

Rules affecting or regulating schools or school districts must include cost implications to local school districts and taxpayers in the impact statement, a clear statement of associated costs, and consideration of alternatives to the rule to reduce or ameliorate costs to local school districts while still achieving the objectives of the rule (see 3 V.S.A. § 832b for details).

Rules affecting small businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof), must include ways that a business can reduce the cost or burden of compliance or an explanation of why the agency determines that such evaluation isn’t appropriate, and an evaluation of creative, innovative or flexible methods of compliance that would not significantly impair the effectiveness of the rule or increase the risk to the health, safety, or welfare of the public or those affected by the rule.

1. TITLE OF RULE FILING:
   Rules regarding phase down of the use of Hydrofluorocarbons

2. ADOPTING AGENCY:
   Agency of Natural Resources

3. CATEGORY OF AFFECTED PARTIES:
   LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

   This rule will affect any person who sells, leases or rents, or any person who installs the equipment or products included in the end-use categories in the rule. Costs associated with this rule will be incredibly varied because of the large range of end uses and prohibited substances, and will depend upon the price of the necessary alternatives and any necessary changes to equipment or manufacturing.
processes. The number of manufacturers actually using these prohibited HFCs in their processes in Vermont is thought to be very small and so the economic impact would depend mainly on the potential additional costs listed above that are passed on to consumers of the effected products in Vermont. California completed an economic impact analysis for a similar regulation and found that often the substitutes could be somewhat more expensive but also that the substitutes were more energy efficient, which could lead to net cost savings over time. It should also be noted that EPA had already begun the phase down of high global warming potential (GWP) HFCs, so industry is already in the process of transitioning to approved substitutes. A number of other larger neighboring states have, or are in the process of, adopting similar regulations to reduce emissions of high GWP HFCs, and so these potential additional costs to consumers in Vermont will likely occur whether or not this rulemaking takes place.

4. IMPACT ON SCHOOLS:

**INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS CLEARLY STATING ANY ASSOCIATED COSTS:**

Impact on schools will be minimal, and will likely be limited to school districts that purchase or retrofit products or equipment included in the end-use categories in the rule. As stated above, the impacts vary by equipment type and necessary substitute. It is possible that new equipment with low global warming potential substitutes will be somewhat more expensive, but is likely to also produce energy efficiency savings and so could provide net benefits over time. It is also true that this transition is happening on a larger scale outside of Vermont, and so these potential costs will likely be incurred whether or not this specific rulemaking occurs.

5. ALTERNATIVES:

**CONSIDERATION OF ALTERNATIVES TO THE RULE TO REDUCE OR AMELIORATE COSTS TO LOCAL SCHOOL DISTRICTS WHILE STILL ACHIEVING THE OBJECTIVE OF THE RULE.**

The Agency has amended some of the phase-out dates for end-uses as originally required in Act 65. See
supplemental Technical Support Document for an explanation and analysis of these amendments.

6. IMPACT ON SMALL BUSINESSES:

*Indicate any impact that the rule will have on Small Businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof):*

Impact on small businesses will be minimal, and will likely be limited to businesses that purchase or retrofit products or equipment included in the end-use categories in the rule. As stated above, the impacts vary by equipment type and necessary substitute. It is possible that new equipment with low global warming potential substitutes will be somewhat more expensive, but is likely to also produce energy efficiency savings and so could provide net benefits over time. It is also true that this transition is happening on a larger scale outside of Vermont, and so these potential costs will likely be incurred whether or not this specific rulemaking occurs.

7. SMALL BUSINESS COMPLIANCE: *Explain ways a business can reduce the cost/burden of compliance or an explanation of why the agency determines that such evaluation isn’t appropriate.*

This evaluation is not applicable. Small businesses should not have to find ways to reduce costs or burden associated with implementation of this rule because compliant end-uses should be widely available on the market by the corresponding phase-out deadlines in the rule.

8. COMPARISON:

*Compare the impact of the rule with the economic impact of other alternatives to the rule, including no rule on the subject or a rule having separate requirements for small business:*

Given that wide-spread availability of compliant end-uses on the market will likely take place prior to the phase-out dates, and HFC alternatives will be widely available, the Agency does not expect there to be significant economic impact of this rule compared with an alternative or no rule in effect.
SUFFICIENCY: EXPLAIN THE SUFFICIENCY OF THIS ECONOMIC IMPACT ANALYSIS. This analysis provides a sufficient explanation of the costs to consumers, schools, and small businesses that may be associated with adoption of this rule, and provides detail on the limited to no economic impact that is likely to take place.
Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

1. TITLE OF RULE FILING:

   Rules regarding phase down of the use of Hydrofluorocarbons

2. ADOPTING AGENCY:

   Agency of Natural Resources

3. GREENHOUSE GAS: EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):

   This rule will reduce emissions of greenhouse gases in Vermont through the phase down of high global warming potential (GWP) hydrofluorocarbons (HFCs). Many HFCs used in refrigeration equipment, air conditioning equipment, foam blowing, aerosols, and various other end uses, are many times more potent than carbon dioxide in terms of their potential to warm the planet. By prohibiting the sale, lease, rent, or install of products that use high GWP HFCs in Vermont and replacing them with products using lower GWP alternatives, emissions of greenhouse gases in Vermont will be reduced. This action combined with similar rules in other states will also help to send a market signal to manufacturers to switch from high GWP HFCs
Environmental Impact Analysis

which will help to drive larger greenhouse gas emissions reductions from the sector on a national and global scale.

No effect

5. LAND: EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):
No effect

6. RECREATION: EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:
No effect

7. CLIMATE: EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:
Hydrofluorocarbons are one of the fastest growing sectors of greenhouse gas emissions in the country and the world. Switching high GWP HFCs to lower GWP alternatives is an important step in reducing these potent short lived climate pollutants and setting an example to achieve reductions on a more global scale.

8. OTHER: EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT’S ENVIRONMENT:
No effect

9. SUFFICIENCY: EXPLAIN THE SUFFICIENCY OF THIS ENVIRONMENTAL IMPACT ANALYSIS.
This environmental impact analysis is sufficient because it describes how the rule will positively impact the environment by reducing greenhouse gas emissions from HFCs, which is one of the fastest growing sectors of greenhouse gas emissions and therefore a driver of climate change.
Administrative Procedures – Public Input

Instructions:

In completing the public input statement, an agency describes the strategy prescribed by ICAR to maximize public input, what it did do, or will do to comply with that plan to maximize the involvement of the public in the development of the rule.

This form must accompany each filing made during the rulemaking process:

1. TITLE OF RULE FILING:
   Rules regarding phase down of the use of Hydrofluorocarbons

2. ADOPTING AGENCY:
   Agency of Natural Resources

3. PLEASE DESCRIBE THE STRATEGY PRESCRIBED BY ICAR TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:
   ICAR indicated agreement with ANR's current strategy and encouraged continued outreach to stakeholders throughout the rulemaking process. A list of stakeholders that have been engaged in the pre-draft development of the rule is attached to these forms.

4. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO COMPLY WITH THAT STRATEGY:
   ANR will notify the public of the proposed rule in accordance with the Vermont Administrative Procedures Act. A public hearing will also be held.

5. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:
   ANR has been responding to and reaching out to various stakeholders during the development of the draft rule earlier in 2020. ANR also held an informal stakeholder meeting on May 13, 2020 to review a draft of the rule and answer stakeholder questions prior to beginning the formal rulemaking process. Stakeholders include other states considering adoption of HFC phase-down rules,
industry groups representing manufacturers of HFCs and HFC end-user/es, appliance manufacturers and lobbyists.
**Instructions:**

In completing the Scientific Information Statement, an agency shall provide a brief summary of the scientific information including reference to any scientific studies upon which the proposed rule is based, for the purpose of validity.

1. **TITLE OF RULE FILING:**
   
   Rules regarding phase down of the use of Hydrofluorocarbons

2. **ADOPTING AGENCY:**
   
   Agency of Natural Resources

3. **BRIEF EXPLANATION OF SCIENTIFIC INFORMATION:**
   
   The rule is based mainly on portions of the EPA Significant New Alternatives Program (SNAP). The SNAP program implements section 612 of the amended Clean Air Act of 1990 and is used to evaluate ozone-depleting substances (ODS) and their substitutes in terms of their overall risk to human health and the environment. These determinations are made based on a review of the potential substitute in a comparative risk framework and include criteria such as atmospheric effects and related health and environmental effects, ecosystem risks, consumer risks, flammability, toxicity, and cost and availability of the substitute.

   Unfortunately some of the substitutes for ozone depleting substances, specifically HFCs, were found to be very potent global warming agents. In 2018, the U.S. Circuit Court of Appeals for the D.C. Circuit ruled that the SNAP program could not be used to require phase-out of HFCs used as replacements for
ozone-depleting substances and so portions of the program were partially vacated. EPA has subsequently taken steps to amend the SNAP program to further remove or weaken previous program elements that require reduction or phase out in use of HFCs in certain end-uses. However, the determinations as to whether a specific substitute was classified as acceptable or unacceptable for a specific end use are still scientifically valid and have been incorporated into this rule through reference.

4. CITATION OF SOURCE DOCUMENTATION OF SCIENTIFIC INFORMATION:
40 C.F.R. Part 82, Subpart G:
https://www.law.cornell.edu/cfr/text/40/part-82/subpart-G

SNAP Rule 21: https://www.govinfo.gov/content/pkg/FR-2016-12-01/pdf/2016-25167.pdf


5. INSTRUCTIONS ON HOW TO OBTAIN COPIES OF THE SOURCE DOCUMENTS OF THE SCIENTIFIC INFORMATION FROM THE AGENCY OR OTHER PUBLISHING ENTITY:
Copies of the source documents can be obtained by following the URLs listed above in (4).
Administrative Procedures – Incorporation by Reference

THIS FORM IS ONLY REQUIRED WHEN INCORPORATING MATERIALS BY REFERENCE. PLEASE REMOVE PRIOR TO DELIVERY IF IT DOES NOT APPLY TO THIS RULE FILING:

Instructions:
In completing the incorporation by reference statement, an agency describes any materials that are incorporated into the rule by reference and how to obtain copies.

This form is only required when a rule incorporates materials by referencing another source without reproducing the text within the rule itself (e.g. federal or national standards, or regulations).

Incorporated materials will be maintained and available for inspection by the Agency.

1. TITLE OF RULE FILING:

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2. ADOPTING AGENCY:

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3. DESCRIPTION (DESCRIPT THE MATERIALS INCORPORATED BY REFERENCE):

   1. 42 U.S.C. § 7671a (§602 of the Clean Air Act), as it read on November 15, 1990;

   2. Appendix A of Subpart A of 40 C.F.R. Part 82 (listing of Class I substances), as those read on January 3, 2017;

   3. Appendix B of Subpart A of 40 C.F.R. Part 82 (listing of Class II substances), as those read on January 3, 2017

4. FORMAL CITATION OF MATERIALS INCORPORATED BY REFERENCE:

   1.

5. OBTAINING COPIES: (EXPLAIN WHERE THE PUBLIC MAY OBTAIN THE MATERIAL(S) IN WRITTEN OR ELECTRONIC FORM, AND AT WHAT COST):

   1. Copies of Section 602 of the Clean Air Act, listing of Class I and Class II substances, may be found
Incorporation By Reference

electronically at:

2. Appendix A, Subpart A, Part 82, can be obtained electronically at:
https://www.law.cornell.edu/cfr/text/40/appendix-A_to_subpart_A_of_part_82

3. Appendix B, Subpart A, part 82, can be obtained electronically at:
https://www.law.cornell.edu/cfr/text/40/appendix-B_to_subpart_A_of_part_82

6. MODIFICATIONS (PLEASE EXPLAIN ANY MODIFICATION TO THE INCORPORATED MATERIALS E.G., WHETHER ONLY PART OF THE MATERIAL IS ADOPTED AND IF SO, WHICH PART(S) ARE MODIFIED):

N/A