(2) On Jenny Lake:
   (i) Operating a power-driven vessel using a motor exceeding 7 1/2 horsepower is prohibited, except:
   (ii) An NPS authorized boating concessioner may operate power-driven vessels under conditions specified by the Superintendent.

(h) Where may I ride a bicycle in Grand Teton National Park? (1) You may ride a bicycle on park roads, in parking areas, and upon designated routes established within the park in accordance with § 4.30(a) of this chapter. The following routes are designated for bicycle use:
   (i) The paved multi-use pathway alongside Dornan Road between Dornan’s and the Teton Park Road.
   (ii) The paved multi-use pathway alongside the Teton Park Road between Dornan Road (Dornan’s Junction) and the South Jenny Lake developed area.

(2) The Superintendent may open or close designated routes, or portions thereof, or impose conditions or restrictions for bicycle use after taking into consideration the location of or impact on wildlife, the amount of snow cover or other environmental conditions, public safety, and other factors, under the criteria and procedures of §§ 1.5 and 1.7 of this chapter.

Dated: September 22, 2011.

Eileen Sobeck,
Acting Assistant Secretary for Fish and Wildlife and Parks.

For more information on the Agency’s process for administering the SNAP program or criteria for evaluation of substitutes, refer to the original SNAP rulemaking published in the Federal Register on March 18, 1994 (59 FR 13044). Notices and rulemakings under the SNAP program, as well as other EPA publications on protection of stratospheric ozone, are available at EPA’s Ozone Depletion World Wide Web site at http://www.epa.gov/ozone/including the SNAP portion at http://www.epa.gov/ozone/snap/.

I. Listing of New Acceptable Substitutes

A. Refrigeration and Air Conditioning

1. Hot Shot 2

EPA’s decision: EPA finds Hot Shot 2 is acceptable as a substitute for CFC–12, CFC–11, CFC–113, CFC–114, R–13B1, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b, for use in retrofit equipment in:
   • Centrifugal chillers
   • Reciprocating and screw chillers
   • Industrial process refrigeration
   • Ice skating rinks
   • Cold storage warehouses
integrated (100-yr) global warming
HFC–125, and R–600) have 100-year
(ODP). Its components (HFC–134a,
has no ozone depletion potential
www.regulations.gov.
HQ–OAR–2003–0118–0271 at
pentafluoroethane (CAS Reg. No. 354–
125, which is also known as 1,1,1,2,2-
also known as n-butane (CAS Reg. No.
106–97–8). You may find the
substitution under Docket item EPA–
www.regulations.gov.

Environmental information: Hot Shot 2 has no ozone depletion potential
(ODP). Its components (HFC–134a,
HFC–125, and R–600) have 100-year
integrated (100-yr) global warming
pounds (GWP) of 1,430, 3,500, and
respectively. If these values are
weighted by mass percentage, then Hot
Shot 2 has a GWP of about 1,820. Of the
three components of Hot Shot 2, R–600
is defined as a volatile organic
compound (VOC) under CAA
regulations (see 40 CFR 51.100(s))
addressing the development of State
Implementation Plans (SIPs) to attain
and maintain the national ambient air
quality standards. The emissions of this
refrigerant will be limited given it is
subject to the venting prohibition under
section 608(c)(2) of the CAA and EPA’s
implementing regulations codified at 40
CFR 82.154(a)(1).[1] Considering the
small expected emissions of this
refrigerant and particularly of the VOC
component, use of Hot Shot 2 is not
expected to pose any significant adverse
impacts on local air quality.

Flammability information: While the
component R–600, isobutane, is a
hydrocarbon that is flammable, Hot Shot
2 as formulated and in the worst-case
fractionation formulation is not
flammable.

Toxicity and exposure data: Potential
health effects of this substitute include
drowdnness or dizziness. The substitute
may also irritate the skin or eyes or
cause frostbite. At sufficiently high
concentrations, the substitute may cause
irregular heartbeat. The substitute could
cause asphyxiation if air is displaced by
vapors in a confined space. These
potential health effects are common to
many refrigerants.

EPA anticipates that Hot Shot 2 will
be used consistent with the
recommendations specified in the
Material Safety Data Sheets (MSDSs) for
the blend and for the individual
components. For the blend, the
manufacturer recommends an
acceptable exposure limit (AEL) of 1000
ppm on an 8-hour time-weighted
average. For both HFC–134a and HFC–
125, the American Industrial Hygiene
Association (AIHA) recommends
workplace environmental exposure
limits (WEELs) of 1000 ppm on an
8-hour time-weighted average. Similarly,
for R–600 the American Conference of
Governmental Industrial Hygienists
(ACGIH) has established a threshold
limit value (TLV) of 1,000 ppm on an
8-hour time-weighted average. The
National Institute for Occupational
Safety and Health (NIOSH) has a
recommended exposure limit (REL) of
800 ppm for R–600 on a 10-hour
time-weighted average. EPA anticipates
that users will be able to meet workplace
exposure limits (WEELs, TLVs, RELs
and manufacturer AELs) and address
potential health risks by following
requirements and recommendations in the
MSDS and other safety precautions
common to the refrigeration and air
conditioning industry.

Comparison to other refrigerants: Hot
Shot 2 is not ozone-depleting in contrast
to CFC–12, CFC–11, CFC–113, CFC–114
(with ODPs ranging from 0.58 to 1.01),
R–13B1 (with an ODP of 15.9), HCFC–
22 (with an ODP of 0.074, R–502 (with
an ODP of 0.334), the ozone-depleting
substances which it replaces, and
c omparable to a number of other
acceptable non-ozone-depleting
substitutes for these end uses such as
HFC–134a, R–410A, and R–404A. Hot
Shot 2’s GWP of about 1,820 is lower
than or comparable to those of the
substances it is replacing, including
CFC–12, CFC–11, CFC–113, CFC–114,
R–13B1, R–500, R–502, and HCFC–22,
with GWPs ranging from 1,810 to
10,900. Furthermore, the GWP of Hot
Shot 2 is lower than or comparable to
that of other non-ozone-depleting
substitutes in the same refrigeration and
air conditioning end uses for which we are
finding it acceptable, such as HFC–
134a with a GWP of 1,430, R–410A with
a GWP of 2,100 and R–404A with a
GWP of 3,930. Flammability and
toxicity risks are low, as discussed
above. Thus, EPA finds Hot Shot 2
acceptable in the end uses listed above
because the overall environmental and
human health risk posed by Hot Shot 2
is lower than or comparable to the risks
posed by other substitutes found
acceptable in the same end uses.

2. R–407F

EPA’s decision: EPA finds R–407F is
acceptable as a substitute for HCFC–22
and HCFC blends, including those
containing HCFC–22 and/or HCFC–
142b, for use in new and retrofit
equipment in:

• Industrial process refrigeration
• Ice skating rinks
• Industrial process air conditioning
• Cold storage warehouses
• Refrigerated transport
• Retail food refrigeration
• Commercial ice machines
• Household refrigerators and freezers
• Motor vehicle air conditioning
(buses and passenger trains only)
• Household and light commercial air
conditioning and heat pumps

R–407F, marketed under the trade
name Genetron® LT or Genetron®
Performax™ LT, is a weighted blend of
30 percent HCFC–32, 30 percent
HCFC–134a, which is also known as
difluoromethane (CAS Reg. No.
75–10–5), 30 percent HFC–125,
which is also known as 1,1,1,2–
pentafluoroethane (CAS Reg. No.
354–33–6), and 40 percent HFC–134a,
which is also known as 1,1,1,2–
tetrafluoroethane (CAS Reg. No.
811–97–2). You may find the
submission under Docket item EPA–HQ–OAR–
www.regulations.gov.

Environmental information: R–407F
has no ODP. HFC–32, HFC–125, and
HFC–134a have GWPs of 675, 3500, and
1430, respectively. If these values are
weighted by mass percentage, then R–407F
has a GWP of about 1,820. The
contribution of this refrigerant blend to
greenhouse gas emissions will be
limited given it is subject to the venting
prohibition under section 608(c)(2) of
the CAA and EPA’s implementing
regulations codified at 40 CFR
82.154(a)(1), which limit emissions of
refrigerant substitutes.

R–407F does not contain any VOCs as
defined under CAA regulations (see 40
CFR 51.100(s)) by assessing the
development of SIPs to attain and
maintain the national ambient air
quality standards.

1 Unless otherwise stated, all GWPs in this
document are from: IPCC. 2007: Climate Change
2007: The Physical Science Basis. Contribution of
Working Group I to the Fourth Assessment Report
of the Intergovernmental Panel on Climate Change
(Solomon, S., D. Qin, M. Manning, Z. Chen, M.
Marquis, K.B. Averyt, M. Tignor and H.L. Miller
[eds.]). Cambridge University Press, Cambridge,
United Kingdom and New York, NY, USA. This
document is accessible at http://www.ipcc.ch/

2 For more information, including definitions, see
40 CFR part 82 subpart F.

3 Unless otherwise stated, all ODPs in this
document are from: WMO (World Meteorological
Organization). Scientific Assessment of Ozone
Depletion: 2010. Global Ozone Research and
Monitoring Report—Report No. 52, 516 pp., Geneva,
Switzerland, 2011. This document is accessible at
http://ozone.unep.org/Assessment_Panels/SAP/
Scientific_Assessment_2010/index.shtml.
Flammability information: While the component HFC–32 is moderately flammable, R–407F as formulated and in the worst-case fractionation formulation is not flammable.

Toxicity and exposure data: Potential health effects of this substitute include drowsiness or dizziness. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, the substitute may cause irregular heartbeat. The substitute could cause asphyxiation if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants.

The AIHA has established WEELs of 1000 ppm on an 8-hour time-weighted average for each of the components of R–407F. The manufacturer also recommends an AEL of 1000 ppm on an 8-hour time-weighted average for each of the R–407F components. EPA anticipates that users will be able to meet AIHA’s WEELs and address potential health risks by following requirements and recommendations in the MSDS and other safety precautions common to the refrigeration and air conditioning industry.

Comparison to other refrigerants: R–407F is not ozone-depleting in contrast to HCFC–22 (with an ODP of 0.04) and HCFC–142b (with an ODP of 0.06), the ozone-depleting substances which it replaces, and comparable to a number of other acceptable non-ozone-depleting substitutes in these end uses (e.g., R–410A and R–404A). R–407F’s GWP of about 1,820 is comparable to that of HCFC–22 with a GWP of 1,810 and lower than or comparable to that of other non-ozone-depleting substitutes for HCFC–22 in the same refrigeration and air conditioning end uses, such as R–410A with a GWP of 2,100 and R–404A with a GWP of 3,930. Flammability and toxicity risks are low, as discussed above. Thus, EPA finds R–407F acceptable in the end uses listed above because the overall environmental and human health risk posed by R–407F is lower than or comparable to the risks posed by other substitutes found acceptable in the same end uses.

3. R–507A

EPA’s decision: EPA finds R–507A as an acceptable alternative for various CFCs (e.g., CFC–12) and CFC-containing blends (e.g., R–500 and R–502) in several refrigeration and air conditioning end uses and as an alternative for HCFC–22 and blends in the very low temperature refrigeration end use. (March 18, 1994, 59 FR 13044; August 26, 1994, 59 FR 44240; January 13, 1995, 60 FR 3318; September 5, 1996, 61 FR 47012; December 20, 2002, 67 FR 77927). Today’s decision finds R–507A acceptable as a substitute for R–13B1 (also known as halon 1301) in the very low temperature refrigeration end use.

Environmental information: The ODP of R–507A is zero. The GWPs of HFC–125 and HFC–143a are about 3,400 and 4,300, respectively. If these values are weighted by mass percentage, then R–507A has a GWP of 3,850. The contribution of this refrigerant blend to greenhouse gas emissions will be limited given it is subject to the venting prohibition under section 608(c)(2) of the CAA and EPA’s implementing regulations codified at 40 CFR 82.154(a)(1), which limit emissions of refrigerant substitutes.

R–507A does not contain any VOCs as defined under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the national ambient air quality standards. Flammability Information: While the component HFC–143a is moderately flammable, R–507A as formulated and in the worst-case fractionation formulation is not flammable.

Toxicity and Exposure Data: Potential health effects of this substitute include headache, nausea, dizziness, drowsiness, or loss of consciousness. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, the substitute may cause irregular heartbeat or rapid heartbeat. The substitute could cause asphyxiation if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants. EPA anticipates that R–507A will be used consistently with the recommendations specified in the MSDSs for the blend and the individual components. All components of the blend have WEELs of 1,000 ppm, as established by AIHA. EPA anticipates that users will be able to meet AIHA’s WEELs and address potential health risks by following requirements and recommendations in the MSDS and other safety precautions common to the refrigeration and air conditioning industry.

Comparison to Other Refrigerants: R–507A is not ozone-depleting, in contrast to R–13B1 (with an ODP of 15.9), the ozone-depleting substance which it replaces, and in contrast to NARM–502 and R–403B, substitutes for this end use that contain HCFC–22 with an ODP of 0.04. R–507A’s GWP of about 3,850 is well below that of R–13B1 with a GWP of 7,140 and lower than or comparable to that of other non-ozone-depleting substitutes for R–13B1 in the very low temperature refrigeration end use, such as R–508A with a GWP of 13,200, NARM–502 with a GWP of 2,380, and R–403B with a GWP of 1,500. Flammability and toxicity risks are low, as discussed above. Thus, EPA finds R–507A acceptable in the very low temperature refrigeration end use for retrofit equipment because the overall environmental and human health risk posed by R–507A is lower than or comparable to the risks posed by other substitutes found acceptable in the same end use.

B. Solvent Cleaning

• Perfluorobutyl Iodide (PFBI)

EPA’s decision: EPA finds perfluorobutyl iodide (PFBI) is acceptable as a substitute for CFC–113, methyl chloroform, and HCFC–225ca, HCFC–225cb, and blends thereof for use in:

• Metal cleaning.
• Electronics cleaning.
• Precision cleaning.

PFBI is also known as 1,1,2,3,3,4,4-nonafluoro-4-iodobutane (CAS Reg. No. 423–39–2). This substitute was submitted to EPA under the trade name Capstone® 4–I as a fluorinated iodide mixture containing greater than 99 percent PFBI. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0269 at http://www.regulations.gov.

Environmental information: PFBI has an ODP of less than 0.005. PFBI has a GWP of less than 5 relative to CO₂, and an atmospheric lifetime of a few days³. PFBI is currently defined as a VOC under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the national ambient air quality standards. Many States currently, in particular those with areas that are violating the ozone NAAQS,
have regulations governing the VOC content of solvents. Some evidence shows that the substitute can cause aquatic toxicity, with an LC₅₀ of 2 mg/l in a 96-hour test on fathead minnows under laboratory conditions. Due to PFBI’s low solubility in water, high vapor pressure and high volatility, it is not likely to accumulate in surface water at concentrations high enough to be toxic to fish. To address the potential for toxicity to fish, the EPA recommends that users follow recommendations in the manufacturer’s MSDS, including:

- Collect the spent solvent for reclamation or incineration;
- Incinerate materials that contain or are contaminated with the solvent;
- Send solvent-contaminated wastewater to a wastewater treatment facility to prevent the solvent from entering waterways; and
- Do not dispose of the solvent by releasing it into waterways.

EPA anticipates that PFBI will be disposed of consistent with regulations pertaining to the definition of hazardous waste under the Resource Conservation and Recovery Act (RCRA) as well as with the recommendations above.

Flammability information: PFBI is not flammable. Toxicity and exposure data: Potential health effects of this substitute include cough, shortness of breath, central nervous system depression, dizziness, confusion, incoordination, drowsiness, or unconsciousness. The substitute may also irritate the skin or eyes. At sufficiently high concentrations, the substitute may cause irregular heartbeat or fluid in the lungs. These potential health effects are common to many solvents.

EPA anticipates that PFBI will be used consistent with the recommendations specified in the manufacturer’s MSDS. EPA and the manufacturer both recommend an acceptable exposure limit of 375 ppm over an 8-hour time-weighted average for PFBI. Users should be aware of additional exposure limits that may be associated with byproducts in PFBI solutions, such as iodine. EPA anticipates that users will be able to meet the workplace exposure limits (manufacturer AEL and EPA recommendation) and address potential health risks by following requirements and recommendations in the MSDSs and other safety precautions common in the solvent cleaning industry.

Comparison to other solvents: PFBI’s ODP of less than 0.005 is below that of CFC–113 (with an ODP of 0.85) and lower than or comparable to that of other substitutes for CFC–113 in metals, electronics, and precision cleaning such as HCFC–225ca with an ODP of 0.02, HCFC–225cb with an ODP of 0.03, and HFE–7100 with an ODP of zero. PFBI’s GWP of less than 5 is well below that of CFC–113 with a GWP of 6.130 and is lower than that of other substitutes for CFC–113 in the listed end uses, such as HCFC–225ca with a GWP of 1.220, HCFC–225cb with a GWP of 5.95, and HFE–7100 with a GWP of 297. PFBI has a lower LC₅₀ for fish than some other acceptable solvents in these end uses (e.g., 7.280 to 8120 mg/l for acetone, 40.7 to 66.8 mg/l for trichloroethylene, and greater than 7.9 mg/l for HFE–7100) and an LC₅₀ higher than for some other acceptable substitutes (e.g., 0.7 mg/l for d-limonene). EPA expects that following the disposal recommendations in the manufacturer’s MSDS can sufficiently address this risk. Flammability and toxicity risks are low, as discussed above. Thus, EPA finds PFBI acceptable in the end uses listed above because the overall risk to human health and the environment posed by PFBI is lower than or comparable to the risks posed by other substitutes found acceptable in the same end uses.

C. Fire Suppression

1. Firebane® All-Weather 1115 and Firebane® 1115

EPA’s decision: EPA finds Firebane® All-Weather 1115 and Firebane® 1115 acceptable as substitutes for halon 1211 for use as streaming agents. Because the formulations of Firebane® All-Weather 1115 and Firebane® 1115 are very similar and share the same human health and environmental risks, we are listing them together and,

Comparison to halon 1211: Firebane® All-Weather 1115 and Firebane® 1115 are not comparable to halon 1211 because:

- Flammability information: Both Firebane® 1115 formulations are non-flammable.
- Toxicity and exposure data: The majority of the constituents of the Firebane® 1115 formulations are classified by the U.S. Food and Drug Administration (FDA) as “Generally Recognized as Safe (GRAS)” compounds, and the remaining constituents are FDA-approved for use as direct and/or indirect food additives. These compounds are commonly used in food, pharmaceutical, or cosmetic applications. Individual constituents may cause gastrointestinal discomfort (if

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6 LC₅₀ is defined as the concentration at which 50% of the test animals die.
7 For more information see the risk screen for PFBI provided in the Docket at [http://www.regulations.gov](http://www.regulations.gov).
10 Material Safety Data Sheet for 3M™ Novec™ 7100 Engineered Fluid. March 17, 2011. Downloaded from [http://multimedia.3m.com/mws/media/mwservlet?mwsid=2SSSSSuUn-zu8i000tBmm0w=p0k172z9x90tD7SSSSSS—on August 10, 2011. HFE–7100’s LC₅₀ for fish (fathead minnow) is reported as being greater than its saturation concentration in water.
11 Toxicity of eight terpenes to fathead minnows and other safety precautions common in the solvent cleaning industry.
12 BOD is the amount of oxygen consumed by microorganisms as they decompose organic materials in water.
excessively ingested), or minor irritation to the eyes, skin, and/or respiratory tract.

Given the low toxicity of its constituents, both formulations of Firebane® 1115 are not expected to pose a significant risk to personnel during manufacture, installation and maintenance. To minimize worker exposure to any chemicals during manufacture, installation, and maintenance through an accidental release or spill, EPA recommends the following:

- Proper personal protective equipment (PPE) be used during handling of the substitute (e.g., goggles, gloves);
- Adequate ventilation should be in place;
- All spills should be cleaned up immediately in accordance with good industrial hygiene practices;
- Training for safe handling procedures should be provided to all employees that would be likely to handle containers of or extinguishing units filled with Firebane® 1115 or Firebane® All-Weather 1115;
- In case of an inadvertent discharge, workers should immediately follow the instructions listed in the manufacturer’s MSDS.

The above recommendations are all contained in the manufacturer’s MSDS. EPA also recommends that use of these systems should be in accordance with the latest edition of NFPA 10 Standard for Portable Extinguishers.

Firebane® 1115 and Firebane® All-Weather 1115 are not expected to cause significant harm to human health when used as stream agents in portable fire extinguishers. As described above, the constituents of both Firebane® 1115 formulations are composed of compounds with low toxicity. Their use as stream agents is not expected to cause any significant adverse health effects when the recommended safety precautions are followed.

Comparison to other fire suppressants: Both Firebane® 1115 formulations have zero ODP and GWP in contrast to halon 1211 (with an ODP of 7.1 and a GWP of 1,890), the ODS which they replace. Compared to other substitutes for halon 1211, such as HCFC Blend B (with ODP of roughly 0.01 and GWP of roughly 80), HFC–227ea (with ODP of 0 and GWP of 3,220), and HFC–236fa (with an ODP of 0 and GWP of 9,810), both Firebane® 1115 formulations have less impact on the atmosphere. Toxicity risks are low, as discussed above. Thus, we find that Firebane® 1115 and Firebane® All-Weather 1115 are acceptable because the overall environmental and human health risk posed by Firebane® 1115 and Firebane® All-Weather 1115 is lower than or comparable to the risks posed by other substitutes found acceptable in the same end use.

2. Firebane® 1170 and Firebane® 1179

EPA’s decision: EPA finds Firebane® 1170 and Firebane® 1179 acceptable as substitutes for halon 1211 for use as stream agents.

Because the formulations of Firebane® 1170 and Firebane® 1179 are very similar and share the same human health and environmental risks, they are being listed together and, hereinafter, collectively referred to in this section as “both Firebane® formulations.” The manufacturer of both Firebane® formulations has claimed their composition as CBI. You may find the submissions under Docket items EPA–HQ–OAR–2003–0118–0260 and EPA–HQ–OAR–2003–0118–0270 at http://www.regulations.gov.

Environmental information: Both Firebane® formulations have zero ODP and zero GWP. Therefore, both Firebane® formulations are not expected to pose any significant adverse impacts on the ozone layer or climate.

At manufacture, EPA believes that regulatory requirements on industrial wastewater discharges are sufficient to prevent the unlikely release of the substitute to surface water during the manufacturing operations of both Firebane® formulations. Because of the BOD level of these formulations, discharges of either Firebane® formulation that result in release to waterways could result in relatively high BOD in the waterways. However, neither Firebane® formulation is expected to pose significant harm to the environment, provided that proper disposal procedures are followed. As with the majority of halon substitutes, their physicochemical properties make it unlikely that the substitutes would be released to surface water.

During discharge, the constituents of both Firebane® formulations would rapidly aerosolize during expulsion from the container and then settle as a liquid on surfaces. After settling, cleanup would involve washing or rinsing of surfaces. It is recommended that discharges of either Firebane® formulation be collected (e.g., mopped) and sealed in containers and then disposed of in accordance with local, state, and federal requirements and as specified in the manufacturer’s MSDS. The MSDS also specifies that training for safe handling procedures be provided to all employees that would be likely to dispose of either Firebane® formulation at cleanup. In addition, the use of an extinguisher is expected to be infrequent (i.e., in case of a fire emergency), and therefore discharges at end-use would be infrequent. Therefore, EPA expects that following the safe handling and disposal recommendations in the manufacturer’s MSDS would protect against significant harm to surface water during manufacture, end-use or at cleanup.

Of the constituents of both Firebane® formulations, only one has not been exempted as a VOC under the CAA (40 CFR 51.000). Potential emissions of VOCs from the use of substitutes for halons in the fire extinguishing and explosion prevention sector are likely to be insignificant relative to VOCs from all other sources (i.e., other industries, mobile sources, and biogenic sources). Even at full market penetration, and given typically annual emission rates for halon substitute fire suppressants, estimated annual VOC emissions from both Firebane® formulations are not expected to pose any significant adverse impact on local air quality.

Flammability information: Both Firebane® formulations are non-flammable.

Toxicity and exposure data: The majority of the constituents of both Firebane® formulations are composed of FDA-classified GRAS compounds, and the remaining constituents are FDA-approved for use as direct or indirect food additives. These compounds are commonly used in food, pharmaceutical, or cosmetic applications. Individual constituents may cause gastrointestinal discomfort (if excessively ingested), or minor irritation to the eyes, skin, and/or respiratory tract. Given the low toxicity of their constituents, both Firebane® formulations are not expected to pose a significant risk to personnel during manufacture, installation and maintenance. To minimize worker exposure to any chemicals during manufacture, installation, and maintenance through an accidental release or spill, EPA recommends the following:

- Proper Level C or higher PPE be used during handling of the substitute (e.g., goggles, gloves);
- Adequate ventilation should be in place;
- All spills should be cleaned up immediately in accordance with good industrial hygiene practices;
- Training for safe handling procedures should be provided to all employees that would be likely to
handle containers of or extinguishing units filled with Firebane® 1170 or Firebane® 1179; and
• In case of an inadvertent discharge, workers should immediately follow the instructions listed in the MSDS for Firebane® 1170 or for Firebane® 1179. The above recommendations are all included in the manufacturer’s MSDSs. EPA also recommends that use of these systems should be in accordance with the latest edition of NFPA 10 Standard for Portable Extinguishers.

Firebane® 1170 and Firebane® 1179 are not expected to cause harm to human health when used as streaming agents in portable fire extinguishers. EPA expects no significant adverse health effects when the recommended safety precautions and normal industry practices are applied and use of the substitutes is in accordance with the manufacturer’s MSDSs.

Comparison to other fire suppressants: Both Firebane® 1170 and Firebane® 1179 have zero ODP and GWP in contrast to halon 1211 (with an ODP of 7.1 and a GWP of 1,890), the ODS they replace. Compared to other substitutes for halon 1211, such as HCFC Blend B (with an ODP of roughly 0.01 and GWP of roughly 80), HFC–227ea (with an ODP of 0 and GWP of 3,220), and HFC–236fa (with an ODP of 0 and GWP of 9,810), both Firebane® formulations have less impact on the atmosphere. Toxicity risks are low, as discussed above. Thus, we find that Firebane® 1170 and Firebane® 1179 are acceptable because the overall environmental and human health risk posed by Firebane® 1170 and Firebane® 1179 is lower than or comparable to the risks posed by other substitutes found acceptable in the same end use.

3. Firebane® 1179 Total Flooding

EPA’s decision: EPA finds Firebane® 1179 acceptable as a substitute for halon 1301 for total flooding uses in both occupied and unoccupied areas.


Environmental information:
Firebane® 1179 has zero ODP and zero GWP. Firebane® 1179 is expected to aerosolize rapidly during expulsion from the fire suppression system and then settle as a liquid on surfaces. After settling, cleanup would involve washing or rinsing of surfaces. See the listing for Firebane® 1179 above in section C.2 for further information.

Flammability information: Firebane® 1179 is non-flammable.

Toxicity and exposure data: The majority of the constituents in the Firebane® 1179 formulation are FDA-classified GRAS compounds, and the remaining constituents are FDA-approved for use as direct or indirect food additives. These compounds are commonly used in food, pharmaceutical, or cosmetic applications. Individual constituents may cause gastrointestinal discomfort (if excessively ingested), or minor irritation to the eyes, skin, and/or respiratory tract. Given the low toxicity of its constituents, EPA expects no significant adverse health effects when the recommended safety precautions and normal industry practices are applied and use of the substitute is in accordance with the manufacturer’s MSDS. See the listing for Firebane® 1179 above in section C.2 for further information.

Comparison to other fire suppressants: Firebane® 1179 has zero ODP and GWP in contrast to halon 1301 (with an ODP of 16 and a GWP of 7,140), the ozone-depleting substance which it replaces, and comparable to other acceptable non-ozone-depleting substitutes (e.g., Inert Gas 541, HFC–227ea and HFC–125). Firebane® 1179’s GWP is comparable to or less than that for other non-ozone depleting substitutes for halon 1301, such as Inert Gas 541, HFC–227ea or HFC–125, with GWPs of less than 1, 3,220, and 3,500, respectively. Toxicity risks are low, as discussed above. Thus, we find that Firebane® 1179 is acceptable because the overall environmental and human health risk posed by Firebane® 1179 is lower than or comparable to the risks posed by other substitutes found acceptable in the same end use.

4. N2 Towers Inert Gas Generator Fire Suppression System (N2 Towers® System)

EPA’s decision: EPA finds the N2 Towers Inert Gas Generator Fire Suppression System (N2 Towers® System) is acceptable as a substitute for halon 1301 for total flooding uses in both occupied and unoccupied areas.

The N2 Towers® System is a fire suppression system that pyrotechnically generates nitrogen (N2, CAS Reg. No. 7727–37–9). It is designed for use with Class A and B fires (ordinary combustible materials fires and flammable liquids fires, respectively). The N2 Towers® System is an inert gas system designed for total flooding applications for fires in normally occupied or unoccupied spaces. Each N2 generator unit contains a large number of small propellant grain discs that generate nitrogen gas when activated. Depending on the fire suppression requirement, several generators may be stacked inside an N2 tower in a room, or a single generator may be bracketed inside a vehicle. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0253 at http://www.regulations.gov.

Environmental information: The constituents of the N2 Towers® System are solids before use and therefore have zero ODP and zero GWP. Further, the ODP of each of the post-activation constituents of the N2 Towers® System is zero, and the GWPs of post-activation constituents are 1 or less.

The N2 Towers® System does not contain any VOCs as defined under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the national ambient air quality standards. Accordingly, use of the N2 Towers® System is not expected to pose any significant adverse impacts on local air quality.

Flammability information: The N2 Towers® System generates products that are non-flammable.

Toxicity and exposure data: The potential health risks of the N2 Towers® System come from its production of nitrogen gas, an inert gas that at sufficiently high levels can cause asphyxiation. The N2 Towers® System is designed to ensure that the oxygen concentration in any protected space will not fall below 12 percent over the 5-minute discharge period, consistent with the health criteria in NFPA Standard 2001 for Clean Agent Fire Extinguishing Systems. EPA recommends that use of this system should be in accordance with the safe exposure guidelines for inert gas systems in the latest edition of NFPA 2001, specifically the requirements for residual oxygen levels, and that use should be in accordance with the relevant operational requirements in NFPA Standard 2010 for Aerosol Extinguishing Systems. EPA also recommends that Section VIII of the OSHA Technical Manual be consulted as well as all information from the manufacturer for information on selecting the appropriate types of PPE to be worn by personnel involved in the manufacture, installation, and maintenance of the N2 Towers® System.

Comparison to other fire suppressants: The N2 Towers® System is not ozone-depleting in contrast to halon 1301 (with an ODP of 16 and a GWP of 7,140), the ODS which it replaces, and comparable to other acceptable non-ozone-depleting substitutes (e.g., Inert Gas 541, HFC–227ea and HFC–125). The GWPs of the...
Section 612(c). The Agency has 90 days from the lists published in accordance with subsections to, or delete a substance from, the lists to grant or deny a petition. Where the Agency grants the petition, EPA must publish the revised lists within an additional six months.

4. 90-Day Notification

Section 612(e) requires the Agency to notify any person who produces a chemical substitute for a class I substance to notify the Agency not less than 90 days before new or existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's unpublished health and safety studies on such substitutes.

5. Outreach

Section 612(b)(1) requires the Administrator to establish a public clearinghouse of alternative chemicals, product substitutes, and alternative manufacturing processes that are available for products and manufacturing processes which use class I and II substances.

B. EPA’s Regulations Implementing Section 612

On March 18, 1994, EPA published the original rulemaking (59 FR 13044) which established the process for administering the SNAP program and issued EPA's first list identifying acceptable and unacceptable substitutes in the major industrial use sectors.

4. 90-Day Notification

Section 612(e) requires the Agency to notify any person who produces a chemical substitute for a class I substance to notify the Agency not less than 90 days before new or existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's unpublished health and safety studies on such substitutes.

5. Outreach

Section 612(b)(1) states that the Administrator shall seek to maximize the use of federal research facilities and resources to assist users of class I and II substances in identifying and developing alternatives to the use of such substances in key commercial applications.

C. How the Regulations for the SNAP Program Work

Under the SNAP regulations, anyone who plans to market or produce a substitute to replace a class I substance or class II substance in one of the eight major industrial use sectors must provide notice to the Agency, including health and safety information on the substitute, at least 90 days before introducing it into interstate commerce for significant new use as an alternative. This requirement applies to the persons planning to introduce the substitute into interstate commerce,13 which typically are chemical manufacturers but may include importers, formulators, equipment manufacturers, and end-users.14 The regulations identify certain narrow exemptions from the notification requirement, such as research and development and test marketing (40 CFR 82.176(b)(4) and (5), respectively).

The Agency has identified four possible decision categories for substitutes that are submitted for evaluation: Acceptable; acceptable subject to use conditions; acceptable subject to narrowed use limits; and unacceptable (40 CFR 82.180(b)). Use conditions and narrowed use limits are both considered “use restrictions” and are explained in the paragraphs below. Substitutes that are deemed acceptable with no use restrictions (no use conditions or narrowed use limits) can be used for all applications within the relevant end uses within the sector.

After reviewing a substitute, the Agency may determine that a substitute is acceptable only if certain conditions in the way that the substitute is used are met to minimize risks to human health and the environment. EPA describes such substitutes as “acceptable subject to use conditions.” Entities that use these substitutes without meeting the associated use conditions are in violation of EPA’s SNAP regulations.

For some substitutes, the Agency may permit a narrowed range of use within an end-use or sector. For example, the Agency may limit the use of a substitute to certain end-uses or specific applications within an industry sector. EPA describes these substitutes as “acceptable subject to narrowed use limits.” The Agency requires the user of a narrowed-use substitute to

13 As defined at 40 CFR 82.194, “interstate commerce” means the distribution or transportation of any product between one state, territory, possession or the District of Columbia, and another state, territory, possession or the District of Columbia, or the sale, use or manufacture of any product in more than one state, territory, possession or District of Columbia. The entry points for which a product is introduced into interstate commerce are the release of a product from the facility in which the product was manufactured, the entry into a warehouse from which the domestic manufacturer releases the product for sale or distribution, and at the site of United States Customs clearance.

14 As defined at 40 CFR 82.172, “end-use” means processes or classes of specific applications within major industrial sectors where a substitute is used to replace an ODS.
demonstrate that no other acceptable substitutes are available for the specific application by conducting comprehensive studies. A person using a substitute that is acceptable subject to narrowed use limits in applications and end-uses that are not consistent with the narrowed use limit is using the substitute in an unacceptable manner and is in violation of section 612 of the CAA and EPA’s SNAP regulations.

The Agency publishes its SNAP program decisions in the Federal Register (FR). EPA publishes decisions concerning substitutes that are deemed acceptable subject to use restrictions (use conditions and/or narrowed use limits), or substitutes deemed unacceptable, as proposed rulemakings to provide the public with an opportunity to comment, before publishing final decisions.

In contrast, EPA publishes decisions concerning substitutes that are deemed acceptable with no restrictions in “notices of acceptability” or “determinations of acceptability,” rather than as proposed and final rules. As described in the March 18, 1994, rule initially implementing the SNAP program, EPA does not believe that rulemaking procedures are necessary to list alternatives that are acceptable without restrictions because such listings neither impose any sanction nor prevent anyone from using a substitute.

Many SNAP listings include “Comments” or “Further Information” to provide additional information on substitutes. Since this additional information is not part of the regulatory decision, these statements are not binding for use of the substitute under the SNAP program. However, regulatory requirements so listed are binding under other regulatory programs (e.g., worker protection regulations promulgated by the Occupational Safety and Health Administration (OSHA)). The “Further Information” classification does not necessarily include all other legal obligations pertaining to the use of the substitute. While the items listed are not legally binding under the SNAP program, EPA encourages users of substitutes to apply all statements in the “Further Information” column in their use of these substitutes. In many instances, the information simply refers to sound operating practices that have already been identified in existing industry and/or building codes or standards. Thus many of the statements, if adopted, would not require the affected user to make significant changes in existing operating practices.

### D. Additional Information About the SNAP Program

For copies of the comprehensive SNAP lists of substitutes or additional information on SNAP, refer to EPA’s Ozone Depletion Web site at: http://www.epa.gov/ozone/snap/index.html. For more information on the Agency’s process for administering the SNAP program or criteria for evaluation of substitutes, refer to the March 18, 1994, SNAP final rulemaking (59 FR 13044), codified at 40 CFR part 82, subpart G.

A complete chronology of SNAP decisions and the appropriate citations is found at: http://www.epa.gov/ozone/snap/chron.html.

### List of Subjects in 40 CFR Part 82

- Environmental protection, Administrative practice and procedure, Air pollution control, Reporting and recordkeeping requirements.

Dated: September 27, 2011.

Elizabeth Craig,
Acting Director, Office of Atmospheric Programs.

### Appendix A: Summary of Acceptable Decisions

#### Refrigeration and Air Conditioning

<table>
<thead>
<tr>
<th>End-Use</th>
<th>Substitute</th>
<th>Decision</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrifugal chillers (retrofit only)</td>
<td>Hot Shot 2 as a substitute for CFC–11, CFC–12, CFC–114, R–500, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Reciprocating and screw chillers (retrofit only)</td>
<td>Hot Shot 2 as a substitute for CFC–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Industrial process refrigeration (retrofit only)</td>
<td>Hot Shot 2 as a substitute for CFC–11, CFC–12, CFC–114, R–13B1, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Industrial process refrigeration (retrofit and new)</td>
<td>R–407F as a substitute for HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The American Industrial Hygiene Association (AIHA) has established workplace environmental exposure limits (WEELs) of 1,000 ppm over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Ice skating rinks (retrofit only)</td>
<td>Hot Shot 2 as a substitute for CFC–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Ice skating rinks (retrofit and new)</td>
<td>R–407F as a substitute for HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The AIHA has established WEELs of 1,000 ppm over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>End-Use</td>
<td>Substitute</td>
<td>Decision</td>
<td>Further information</td>
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<tr>
<td>Industrial process air conditioning (retrofit and</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
</tr>
<tr>
<td>new).</td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td></td>
<td>established WEELs of 1,000 ppm</td>
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<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
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<tr>
<td>Cold storage warehouses (retrofit only).</td>
<td>Hot Shot 2 as a substitute for CF–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
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<tr>
<td>Cold storage warehouses (retrofit and new).</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
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<td></td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
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<td>established WEELs of 1,000 ppm</td>
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<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
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<tr>
<td>Refrigerated transport (retrofit only)</td>
<td>Hot Shot 2 as a substitute for CF–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Refrigerated transport (retrofit and new).</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
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<td></td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td></td>
<td>established WEELs of 1,000 ppm</td>
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<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Retail food refrigeration (retrofit only).</td>
<td>Hot Shot 2 as a substitute for CF–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Retail food refrigeration (retrofit and new).</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
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<td></td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
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<td>established WEELs of 1,000 ppm</td>
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<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Vending machines (retrofit only) ....</td>
<td>Hot Shot 2 as a substitute for CF–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Commercial ice machines (retrofit only).</td>
<td>Hot Shot 2 as a substitute for CF–12, R–500, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Commercial ice machines (retrofit and new).</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
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<td></td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td></td>
<td>established WEELs of 1,000 ppm</td>
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<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Residential dehumidifiers (retrofit only).</td>
<td>Hot Shot 2 as a substitute for CF–12, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>Household refrigerators and freezers (retrofit</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
</tr>
<tr>
<td>and new).</td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td></td>
<td>established WEELs of 1,000 ppm</td>
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<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Motor vehicle air conditioning (retrofit and</td>
<td>R–407F as a substitute for HCFC–22 and HCFC</td>
<td>Acceptable</td>
<td>The AIHA has</td>
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<td>new-bus and passenger trains only).</td>
<td>blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td></td>
<td>established WEELs of 1,000 ppm</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
<tr>
<td>Household and light commercial air conditioning</td>
<td>Hot Shot 2 as a substitute for CF–12, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The manufacturer has an acceptable exposure limit of 1,000 ppm over an 8-hour time-weighted average for Hot Shot 2.</td>
</tr>
<tr>
<td>and heat pumps (retrofit only).</td>
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</tr>
<tr>
<td>Household and light commercial air conditioning</td>
<td>R–407F as a substitute for CF–12, R–502, HCFC–22 and HCFC blends, including those containing HCFC–22 and/or HCFC–142b.</td>
<td>Acceptable</td>
<td>The AIHA has established WEELs of 1,000 ppm over an 8-hour time-weighted average for each of R–407F’s individual components.</td>
</tr>
</tbody>
</table>
### Refrigeration and Air Conditioning—Continued

<table>
<thead>
<tr>
<th>End-Use</th>
<th>Substitute</th>
<th>Decision</th>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very low temperature refrigeration (retrofit).</strong></td>
<td>R–507A as a substitute for R–13B1.</td>
<td>Acceptable ...</td>
<td>The AIHA has established WEELs of 1,000 ppm over an 8-hour time-weighted average for each of R–507A’s individual components.</td>
</tr>
</tbody>
</table>

1 Users should observe recommendations in the manufacturer’s MSDS and guidance for all listed refrigerants.

### Solvent Cleaning

<table>
<thead>
<tr>
<th>End-Uses</th>
<th>Substitute</th>
<th>Decision</th>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals cleaning</td>
<td>Perfluorobutyl iodide (PFBI) as a substitute for CFC–113, methyl chloroform, and HCFC–225ca, HCFC–225cb, and blends thereof.</td>
<td>Acceptable ...</td>
<td>PFBI has an ODP of less than 0.005 and a 100-year global warming potential of less than 5. Its Chemical Abstracts Service Registry number (CAS Reg. No.) is 423–39–2.</td>
</tr>
<tr>
<td>Electronics cleaning</td>
<td></td>
<td></td>
<td>EPA recommends an acceptable exposure limit of 375 ppm over an 8-hour time-weighted average for PFBI.</td>
</tr>
<tr>
<td>Precision cleaning</td>
<td></td>
<td></td>
<td>Observe recommendations in the manufacturer’s MSDS and guidance for using this substitute, particularly with respect to disposal considerations. EPA recommends that spent solvent is collected for reclamation or incineration, materials that contain or contaminated with solvents are incinerated, and that solvent-contaminated wastewater is sent to a wastewater treatment facility to prevent the solvent from entering waterways. PFBI is currently defined as a volatile organic compound (VOC) under CAA regulations (see 40 CFR 51.100(s)) addressing the development of State Implementation Plans (SIPs) to attain and maintain the national ambient air quality standards.</td>
</tr>
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</table>

### Fire Suppression

<table>
<thead>
<tr>
<th>End-Use</th>
<th>Substitute</th>
<th>Decision</th>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total flooding systems (occupied and unoccupied areas).</td>
<td>Firebane® 1179 as a substitute for halon 1301. N2 Towers® System as a substitute for halon 1301.</td>
<td>Acceptable ...</td>
<td>EPA recommends that use of this system should be in accordance with the manufacturer’s MSDS. EPA recommends that use of this system should be in accordance with the safe exposure guidelines for inert gas systems in the latest edition of NFPA 2001 Standard on Clean Agent Fire Extinguishing Systems, specifically the requirements for residual oxygen levels, and use should be in accordance with the NFPA Standard 2010 for Aerosol Extinguishing Systems.</td>
</tr>
<tr>
<td>Streaming agents</td>
<td>Firebane® All-Weather 1115 and Firebane® 1115 as substitutes for halon 1211. Firebane® 1170 and Firebane® 1179 as substitutes for halon 1211.</td>
<td>Acceptable ...</td>
<td>EPA recommends that use of these systems be in accordance with the latest edition of NFPA 10 Standard for Portable Extinguishers. EPA recommends that use of these systems be in accordance with the latest edition of NFPA 10 Standard for Portable Extinguishers.</td>
</tr>
</tbody>
</table>

1 EPA recommends that users consult Section VIII of the OSHA Technical Manual for information on selecting the appropriate types of personal protective equipment for all listed fire suppression agents. EPA has no intention of duplicating or displacing OSHA coverage related to the use of personal protective equipment (e.g., respiratory protection), fire protection, hazard communication, worker training or any other occupational safety and health standard with respect to halon substitutes.

2 Use of all listed fire suppression agents should conform to relevant OSHA requirements, including 29 CFR part 1910, subpart L, sections 1910.160 and 1910.162.
DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency


Final Flood Elevation Determinations

ACTION:

AGENCY: Federal Emergency Management Agency.

SUPPLEMENTARY INFORMATION: On June 23, 2000, OMB approved the information collection requirements contained in §32.2000 of title 47 of the United States Code as a revision to OMB Control Number 3060–0370.

On September 12, 2000, OMB approved the information collection requirements contained in §52.33 of title 47 of the United States Code as a revision to OMB Control Number 3060–0370.

On October 22, 2002 OMB approved the information collection requirements contained in §52.33(a)(3) of title 47 of the United States Code as a revision to OMB Control Number 3060–0742.

On May 25, 2005, OMB approved the information collection requirements contained in §§61.38(b)(4), 61.41(c), (d) and (e) and 69.123 of title 47 of the United States Code as a revision to OMB Control Number 3060–0298.

On February 5, 2007, OMB approved the information collection requirements contained in §64.5001 of title 47 of the United States Code as a new collection, OMB Control Number 3060–1096. These information collection requirements required OMB approval to become effective. The Commission publishes this document as an announcement of those approvals. If you have any comments on the burden estimates listed below, or how the Commission can improve the collections and reduce any burdens caused thereby, please contact Thomas Butler, Federal Communications Commission, Room 5–C458, 445 12th Street, SW., Washington, DC 20554. Please include the OMB Control Numbers, 3060–0370, 3060–0742, 3060–0298, and 3060–1096 in your correspondence. The Commission will also accept your comments via the Internet if you send them to PRA@fcc.gov.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418–0530 (voice, (202) 419–0432 (TTY).

Synopsis: As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507), the FCC is notifying the public that it received OMB approval for the information collection requirements described above. The OMB Control Numbers are 3060–0370, 3060–0742, 3060–0298 and 3060–1096. The total annual reporting burden for respondents for these collections of information, including the time for gathering and maintaining the collection of information, has been most recently approved to be:

For 3060–0370: 859 responses, for a total of 859 hours, and no annual costs.

For 3060–0742: 10,001,890 responses, for a total of 672,516 hours and $13,423,321 in annual costs.

For 3060–0298: 1,160 responses, for a total annual burden of 58,000 hours, and $945,400 in annual costs.

For 3060–1096: 1,896 responses, for a total of 15,800 hours, and no annual costs.

An agency may not conduct or sponsor a collection of information unless it displays a current valid OMB Control Number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act, which does not display a current, valid OMB Control Number. The foregoing notice is required by the Paperwork Reduction Act of 1995, Public Law 104–13, October 1, 1995, and 44 U.S.C. 3507.

List of Subjects in 47 CFR Parts 32, 52, 61, 64, and 69

Communications common carriers, reporting and Recordkeeping requirements, Telephone, Telecommunications, Uniform System of Accounts.

AGENCY: Federal Communications Commission.

ACTION: Final rule; announcement of effective date.

SUMMARY: This document announces the approval of the Office of Management and Budget (OMB) for information collection requirements in the sections outlined in the DATES section.

DATES: Effective October 4, 2011, the following regulations have been approved by OMB:

32.33—63 FR 35161, June 29, 1998.
61.41(c), (d) and (e)—69 FR 25336, May 6, 2004.
64.5001—71 FR 43673, August 2, 2006.

FOR FURTHER INFORMATION CONTACT:
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DEPARTMENT OF DEFENSE

Defense Acquisition Regulations System

48 CFR Parts 212, 247, and 252

RIN 0750–AG25

Defense Federal Acquisition Regulation Supplement; Defense Cargo Riding Gang Member (DFARS Case 2007–D002)

AGENCY: Defense Acquisition Regulations System, Department of Defense (DoD).

ACTION: Final rule.

SUMMARY: DoD is adopting as final, with changes, an interim rule amending the Defense Federal Acquisition Regulation Supplement (DFARS) to implement section 3504 of the National Defense Authorization Act for Fiscal Year 2001, during the current calendar year, that governs the adoption of a Defense Department-wide policy for the cost of rideshare programs associated with cargo transport.