

technique for combinational circuit optimization. The technique is a two-step process. In the first step, the non-linearity of the circuit—as measured by the number of nonlinear gates it contains—is reduced. The second step reduces the number of gates in the linear components of the circuit. The technique can be applied to arbitrary circuits, and seems to yield improvements even on circuits that have already been optimized by standard methods. The technique is applied to the S-box of the Advanced Encryption Standard (AES). The result is, as far as we know, the smallest circuit yet constructed for this function.

Dated: April 7, 2009.

**Patrick Gallagher,**

*Deputy Director.*

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## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

RIN 0648-XO55

#### Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permits

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; request for comments.

**SUMMARY:** The Assistant Regional Administrator for Sustainable Fisheries, Northeast Region, NMFS (Assistant Regional Administrator), has made a preliminary determination that an Exempted Fishing Permit (EFP) application contains all of the required information and warrants further consideration. The Assistant Regional Administrator has made a preliminary determination that the activities authorized under this EFP would be consistent with the goals and objectives of the Monkfish Fishery Management Plan (FMP). However, further review and consultation may be necessary before a final determination is made to issue an EFP. Therefore, NMFS announces that the Assistant Regional Administrator proposes to recommend that an EFP be issued that would allow eight commercial fishing vessels to conduct research and compensation fishing operations that are otherwise restricted by the regulations governing the fisheries of the Northeastern United States. This EFP, which would enable

vessels to harvest monkfish granted through the Monkfish Research Set-Aside (RSA) Program, would grant exemptions from restrictions of the Gulf of Maine (GOM) Rolling Closure Areas (RCA) I and II and from the monkfish days-at-sea (DAS) possession limits in the Southern and Northern Fishery Management Areas.

Regulations under the Magnuson-Stevens Fishery Conservation and Management Act require publication of this notification to provide interested parties the opportunity to comment on applications for proposed EFPs.

**DATES:** Comments must be received on or before May 4, 2009.

**ADDRESSES:** You may submit written comments by any of the following methods:

- Email: [DA8-057@noaa.gov](mailto:DA8-057@noaa.gov). Include in the subject line "Comments on UMES Monkfish RSA EFP."

- Mail: Patricia A. Kurkul, Regional Administrator, NMFS, NE Regional Office, 1 Blackburn Drive, Gloucester, MA 01930. Mark the outside of the envelope "Comments on UMES monkfish RSA EFP, DA8-057."

- Fax: (978) 281-9135.

**FOR FURTHER INFORMATION CONTACT:**

Emily Bryant, Fishery Management Specialist, 978-281-9244.

**SUPPLEMENTARY INFORMATION:** An application for an EFP was submitted by the University of Maryland Eastern Shore (UMES) on March 11, 2009, for a project selected under the New England and Mid-Atlantic Fishery Management Councils' Monkfish RSA Program. The purpose of the project is to investigate the influence of temperature on monkfish distribution and abundance. This EFP would grant an exemption from monkfish possession limits to eight vessels for the purpose of research and RSA harvest to fund this research project (i.e., compensation fishing).

While conducting RSA compensation trips, the vessels would use gillnets that are 12-inch (30-cm) stretch mesh with a 3.5-inch (9-cm) diameter gauge web that is 12 meshes deep. The nets do not exceed 300 ft (91 m) in length. Average soak times differ between vessels, with a range of 36 to 120 hours. Each vessel would receive two temperature and depth loggers to attach to gillnets during RSA fishing trips. The loggers would collect temperature and depth at intervals of 1 hour, and will be downloaded approximately every two months. Catch data (number and size of monkfish) from panels with probes would be recorded by collaborating fishermen, along with information on location, depth fished, water currents, and lunar cycle. UMES plans to collect

histological samples on board the fishing vessels from a subset of trips for analysis of reproductive condition. Length measurements would be taken each trip from a minimum of 25 randomly selected monkfish from the nets with attached temperature probes to gain information about fish distribution. The smallest samples would measure 17 inches (43 cm) in length. Additional catch, within applicable size and possession limits, would be sold to help offset the costs of the research.

Compensation fishing for this research would occur from May 2009 through April 2010. The eight fishing industry collaborators would have access to 105 monkfish DAS that will be awarded to the project through the Monkfish RSA Program. In order to achieve the target catch to fund the project, these fishing activities would require an exemption from monkfish DAS possession limits at 50 CFR 648.94(b)(2). This exemption would provide these eight vessels with the flexibility they need to generate sufficient income to meet projected costs of the research activity, while minimizing operating expenses. Based on the preliminary award of 105 DAS, this would require a total catch of 340,046 lb (154,242 kg) of whole monkfish (102,424 lb (46,459 kg) tail weight). Operating under this total landings cap, compensation fishing would continue until the required goal of 340,046 lb (154,242 kg) of whole monkfish is met, or until the awarded DAS have been fully utilized, whichever occurs first. Aside from this exemption, fishing activity would be conducted under normal commercial practices.

In addition, this EFP would also allow five of the eight vessels to fish for monkfish using gillnets inside the GOM and would require exemption from the restrictions of RCAs I and II that will be in effect during April 2009 and March 2010. It is expected that these locations, within the rolling closure areas, would provide access to large monkfish and would avoid gear interactions between the research gillnet gear and trawl gear. These locations also coordinate with the locations from previous years' research.

The applicant may request minor modifications and extensions to the EFP throughout the year. EFP modifications and extensions may be granted without further notice if they are deemed essential to facilitate completion of the proposed research and have minimal impacts that do not change the scope or impact of the initially approved EFP request. Any fishing activity conducted outside the scope of the exempted fishing activity would be prohibited. If

the research project is terminated for any reason prior to completion, any unused funds collected from catch sold to pay for research expenses may be refunded to NOAA.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: April 13, 2009.

**Kristen C. Koch,**

*Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

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## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648-XO29**

#### Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permits

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; request for comments.

**SUMMARY:** The Assistant Regional Administrator for Sustainable Fisheries, Northeast Region, NMFS (Assistant Regional Administrator), has made a preliminary determination that an Exempted Fishing Permit (EFP) application contains all of the required information and warrants further consideration. The Assistant Regional Administrator has made a preliminary determination that the activities authorized under this EFP would be consistent with the goals and objectives of the Monkfish Fishery Management Plan (FMP). However, further review and consultation may be necessary before a final determination is made to issue an EFP. Therefore, NMFS announces that the Assistant Regional Administrator proposes to recommend that an EFP be issued that would allow 24 commercial fishing vessels to conduct compensation fishing operations that are otherwise restricted by the regulations governing the fisheries of the Northeastern United States. This EFP, which would enable vessels to harvest monkfish granted through the Monkfish Research Set-Aside (RSA) Program, would grant exemptions from the monkfish days-at-sea (DAS) possession limits in the Southern and Northern Fishery Management Areas.

Regulations under the Magnuson-Stevens Fishery Conservation and Management Act require publication of

this notification to provide interested parties the opportunity to comment on applications for proposed EFPs.

**DATES:** Comments must be received on or before May 4, 2009.

**ADDRESSES:** You may submit written comments by any of the following methods:

- Email: [DA9-071@noaa.gov](mailto:DA9-071@noaa.gov). Include in the subject line "Comments on Monkfish RSA Harvest EFP."

- Mail: Patricia A. Kurkul, Regional Administrator, NMFS, NE Regional Office, 1 Blackburn Drive, Gloucester, MA 01930. Mark the outside of the envelope "Comments on monkfish RSA harvest EFP, DA9-071."

- Fax: (978) 281-9135.

**FOR FURTHER INFORMATION CONTACT:**

Emily Bryant, Fishery Management Specialist, 978-281-9244.

**SUPPLEMENTARY INFORMATION:** An application for an EFP was submitted by Gulf of Maine Research Institute on March 5, 2009, for a project selected under the New England and Mid-Atlantic Fishery Management Councils' Monkfish RSA Program. The project itself will investigate a multi-method approach for determining age in monkfish through lab trials utilizing monkfish samples obtained through a previously issued Letter of Authorization. This EFP would grant an exemption from monkfish possession limits to 24 vessels for the purpose of harvesting RSA to fund this research project (i.e. compensation fishing). Funds generated by the compensation fishing will be used to pay for laboratory equipment, as well as salaries and stipends for principal investigators.

Compensation fishing for this research would occur from May 2009 through April 2010. The 24 fishing industry collaborators would have access to 203 monkfish DAS that will be awarded to the project through the Monkfish RSA Program. The applicant states that these vessels must be able to land at least 3,000 lb (1,361 kg) of whole monkfish (904 lb (410 kg) tail weight) per trip to achieve the goal of \$2,800 per RSA DAS. In order to achieve this target catch, these fishing activities would require an exemption from monkfish DAS possession limits at 50 CFR 648.94(b)(2). This exemption would provide these 24 vessels with the flexibility they need to generate sufficient income to meet projected costs of the research activity, while minimizing operating expenses. Based on the preliminary award of 203 DAS, this would require a total catch of 609,000 lb (276,238 kg) of whole monkfish (183,434 lb (83,204 kg) tail weight). Operating under this total

landings cap, compensation fishing would continue until the required goal of 609,000 lb (276,238 kg) of whole monkfish is met, or until the awarded DAS have been fully utilized, whichever occurs first. Aside from this exemption, fishing activity would be conducted under normal commercial practices.

The applicant may request minor modifications and extensions to the EFP throughout the year. EFP modifications and extensions may be granted without further notice if they are deemed essential to facilitate completion of the proposed research and have minimal impacts that do not change the scope or impact of the initially approved EFP request. Any fishing activity conducted outside the scope of the exempted fishing activity would be prohibited. If the research project is terminated for any reason prior to completion, any unused funds collected from catch sold to pay for research expenses may be refunded to NOAA.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: April 13, 2009.

**Kristen C. Koch,**

*Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. E9-8890 Filed 4-16-09; 8:45 am]

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## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648-XO34**

#### Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permits

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; request for comments.

**SUMMARY:** The Assistant Regional Administrator for Sustainable Fisheries, Northeast Region, NMFS (Assistant Regional Administrator), has made a preliminary determination that an Exempted Fishing Permit (EFP) application contains all of the required information and warrants further consideration. The Assistant Regional Administrator has made a preliminary determination that the activities authorized under this EFP would be consistent with the goals and objectives of the Monkfish Fishery Management Plan (FMP). However, further review and consultation may be necessary before a final determination is made to