

**Supplemental NMFS Report on the Whiting Electronic Monitoring (EM)
Final Alternative and Regulations**

Prepared by the NMFS West Coast Regional Office

The draft regulations that we prepared for the briefing book assumed that we would issue a second rulemaking in a future year to allow industry to contract with a third party service provider to review video from the EM program. We have since received updated guidance from HQ that, given the uncertainty of Federal appropriations, the EM program cannot rely solely on NMFS funding for video review. This means that the EM program, as proposed, must include a funding backstop through direct industry contracting with a third party service provider for video review. We have prepared the draft regulations below for third party video review for the Council and its advisory bodies to consider. We still intend to conduct the video review (through PSMFC) at the start of the program, but these regulations would be in place for industry to contract directly with a third party for video review should Federal funding for video review end.

1. General

- a. *General.* The new section would lay out the requirements for whiting vessels to obtain an exemption from observer coverage by procuring and maintaining an operational EM system and submitting logbook and EM data to NMFS (via a third party service provider). NMFS would use the logbook and EM data, along with other available information (e.g., observer data, fish tickets), to determine a vessel's discards.

2. EM Service Provider Certification Process

- a. NMFS would amend the existing regulations at §660.18 to incorporate EM provider permits and endorsements. The application process and content would follow the existing application process and content for observer and catch monitor provider permits and endorsements. EM service providers would be able to apply for an equipment or video review endorsement. NMFS may add the following additional requirements for an EM video review service provider's application:
 - i. A narrative statement should identify prior relevant experience in recruiting, hiring, deploying, and providing support for individuals in marine work environments in the groundfish fishery or other fisheries of similar scale.
 - ii. A narrative description of the applicant's ability to carry out the required responsibilities and duties for EM video review providers as described at paragraphs 3.a and b.
 - iii. If requested, provide NMFS with two copies of video review and analysis software for each fishery for which an application has been submitted for a minimum of 90 calendar days for testing and evaluation.
 - iv. If requested, provide NMFS with thorough documentation for the video review and analysis software, including: user manuals, performance specifications, and technical support information.
 - v. Specify identifying characteristics of the software to be used for video review and analysis in the fishery for which an application has been submitted, including but not limited to: manufacturer, brand name, software version and date.

Comment [M1]: This is required of observer providers, but does it make sense here? Would a firm that has never deployed observers before, but done other data analysis work be considered to have relevant experience? Should it at least be fisheries related experience?

Comment [M2]: Trying to build in some flexibility here to allow automated review software to be considered in the future.

3. EM Service Provider Requirements

- a. NMFS would need to specify requirements and performance standards for EM service providers. NMFS is considering some of the following requirements:
 - i. Must provide the following to NMFS or its agent, upon request, free of charge unless otherwise specified in NMFS-authorized service or approval holder's U.S. federal fishery customers.
 1. Litigation support to NMFS if the EM data is being admitted as evidence in a court of law.
 2. Supply all software necessary for accessing, viewing, and interpreting the data/files generated by the EM system, and replicating the provider's analysis.
 3. Make video reviewers and other staff available for debriefings with NMFS or its agent.
 4. If requested, a copy of any contract between the service provider and entities requiring EM services, or between the service provider and video reviewers.
 - ii. Proof of adequate insurance.
 - iii. Submit any change of management or contact information.
 - iv. If requested, submit copies of any information developed and used by the EM service providers and distributed to vessels, including, but not limited to, informational pamphlets, and description of EM service provider duties.
 - v. Provide qualified candidates to serve as EM reviewers. To be qualified a candidate must have:
 1. A Bachelor's degree or higher from an accredited college or university with a major in one of the natural sciences;
 2. Successfully completed a minimum of 30 semester hours or equivalent in applicable biological sciences with extensive use of dichotomous keys in at least one course;
 3. Successfully completed at least one undergraduate course each in math and statistics with a minimum of 5 semester hours total for both; and,
 4. Computer skills that enable the candidate to work competently with standard database software and computer hardware.
 5. Be a U.S. citizen or have authorization to work in the United States;
 6. Be at least 18 years of age;
 7. Have a high school diploma and;
 - a. At least two years of study from an accredited college with a major study in natural resource management, natural sciences, earth sciences, natural resource anthropology, law enforcement/police science, criminal justice, public administration, behavioral sciences, environmental sociology, or other closely related subjects pertinent to the management and protection of natural resources, or;

Comment [M3]: These are the minimum qualifications for an observer. What do we think should be the min qualifications for a video reviewer? They need to be able to estimate weights and ID species. PSMFC hires ex-observers to do video review because of their experience. Should on-the-water experience be a prerequisite?

- b. One year of specialized experience performing duties which involved communicating effectively and obtaining cooperation, identifying and reporting problems or apparent violations of regulations concerning the use of protected or public land areas, and carrying out policies and procedures within a recreational area or natural resource site.
 - c. Have had a background investigation and been found to have had no criminal or civil convictions that would affect their performance or credibility as a catch monitor.
 - d. Have had health and physical fitness exams and been found to be fit for the job duties and work conditions;
- vi. Ensure that reviewers complete duties in a timely manner, including:
 - 1. Submit to NMFS all data and reports as required under EM program policy guidelines.
 - 2. Report for his or her scheduled debriefing and complete all debriefing responsibilities; and,
 - 3. Report immediately to NMFS and OLE any instances of harassment, intimidation, etc.
- vii. Video reviewers must have a valid EM Program video reviewer certification endorsement and must have successfully completed all NMFS required training and briefings before beginning work.
- viii. *Debriefing.* NMFS will notify the service provider which reviewers require debriefing and the specific time period the provider has to schedule a date, time, and location for debriefing. The provider must notify NMFS within 5 business days by telephone to schedule debriefings.
- ix. Review EM video according to a prescribed coverage level or sampling scheme, as specified by NMFS.
- x. Determine an estimate of discards for each trip using standardized estimation methods established by NMFS.
- xi. Submit the following reports as directed by NMFS:
 - 1. Reports of feedback given to vessels following video review;
 - 2. Reports to EM equipment provider to modify or repair EM systems;
 - 3. Reports from video review, including discard estimates and fishing activity information, but also meta data regarding image quality, reviewer name, etc.;
 - 4. Reports of compliance issues identified from video review;
- xii. Submit reports of the following within 24 hours after the EM service provider becomes aware of the information:
 - 1. Any information regarding possible harassment of EM provider staff;
 - 2. Any information regarding possible EM system tampering;
 - 3. Any information regarding any action prohibited under §660.12(f);
 - 4. Any information, allegations or reports regarding EM service provider staff conflicts of interest.

Comment [M4]: These are some of the prerequisites for CMs.

- xiii. If requested, submit raw EM data, processed data, copies of EM data, video review meta data, and other associated records to NMFS for QA/QC.
- xiv. *Retention of records.* All records would be required to be retained for a minimum of 5 years from the date of landing, consistent with other retention timelines for the IFQ program.

Comment [M5]: Service providers would be required to submit data to NMFS, if requested, to allow auditing or other QA/QC of video review.

- b. *Confidentiality of data.* Consistent with NOAA data confidentiality guidance, an EM service provider must not disclose data and observations made on board a vessel to any person except the owner or operator of the observed vessel, an authorized state or OLE officer, NMFS or its designated agent. A service provider must also have a means to protect the confidentiality and privacy of the data submitted by vessels.

Comment [M6]: Other records are only required to be kept for 3 years. However, NMFS, PACFIN, WCGOP, etc. usually has copies of these. In this case, the EM provider would have the only copies, so we would need them to keep it for at least 5 years, the statute of limitations under the MSA.

4. Video Reviewer Certification

- a. NMFS would need to train and certify video reviewers to ensure accurate species identification and weight estimation. I adapted the regulations below from the CM certification regulations.
- b. *Video reviewer certification and responsibilities.* Video reviewer certification authorizes an individual to fulfill duties as specified by NMFS while under the employ of a video review provider.
- c. *Video reviewer training certification.* A training certification signifies the successful completion of the training course required to obtain video review certification. This certification expires when the video reviewer has not been assigned and performed review duties as required by the EM Program for a period of time, specified by EM Program, after his or her most recent debriefing. The certification is renewed by successful completion of the training course.
- d. *EM Program annual briefing.* Each video reviewer must attend a briefing prior to his or her first deployment within any calendar year subsequent to a year in which a training certification is obtained. To maintain a certification, a video reviewer must successfully complete any required briefing specified by the EM Program. All briefing attendance, performance, and conduct standards required by the EM Program must be met prior to any deployment.
- e. *Video reviewer certification requirements.* NMFS may certify individuals who:
 - i. Are employed by a video review provider at the time of the issuance of the certification and qualified, as described at paragraph (f)(1)(i) through (viii) of this section and have provided proof of qualifications to NMFS, through the video review provider.
 - ii. Have successfully completed video reviewer certification training.
 - 1. Successful completion of training by an applicant consists of meeting all attendance and conduct standards; meeting all performance standards for assignments, tests, and other evaluation tools; and completing all other training requirements established by the EM Program.
 - 2. If a candidate fails training, he or she will be notified in writing on or before the last day of training. The notification will indicate: The reasons the candidate failed the training; whether the candidate can retake the training, and under what conditions.

Another option: in the Australian EM program, the hard drives are sent to the government agency first, copied, then sent on to the service provider. This ensures there is a secure copy.

- iii. Have not been decertified as an observer, catch monitor, or video reviewer under provisions in §§660.17(g), and 660.140(h)(6), 660.150(j)(5), 660.160(g)(5) or 679.53(c) of this chapter.
- f. *Maintaining the validity of a video reviewer certification.* After initial issuance, a video reviewer must keep their certification valid by meeting all of the following requirements specified below:
 - i. Successfully perform their assigned duties as described in the Video Reviewer Manual or other written instructions from the EM Program.
 - ii. Accurately record their data, write complete reports, and report accurately any observations of suspected violations of regulations relevant to conservation of marine resources or the environment.
 - iii. Consistent with NOAA data confidentiality guidance, not disclose data and observations made on board a vessel to any person except the owner or operator of the observed vessel, an authorized state or OLE officer, NMFS or the EM Program; and, not disclose data and observations made at a first receiver to any person other than the first receiver site license holder, the first receiver site license authorized representative, facility operators and managers an authorized state or OLE officer, NMFS or the EM Program.
 - iv. Successfully complete any required briefings as prescribed by the EM Program.
 - 1. Successful completion of a briefing by a video reviewer consists of meeting all attendance and conduct standards issued in writing at the start of training; meeting all performance standards issued in writing at the start of training for assignments, tests, and other evaluation tools; and completing all other briefing requirements established by the EM Program.
 - v. Successfully meet all debriefing expectations including video reviewer performance standards and reporting for assigned debriefings.
 - vi. Submit all data and information required by the EM Program within the program's stated guidelines.
 - vii. Have been assigned as a video reviewer within the 12 months prior to any required briefing, unless otherwise authorized by the EM Program.
- g. *Video reviewer standards of behavior.* Video reviewers must do the following:
 - i. Perform authorized duties as described in training and instructional manuals or other written and oral instructions provided by the EM Program.
 - ii. Accurately record and submit the required data as directed by NMFS.
 - iii. Write complete reports, and report accurately any observations of suspected violations of regulations.
 - iv. Return phone calls, emails, text messages, or other forms of communication within the time specified by the EM Program.
 - v. Not disclose data and observations made on board a vessel to any person except the owner or operator of the observed vessel, an authorized officer, NMFS or the EM Program; and not disclose data and observations made at a first receiver to any person other than the first receiver site license

- holder, the first receiver site license authorized representative, facility operators and managers an authorized officer, NMFS or the EM Program.
- h. *Certification and decertification procedures for video reviewers.*
 - i. *Video review certification official.* The Regional Administrator (or a designee) will designate a NMFS video reviewer certification official who will make decisions on whether to issue or deny video reviewer certification.
 - ii. *Agency determinations on video reviewer certifications*
 - 1. *Issuance of certifications.* Certification may be issued upon determination by the video reviewer certification official that the candidate has successfully met all requirements for certification as specified in §660.17(d).
 - iii. *Denial of a certification.* The video reviewer certification official will issue a written determination identifying the reasons for denial of a certification.
 - i. *Limitations on conflict of interest for video reviewers.* Video reviewers must not have a direct financial interest, other than the provision of observer, catch monitor, or video review services in a North Pacific fishery managed pursuant to an FMP for the waters off the coast of Alaska, Alaska state waters, or in a Pacific Coast fishery managed by either the state or Federal Governments in waters off Washington, Oregon, or California, including but not limited to:
 - i. Any ownership, mortgage holder, or other secured interest in a vessel, first receiver, shorebased or floating stationary processor facility involved in the catching, taking, harvesting or processing of fish;
 - ii. Any business involved with selling supplies or services to any vessel, first receiver, shorebased or floating stationary processing facility; or
 - iii. Any business involved with purchasing raw or processed products from any vessel, first receiver, shorebased or floating stationary processing facilities.
 - iv. Must not solicit or accept, directly or indirectly, any gratuity, gift, favor, entertainment, loan, or anything of monetary value from any person who either conducts activities that are regulated by NMFS or has interests that may be substantially affected by the performance or nonperformance of the video reviewers official duties.
 - v. May not serve as video reviewers of any vessel owned or operated where a person was previously employed in the last two years.
 - vi. May not solicit or accept employment as a crew member or an employee of a vessel, or shoreside processor while employed by a video review provider.
 - vii. Provisions for remuneration of video review under this section do not constitute a conflict of interest.
 - j. *Catch monitor decertification*
 - i. *Catch monitor decertification review official.* The Regional Administrator (or a designee) will designate a video reviewer decertification review official(s), who will have the authority to review certifications and issue IADs of decertification.

- ii. *Causes for decertification.* The video reviewer decertification official may initiate decertification proceedings when it is alleged that any of the following acts or omissions have been committed:
 1. Failed to satisfactorily perform the specified duties and responsibilities;
 2. Failed to abide by the specified standards of conduct;
 3. Upon conviction of a crime or upon entry of a civil judgment for:
 4. Commission of fraud or other violation in connection with obtaining or attempting to obtain certification, or in performing the duties and responsibilities specified in this section;
 5. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 6. Commission of any other offense indicating a lack of integrity or honesty that seriously and directly affects the fitness of catch monitors.
- iii. *Issuance of IAD.* Upon determination that decertification is warranted, the video reviewer decertification official will issue a written IAD. The IAD will identify the specific reasons for the action taken. Decertification is effective 30 calendar days after the date on the IAD, unless there is an appeal.
- iv. *Appeals.* A certified video reviewer who receives an IAD that suspends or revokes his or her catch monitor certification may appeal the determination within 30 calendar days after the date on the IAD to the Office of Administrative Appeals pursuant to §660.19.

5. Vessel Requirements

- a. The following additional vessel requirements would be added to the regulations to support third-party video review.
- b. The vessel must obtain video review services from a certified EM video review service provider.
- c. *Recordkeeping and reporting requirements.*
 - i. *Discard logbook.* Vessels would be required to fill out a Federal EM discard logbook. MS/CV vessels would provide a copy of this logbook to the mothership observer so that the discard information can be incorporated into the mothership observer data for that haul.
 - ii. *Submission of logbooks.* Copies of the discard logbook and state logbook would be required to be submitted to PSMFC and postmarked within 24-hours of landing.
 - iii. *Submission of hard drives.* Hard drives would have to be submitted to the EM service provider using a method that requires a signature for delivery and provides a return receipt or delivery notification to the sender. Deadlines for submission would be:
 1. *Pacific whiting IFQ fishery.* Hard drives must be postmarked within 10 days of landing.
 2. *Mothership catcher vessels.* Hard drives must be postmarked within 24-hours of landing.

Comment [M7]: Logbooks could still be submitted to PSMFC for data entry and upload to VAS. This would ensure blind video review. On the other hand, logbooks have been useful for reporting equipment malfunctions, net capacity, and other information to the video reviewer. The video reviewers would still need access to some of this information (e.g., codend capacity). Whatever info the reviewers don't have access to, the burden would be on PSMFC or NMFS to compare to video data and check for compliance.