

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

Prepared by the NMFS West Coast Regional Office

NMFS is providing this report to inform the Pacific Fishery Management Council's final action on an EM program for the whiting fishery and to facilitate deeming of the draft regulations.

NMFS Recommendations Regarding the Council's Final Preferred Alternative (FPA)

In the NMFS's September 2015 report, we notified the Council of our concerns that two components of the Council's FPA may not be consistent with applicable law. We discussed the issues in detail in that report and recommended changes to the Council's FPA to make it consistent with applicable law (see Sept. 2015 agenda item H.4.a). We reiterate our concerns to the Council and urge the Council to make these changes to its FPA:

1. NMFS recommends that the Council revise its FPA to clarify that a third party would conduct video review funded by industry, and acknowledge that NMFS may need to conduct video review until such time that NMFS has put standards and infrastructure in place to support third party review.
2. NMFS recommends that the Council recommend inseason accounting for mothership catcher vessel (MS/CV) discards using logbook and EM data, in order to use the best available information. The Council's GMT, GAP, and EC supported this recommendation in September 2015.

In developing the draft regulations, NMFS also identified an additional concern regarding how whiting allowable discards are changed. The Council's FPA currently states that the list of allowable discards in the whiting fishery could be changed through a routine action. Currently, whiting vessels are required to retain all catch with the exception of some minor discards. The discards that are allowed are not sorted to species before being discarded, but rather discards are reported as total pounds of all species on the logbook (and from video review) and species composition is extrapolated from the retained catch. Allowing whiting vessels to begin discarding single species would require sorting to species so that video reviewers could check for compliance. This represents a fundamental shift in the design of the whiting EM program and, as such, was not part of the analysis for this action and would be beyond the scope of a routine action. We recommend additional deliberation and analysis of such a change through a regulatory amendment.

Draft Regulations

NMFS has prepared annotated draft regulations for the Council to review at its November meeting. The draft regulations have the organizational structure and detailed content of the regulations, but in more accessible language than regulatory legalese. We thought that this format would be more useful for the Council's and public's discussion of the draft regulations, while still clearly communicating how NMFS plans to amend the regulations. As we proposed to the Council in September, we have taken a tiered approach to the draft regulations in order to maintain the flexibility to incorporate the latest technological advancements. The first tier would

be the regulations that lay out basic performance standards for the EM systems, service providers, and vessels. The second tier would be guidance documents and vessel monitoring plans (VMPs) that are incorporated by reference into the regulations. NMFS would issue guidance documents, which would be updated on an annual or as-needed basis, describing guidelines or best practices to use in meeting the performance standards in the regulations. EM service providers would address these guidelines in their applications for provider permits, and vessels would address them in the VMPs. Since guidance documents could be updated more quickly without a rulemaking, it would allow the fishery to incorporate the latest technological advancements. Most of the regulations closely follow the terms and conditions of the whiting EM exempted fishing permit (EFP) with some new sections for a vessel application and review process and EM service provider permit process. We have also tried to incorporate lessons-learned and useful provisions from other monitoring programs around the country and the Vessel Monitoring System (VMS) program.

If the Council approves of these annotated draft regulations, NMFS would turn it into regulatory text for the proposed rule which could be deemed by Council staff before being published. The public and Council would then have an opportunity to review and comment on the draft regulations again during the proposed rule comment period.

We have highlighted some specific provisions that we think would be of particular interest to the Council and its advisory bodies, as well as some specific issues that we would appreciate Council guidance on. These items are discussed in more detail below and have also been annotated with comment bubbles in the draft regulations.

1. *Video review.* Because the Pacific States Marine Fisheries Commission (PSMFC) will be conducting the video review on behalf of NMFS, the regulations would only require that vessels procure equipment and submit data to NMFS. If the program transitions to a non-governmental third party video review in the future, additional regulations would be added to require vessels to procure video review services and to set standards for such service providers. This would be done through another proposed and final rule process with Council deeming of the regulations. At this time, we would only include a placeholder to note that third party video review has not yet been implemented.
2. *Eligibility criteria.* The Council's decision document also considered "no IFQ deficits" and "no civil or criminal penalties...exceeding a certain amount" as eligibility criteria. NMFS recommends against using these as eligibility criteria because there are existing regulations and penalties to address such violations. Allowing a vessel to be disqualified from using EM because of these criteria could be construed as additional punishment.
3. *Vessel monitoring plans.* The VMPs used in the EFP program were minimal, because most of the requirements were addressed in detail in the EFP itself. In an operational program, we envision the VMPs being much more like the first receiver catch monitoring plans. These VMPs would address a set of elements or performance standards in the regulations with more detail about the individual vessel's operations and plans for its own monitoring. For example, we have added an element for the applicant to propose how they would address common EM system malfunctions. This would encourage individuals to plan ahead for

known problems and for NMFS to consider alternate methods of addressing them. One vessel may choose to purchase and carry spare parts for the EM system. Another may prefer to absorb the risk and simply return to port if the system is not working. The VMP allows each vessel to meet the requirements based on their own individual preferences.

In addition, if NMFS and the vessel can agree on a proper response ahead of time, it may not be necessary for a vessel to call NMFS for some malfunctions. This approach will be time intensive for both the applicant and NMFS, but would provide the most flexibility to consider unique situations and proposals. We plan to provide a template for the VMP with some initial suggestions for addressing each of the requirements to help applicants get started.

4. *EM system certification.* We are proposing that the EM service provider certify the installation of each EM system and that it has been tested for known malfunction and interference issues, before an application is approved. We believe this would minimize the likelihood of a malfunction and would negate the need for a shakedown cruise. Vessels could still be encouraged to take an observer on their first few trips to mitigate their own risk. Vessels would not be allowed to fish without adequate monitoring, regardless of when the malfunction occurs.
5. *Self-enforcing agreement.* NMFS agrees that a self-enforcing agreement may be an effective tool for addressing mundane compliance issues in a timely manner, while relieving NMFS's administrative burden. However, NMFS, EDF, and The Nature Conservancy are still working out the details of a self-enforcing agreement for their EFP. At this time, we propose including a placeholder in the regulations that could be expanded through future rulemaking once the details of the agreement are worked out.
6. *Application review and renewal process.* We are thinking that the application process should have two phases, so that applicants would have some assurance that they are eligible for EM before they invest in equipment and services. NMFS would first notify the applicant that they are eligible and then would issue the final authorization once the equipment is installed and tested and the VMP is complete. We are interested in hearing whether this process and the proposed timelines in the roadmap would work for industry.

We have also proposed that all vessel operators undergo some kind of briefing or training before being approved to use EM. As we noted in our September 2015 report, many of the compliance issues in the EFP to date have resulted because a vessel owner or operator was not aware of or did not understand a particular EFP requirement. We believe a training would prevent many of these compliance issues and give everyone the best possible chance of success from the start of the program. Ideally, NMFS or PSMFC staff would meet one-on-one with the captain and crew at the vessel, similar to the site inspection for first receiver catch monitoring plans. Unfortunately, we do not have the staff to accommodate this approach at this time, so the training would more likely be a webinar or one-on-one call with NMFS and PSMFC staff.

7. *VMP changes.* The VMP is intended to be a living document that can be modified quickly in between fishing trips to clarify catch handling instructions or adjust camera views.

Currently, NMFS accepts addendums to catch monitor plans over email and could likely do the same for VMPs to allow this type of adaptive management approach.

8. *EM service provider certification process.* Many of the general requirements for EM provider certifications already exist in the permit process for observer and catch monitor providers, so NMFS could simply amend the observer and catch monitor provider process to add EM equipment service providers. We also propose adding some requirements to the application for EM service providers to allow NMFS to evaluate the equipment they propose to supply to the fishery. The EM service provider standards would also incorporate by reference the basic performance standards for the EM systems laid out in the vessel requirements section. This approach would be used in lieu of a type approval process to provide flexibility for incorporating advances in technology quickly, while ensuring NMFS maintains some oversight of over the quality of EM systems.
9. *Electronic monitoring system.* This section lays out some basic performance standards for the EM systems that would be the first tier of the tiered approach to the regulations. NMFS would issue guidance documents with guidelines or best practices to use in meeting these performance standards, which could be updated more quickly than the regulations. EM service providers and vessels would then use the guidelines in writing their applications, which NMFS would approve on an annual basis as meeting the performance standards.
10. *Declaration.* During the EFPs, whiting vessels have not been switching between observers and EM as was originally feared. Most likely vessels would not switch to an observer unless there was an EM system malfunction that could not be fixed in a timely manner. Switching may be a more likely with bottom trawl vessels, because of the difference in bycatch rates depending on where they fish. We do not think there is a need for the limit on switching at this time, but we could include a placeholder in the regulations so that NMFS and the Council can revisit this issue during the rulemaking for the other sectors.
11. *Logbooks.* NMFS will be creating a Federal discard logbook requirement for the EM program using the PSMFC EM discard logbook. If the EC's recommendation to have logbooks filled out after completion of each haul is adopted, those instructions would be incorporated in this section.

We incorporated the logbook and hard drive submission deadlines that were used in the EFPs. NMFS is seeking input from the Council and its advisory bodies on whether to keep these timelines the same or revise them.

12. *MS/CV discard accounting.* If the Council wishes to move forward with a preseason deduction of MS/CV minor operational discards, the Council needs to clarify how the set-aside would be revisited or updated – through a routine action or some other process.

Annotated Draft Regulations

1. Observer Exemption

- a. Amend §660.140(h)(1)(i) and §660.150(j)(1)(i)(B) to allow an exemption from observer requirements provided the vessel is using EM and has a valid EM authorization.

2. General

- a. NMFS may create a new section at Subpart C or D for the EM regulations for whiting and future bottom trawl and fixed gear requirements. This section could then be cross-referenced by other sections §§ 660.18, 660.140(h)(1)(i), and 660.150(j)(1)(i)(B).
- b. *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 PSMFC). 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. Although not required at this time, NMFS would note in the regulations that vessels could be required to procure video review services from a third party service provider through future rulemaking.

3. Vessel Application Process

- a. *Eligibility.* To receive and maintain eligibility for an EM authorization, the authorization holder would have to meet a series of eligibility criteria, such as:
 - i. The vessel has a valid Pacific Coast Groundfish trawl limited entry permit;
 - ii. The vessel is participating in the Pacific whiting IFQ fishery or mothership sector;
 - iii. The vessel is able to accommodate the EM system, including providing sufficient uninterrupted electrical power, suitable camera mounts, adequate lighting, and fittings for hydraulic lines to enable connection of a pressure transducer;
 - iv. The vessel owner/operator is willing and able to comply with all applicable requirements of this section and operate under an approved vessel monitoring plan.
- b. *Application process.* Vessel owner/operator would submit an application to the NMFS Permit Office that would include the following:
 - i. *Application form.* A completed application form provided by NMFS that establishes eligibility and is signed and dated by an authorized representative of the vessel.
 - ii. *Vessel monitoring plan.* The applicant would submit a proposed vessel monitoring plan (VMP) that addresses the elements listed below along with their application. This VMP would be much more detailed than the VMPs used in the EFP program, because it would now be the primary document governing the vessel's operations at sea in place of the EFP. This VMP would look more like the first receiver's catch monitoring plan.

Commented [M1]: We would include a placeholder for non-governmental third party video review. Future rulemaking would be needed to implement this requirement and create standards for a 3rd party review. Those regulations would also need to be deemed by the Council at that time.

1. General vessel information including the vessel name, hull number, gear type(s), home port, captain name, and target fishery or sector;
 2. The coordinates of the home port box, if a geo-referenced port box will be used to trigger data collection;
 3. A diagram of the vessel layout with measurements of the deck and denoting the location of any designated discard control points;
 4. The number and location of cameras and with images of corresponding views;
 5. The location of lighting, control center, GPS, sensors, monitor, and other EM equipment;
 6. Frame rates, image resolution, frequency of data logging, sensor trigger threshold values and other EM system specifications;
 7. Describe the location and procedures for any catch handling, including designated discard control points within camera view, procedures for sorting and measuring discards, the number of crew sorting catch, and what steps will be taken to ensure that all catch remains in camera view;
 8. The measurements of all bins, baskets and compartments that will be used to calculate volumetric estimates of weight;
 9. Describe what steps will be taken to minimize the potential for EM system malfunctions and the impact of malfunctions on the adequate monitoring of catch;
 10. Notes and changes made to VMP and system configuration, including date modified;
 11. The name, address, phone number, and email address of a primary point of contact for vessel operations;
 12. The name, address, and phone number of the vessel's EM service provider, and contact information for a primary point of contact at the EM service provider;
 13. The name, address, phone number, and signature of the applicant, and the date of the application; and,
 14. Any other information required by the Regional Administrator.
- iii. *EM system certification.* A certification form may be used to verify that a certified EM service provider installed and tested an EM system that meets the performance standards laid out in the regulations at paragraph 5.b.
- iv. *Self-enforcing agreement.* NMFS and EFP sponsors are still developing this concept. NMFS would include a placeholder in the regulations that could be fleshed out through future rulemaking once the details of these agreements are worked out.
- c. *Application review process.* The application review process would have two phases. First, NMFS would make an initial determination of the vessel's eligibility for EM, to provide the applicant some confidence before they invest in an EM system. The applicant could then submit a completed EM system certification form and updated VMP. Vessel operators would also be required to

Commented [M2]: This was not in the whiting EFP, but was added based on lessons-learned. There are some common malfunctions that we now know about that vessels and NMFS could be proactive at addressing in the EFP. If a proper response can be agreed upon ahead of time, it may not be necessary for a vessel to call NMFS for some malfunctions. In addition, vessels may be able to mitigate some problems by planning ahead.

Commented [M3]: NMFS is proposing to require that the EM service provider certify the EM system and that they have tested it for known malfunctions. This may negate the need for shakedown cruises, although vessels could be encouraged to take an observer on their first few trips to mitigate their own risk.

Commented [M4]: NMFS is thinking that the application process should have two phases. Applicants would need some confidence that they will receive an exemption before they invest in EM equipment and services. So NMFS would first notify the applicant that they are eligible and then would issue the final authorization once the equipment is installed and tested and the VMP is complete.

attend a NMFS-approved training to familiarize them with the program requirements. In the second phase, NMFS would approve a vessel monitoring plan and application if they meet all the required elements. If the application/monitoring plan is not approved, the vessel would be able to resubmit a revised application/monitoring plan.

Commented [M5]: We think it is essential that vessel operators undergo some kind of briefing or training before using EM. This would give everyone the best possible chance of success from the start of the program and could address many common compliance issues.

- d. *Changing a NMFS-accepted vessel monitoring plan.* An applicant would be able to make changes to an approved VMP by submitting a revised plan or plan addendum to NMFS in writing. NMFS would review and approve the change if it meets all the required elements. A vessel monitoring plan addendum must contain:
- i. The date and the name and signature of the person submitting the addendum;
 - ii. Address, telephone number, fax number and email address (if available) of the person submitting the addendum;
 - iii. A complete description of the proposed VMP change.
- e. *Initial administrative determination.* NMFS would issue an initial determination of the vessel's eligibility and then, once the application elements are met, an initial administrative determination (IAD) that either approves or disapproves the application and, if approved, includes an EM authorization. This would follow the IAD, appeals, and final decision process specified at §660.115(d)(3)(ii).
- f. *Effective dates.* The electronic monitoring authorization would be valid from the effective date until April 30.
- g. *Re-registration of electronic monitoring authorization in subsequent years.* EM authorization holders would be required to reapply annually following the application process described above and the following timeline:
- i. NMFS will mail an EM authorization application to existing authorization holders on or about January 1 each year.
 - ii. Applicants who want to have their new authorization effective for May 1 must submit their complete re-registration application to NMFS by February 15. For those authorization holders who do not submit a complete re-registration application by February 15, NMFS may not be able to issue the new authorization by May 1 of that calendar year, and will issue the new authorization as soon as practicable.
- h. *Change in ownership of a vessel.* If a vessel changed ownership, the new owner would be required to apply for a new electronic monitoring authorization.
- i. *Fees.* As with the first receiver license program, NMFS may charge a fee for administrative costs associated with processing the applications.
- j. *Appeals.* If NMFS does not accept the EM authorization application through an IAD, the applicant may appeal the IAD consistent with the general permit appeals process defined at §660.25(g), subpart C.
- k. *Termination of electronic monitoring authorization.* NMFS may terminate a vessel's EM authorization if it is determined that the holder no longer meets the eligibility criteria specified at paragraph 3.a. NMFS would first notify the holder of the deficiencies in writing. The holder would have 30-days to correct the deficiencies. If the deficiencies are not resolved, NMFS will notify the holder in writing that the EM authorization is void and that the vessel is no longer exempt

Commented [M6]: Currently NMFS accepts addendums to catch monitor plans over email and could likely do the same for VMPs to allow changes to be made quickly.

Commented [M7]: Would this timeline for renewing EM authorizations work for industry? This timeline would target completion before the start of the whiting primary season.

from observer coverage for that period. The holder may reapply for an EM authorization for the following period.

4. 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. At this time, EM service providers would only be able to apply for an equipment endorsement. If the fishery transitions video review to a non-governmental third party, NMFS would issue a rule at a later time that would amend this section to create standards and requirements for a video review provider endorsement. NMFS may add the following additional requirements for an EM equipment 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 equipment providers as described at paragraph 5.a.
 - iii. If requested, provide NMFS with two EM system units loaded with 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 EM system, including: user manuals; any necessary interfacing software, performance specifications, and technical support information.
 - v. Specify identifying characteristics of the EM system to be deployed in the fishery for which an application has been submitted, including but not limited to: manufacturer, brand name, model name, model number, software version and date, firmware version number and date, hardware version number and date, monitor/terminal number and date, pressure sensor model number and date, drum rotation sensor model number and date, and GPS model number and date.
- b. NMFS would also amend the regulations at §660.18(c)(3) pertaining to limitations on conflict of interest to make it clear that provision of electronic monitoring services, like observer and catch monitor services, does not qualify as a "direct financial interest" in fisheries.
- c. NMFS would also amend the regulations pertaining to the appeals process for observer and catch provider permits at §660.19 to incorporate EM service provider permits.

5. 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 an EM system that meets the performance standards laid out at paragraph 6b.

Commented [M8]: We incorporated these requirements from type approval regulations for VMS. Unlike VMS, however, we would approve the EM systems through the provider permitting process, rather than a type-approval process. This would provide flexibility for incorporating advances in technology quickly.

- ii. Must provide assistance to vessels, upon request, in EM system operation, the diagnosis of the cause of anomalies, and assistance in resolving any anomalies.
- iii. 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. Diagnostic and trouble-shooting support to NMFS and its designated agents and to vessels, which is available 24-hours a day, seven days per week, and year-round.
 - 2. Assistance in EM system operation, resolving technical issues, recovering corrupted or lost data, and data analyses related to the EM program or system.
- iv. Litigation support to NMFS if the EM system/data is being admitted as evidence in a court of law.
- v. Supply all software necessary for accessing, viewing, and interpreting the data/files generated by the EM system.
- vi. Make EM technicians and other staff available for debriefings with NMFS or its agent.
- vii. If requested, a copy of any contract between the service provider and entities requiring EM services.
- viii. Proof of adequate insurance.
- ix. Submit any change of management or contact information.
- x. 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.
- xi. Submit regular reports of requests for technical assistance from vessels, when the call/visit was made, what the issue was, how it was resolved.
- 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.
- 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.

6. Vessel Requirements

- a. This section would incorporate the terms and conditions of the whiting EFP into the regulations.
- b. *Electronic monitoring system.* The vessel would be required to install, operate, and maintain an EM system from a certified service provider and that meets a set of performance standards. Below are the performance standards that were used in

the EFP. NMFS may also issue guidance documents with best practices or guidelines for how to meet these requirements. NMFS would provide additional details about these guidelines, to the extent they are available, in the preamble to the proposed rule and posted to its website.

- i. Specifications (i.e., image resolution, frame rate, user interface) and configuration of the EM system and associated equipment (i.e., number and placement of cameras, lighting) must be sufficient to:
 1. Allow easy viewing, identification, and quantification, of catch items discarded at sea;
 2. Continuously record vessel location (latitude/longitude coordinates), velocity, course, and sensor data (i.e., hydraulic and winch activity);
 3. Allow the identification of the time, date, and location of a fishing or discard event;
 4. Record and store image data from the trip (i.e., data from one overall deck view camera that will begin recording upon the first spike in hydraulic or winch sensors and continue image recording until the vessel returns to port, and data from other cameras that will record the duration of gear retrieval and catch processing, as specified in the VMP);
 5. Continuously record and store raw sensor data (i.e., GPS and gear sensors) for the entire trip;
 6. To the extent possible, provide EM system with low radio frequency emissions, to avoid interference (RFI) with vessel monitoring systems (VMS) and other equipment;
 7. Allow the vessel operator to test and monitor the functionality of the EM system prior to and during the trip as specified in the VMP;
 8. Prevent tampering or, if tampering does occur, show evidence of tampering; and,
 9. Provide image and sensor data in a format that enables their integration for analysis.
- c. *Declaration.* Vessels would be required to declare to OLE if they are using EM or an observer. The declaration would remain the same until changed. NMFS would retain the authority to set a limit on the number of times a vessel can revise its EM declaration through a later rulemaking, but would not specify a limit at this time.
- d. *Observer requirements.* This section would establish a requirement for vessels to provide notice to the West Coast Groundfish Observer program before a trip, for the purposes of deploying scientific observer coverage. Whiting vessels were exempt from this requirement in the EFPs, but NMFS would include the requirement in the regulation, in the event that it becomes necessary at a future time. This section would cross-reference other observer regulations (notifications, safety requirements, etc.) that the vessel would need to comply with if selected.

Commented [M9]: In order to be able to adapt to changes in technology, we are taking a tiered approach to the regulations – the regulations include broad performance standards for the EM system and incorporate by reference guidance documents that could be updated more quickly, without a rulemaking, to incorporate the latest technologies.

Commented [MH10]: Whiting vessels have not been switching between observers and EM as was feared, so we do not think there is a need for the limit at this time. This may be a more likely occurrence for bottom trawl vessels, because of the difference in bycatch rates depending on where they fish. We could include a placeholder in the regulations so that NMFS and the Council can revisit this during rulemaking for the other sectors.

- e. *EM system maintenance and care.* As in the EFP, the vessel operator would be responsible for monitoring and maintaining the functionality of the EM system. Specific responsibilities would include:
- i. Conducting a function test prior to departing port and ensuring the system has adequate memory for the entire trip.
 - ii. Ensuring the EM system is powered continuously during the trip with either 12 VDC or 110 VAC.
 - iii. Ensuring the system is functioning for the entire trip.
 - iv. Ensuring camera views are unobstructed and imagery is clear in quality.
 - v. Ensuring EM system components are not tampered with.
- f. *System malfunctions.* As in the EFP, the vessel operator would contact NMFS for further instruction if there is a malfunction that cannot be resolved. NMFS may allow the vessel to continue its trip if the EM system is functioning properly or other circumstances warrant it, or may require a vessel to return to port if NMFS determines that the vessel cannot be adequately monitored. NMFS is thinking about working with applicants to incorporate ways to avoid and address common EM system malfunctions in VMPs, to reduce the frequency of malfunctions and minimize impacts to vessel operations.
- g. *Retention requirements.* Whiting vessels would be required to fish under maximized retention. As with the EFP, NMFS may revise the existing definition of maximized retention that is in the regulations to be clear what types of discards are allowed on EM trips.
- h. *Catch handling.* Specific catch handling procedures would be detailed in the vessel's VMP, but a general provision would be included in the regulations to make clear that catch must be handled in a manner that enables the EM system to record it and consistent with the vessel's VMP.
- i. *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 PSMFC using a method that requires a signature for deliver 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.
 - iv. *Retention of records.* All records would be required to be retained for a minimum of 3 years from the date of landing, consistent with other retention timelines for the IFQ program.

Commented [MH11]: If the EC's recommendation to have logbooks filled out after completion of each haul is adopted, it would be incorporated here.

Commented [M12]: The timelines for submission of logbooks and hard drives are the same as those used in the EFP. Would the Council or others recommend alternate timelines?

7. Prohibitions

- a. NMFS would amend §§660.12 and 660.112 to add corresponding prohibitions for the new EM requirements.

8. MS/CV Discard Accounting

- a. If the Council preferred to deduct MS/CV minor operational discards from the mothership allocation preseason, NMFS would add this provision to the MS cooperative allocation method at §660.150(c). The Council would need to specify how and when this set-aside would be updated – through a routine action or the specifications process?
- b. If the Council adopts NMFS’s recommendation to use inseason accounting of MS/CV discards, this section would be unchanged. The logbook and EM data would be incorporated into the MS observer data consistent with internal PSMFC and WCGOP procedures for CV observer data.

Commented [MH13]: If discards are deducted preseason, how would the Council like to update the preseason estimates?