

FACT SHEET
WET DECK LOG SPRAY WITH RE-CIRCULATION GENERAL PERMIT
NPDES PERMIT MSG17
October 27, 2021

INTRODUCTION

The Mississippi Department of Environmental Quality (MDEQ) proposes to re-issue a multi-activity NPDES General Permit for eligible Wet Deck Log Spray Systems using re-circulation. The proposed permit is intended to cover eligible new and existing facilities in all areas of the State of Mississippi. The permit's intent is to cover wet decking with re-circulation operations, which involve the storage of harvested logs and spraying of these decks of timber with water to keep the timber wet in order to prevent deterioration until such time as the timber can be further processed. The spray or sprinkling water is initially clean water taken from surface water or ground water withdrawal. These operations function such that any excess spray water and any storm water falling on the wet deck storage area will be routed back to a recirculation pond for reuse in the spray system. Surface water or ground water is used as makeup for the recirculation pond during dry weather conditions. Intermittent discharges occur from the re-circulation pond as a result of high intensive or extended duration rainfall events.

COVERAGE ELGIBILITY

Facilities which meet the requirements of the following items are eligible to obtain coverage under the general permit:

- (1) Discharges from Wet Deck Log Spray (WDLS) Recirculation pond, including water which is sprayed onto the timber, storm water run-off from the timber wet deck storage area, boiler blow down**, and exterior equipment** and exterior vehicle washing** washwater where no internal washing or engine washing is occurring and where no detergents or chemicals are being used.

**The WDLS re-circulation system coverage is only for systems that are operated in a no discharge manner and only discharge intermittently as a direct result of rainfall. As a result, facilities which discharge or will discharge blow down or washwater into the WDLS system are only eligible for coverage if these discharges will be small in volume, and will not interfere with the no discharge operation of the system. For facilities with these operations, coverage will be granted on a case by case basis after MDEQ staff technical review.

- (2) Discharges composed entirely of storm water and allowable non-storm water discharges identified in the permit.
- (3) A facility is eligible for coverage under this general permit for discharges of pollutants of concern to water bodies for which there is a total maximum daily load (TMDL) established or approved by EPA if measures and controls are incorporated that are consistent with the assumptions and requirements of such TMDL. To be eligible for coverage under this general permit, the facility must incorporate any conditions applicable to any discharge(s) necessary for consistency with the assumptions and requirements of such TMDL. If, after coverage issuance, a specific wasteload allocation is established that would apply to the facility's discharge, the facility must implement steps necessary to meet that allocation.

- (4) The discharges must not cause nor contribute to violations of State Water Quality Standards.
- (5) Coverage under this permit is available only if the regulated entity's discharges are not likely to jeopardize the continued existence of any species that is listed as endangered or threatened ("listed") under the Environmental Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA ("critical habitat")

GENERAL DESCRIPTION OF WASTEWATER

Wastewater discharges allowed under this Wet Deck Log Spray with Re-circulation General Permit include the following:

- (1) Discharges from Wet Deck Log Spray (WDLS) Recirculation pond, including water which is sprayed onto the timber, storm water run-off from the timber wet deck storage area, boiler blow down, and exterior vehicle and/or equipment washdown provided the above limitations are met.
- (2) Discharges composed entirely of storm water and allowable non-storm water discharges identified in the proposed General Permit.

WASTEWATER DISCHARGE CHARACTERISTICS

<u>Pollutant</u>	<u>Concentration</u>
BOD ₅	< 45 mg/l
TSS	< 45 mg/l
COD	Varies
pH	6.0 minimum SU to 9.0 maximum SU
Ammonia (as N)	< 2 mg/l
Oil and Grease	Non-detect

These characteristics are based on historical sampling conducted by various wet decking with re-circulation facilities in Mississippi as part of past individual permit applications.

DESCRIPTION OF WASTEWATER TREATMENT

Facility's eligible for coverage under this general permit will use log spray re-circulation pond(s) where water that is sprayed on the logs is recaptured and reused. Sedimentation and settling occur in the log spray recirculation pond. These facilities are subject to categorical regulations found in 40 CFR, Part 429, Subpart I, which prevents the discharge of debris from the recirculation ponds. As a result, many facilities have screens or other mechanisms such as turn down drains to further prevent the discharge of settleable and non-settleable material. These facilities normally operate in a no-discharge manner. Intermittent discharges from the re-circulation pond(s) are expected to occur only as a direct result of rainfall onto the wet deck timber storage area.

WATER QUALITY ISSUES ASSOCIATED WITH OPERATION

Wet deck log spray ponds using re-circulation in the State of Mississippi are operated in a manner to minimize discharge to state waters. It is expected that the pond's freeboard will be managed such that smaller volumes of storm water runoff due to smaller rainfall events may be captured and used as make up water for the recirculation pond. Intermittent discharges are expected to occur only as a direct result of high intensity or extended duration rainfall events. Due to the dilution of the wastewater as a result of storm water run-off from the wet deck timber storage area, low concentrations of pollutants are typically found in the discharge from log spray re-circulation ponds. Also, these discharges normally occur during wet weather months when the receiving streams have increased base flow. Due to the intermittent nature of the discharge, the existence of increased base flow in the receiving stream and the relatively low strength wastewater, it is believed that the discharge will only have a de minimis effect on the quality of the receiving stream(s). Facilities which have the potential to cause or contribute to violations of State Water Quality Standards will not be eligible for coverage under this general permit and must apply for an individual NPDES permit.

ANTIDegradation ISSUES

The Department does not believe a technologically and economically feasible alternative exists and believes the re-circulation technology with intermittent discharges to be the preferred and practical solution. Intermittent discharges from log spray ponds occur as a direct result of rainfall. Due to the volume of relatively clean wastewater which is discharged from these systems, discharge to a sanitary sewer system is discouraged. It is our position that unnecessary costs would be incurred due to collecting, routing/transporting, and treating these discharges, when the degree of treatment provided by a typical sanitary sewer system, is unwarranted. The sanitary sewer treatment plant may also encounter operational problems due the slug of relatively clean water. Weather conditions in Mississippi suggest land application of the wastewater is impractical since application fields will likely be saturated during those times a discharge is most likely to occur. Large storage requirements associated with a suitable land application system would also likely be economically infeasible. Finally, log storage yards help provide for job creation for the local economy, as well as help to utilize one of Mississippi's greatest natural resources (timber) to its fullest potential.

A full anti-degradation review will not be required for each coverage. However, as part of the MDEQ permitting process for individual permits and coverage under general permits, a project awareness checklist (PAC) is completed that addresses many of the components contained in an anti-degradation review. Permitting staff consider questions, including but not limited to the following list, prior to making a recommendation for decision on the issuance or coverage:

- Will the project have a significant economic impact on the area?
- Will this project have the potential to impact threatened or endangered species?
- Is there a POTW capable of receiving the discharge?
- Has the receiving stream been proposed for inclusion in the State's Scenic Streams Stewardship Program?
- Is the receiving stream actually used for recreational activity even though it's classified as fish and wildlife?
- Is the receiving stream classified for shell fish harvesting, drinking water supply, or recreation?
- Will the project impact wetlands, or other waters of the state?
- Has a TMDL been developed?

- Is the receiving stream on the 303d list?
- Is the discharge being made into a suitable point of discharge?

Based upon completion of this PAC review, and in accordance with our Anti-degradation Implementation Policy, it may be decided for a particular project, that coverage under this proposed general permit is not recommended. It may be recommended that the facility apply for an individual NPDES permit. If this is the case, a full anti-degradation review would be required.

In summary, MDEQ believes that coverage under the proposed WDLS system with re-circulation general permit will only be issued to facilities that have small or de minimis impacts on water quality. Upon review of a WDLS Notice of Intent, coupled with the PAC review results, MDEQ staff may recommend that coverage not be granted and/or that an alternate permit, such as an individual NPDES permit, is more appropriate.

APPLICABLE GUIDELINES

"State of Mississippi Wastewater Regulations (11 Miss. Admin. Code Pt. 2, Ch. 1)", "State of Mississippi Water Quality Criteria (11 Miss. Admin. Code Pt. 2, Ch. 2)" and 40 CFR Part 429 - Timber Products Processing Point Source Category; Subpart I - Wet Storage Subcategory (BAT, BCT, BPT, NPS)."

PROPOSED EFFLUENT PERMIT LIMITATIONS

WDLS System w/re-circulation pond Outfall

Average Limitations

Parameter	Water Quality Limitations	Categorical Limitations	Proposed Permit Limitations	Basis
pH	6.0 min SU	6.0 min SU	6.0 min SU	11 Miss. Admin. Code Pt. 2, Ch. 2 & Categorical
Flow	-----	-----	Report (MGD)	11 Miss. Admin. Code Pt. 2, Ch. 1

Maximum Limitations

Parameter	Water Quality Limitations	Categorical Limitations	Proposed Permit Limitations	Basis
pH	9.0 SU	9.0 SU	9.0 SU	11 Miss. Admin. Code Pt. 2, Ch. 2 & Categorical
Flow	-----	-----	Report (MGD)	11 Miss. Admin. Code Pt. 2, Ch. 1

There shall be no discharge of debris from the wet decking recirculation pond. [40 CFR, Part 429, Subpart I]

Outfall Limitations Discussion

pH

As discussed above and is found in the Technical Guidance document for the development of the categorical standards for wet decking operations, due to storm water dilution, there is believed to be little impact on the receiving stream as a result of these discharges. As a result, only pH monitoring is being proposed in the general permit. pH limitations are based on the “State of Mississippi Water Quality Criteria (11 Miss. Admin. Code Pt. 2, Ch. 2)” and the categorical regulations for wet decking facilities found in, 40 CFR, Part 429, Subpart I. pH shall be monitored twice per year with a grab sample of the effluent. Twice per year monitoring is being proposed due to the consistent characteristics of the wastewater and the infrequent discharge.

Flow

Flow shall be measured twice per year instantaneously.

Other Limitations and Notes

A special condition of the permit shall be, as per the categorical standards, that there shall be no discharge of debris from the wet decking log spray recirculation system. Another special condition is that there shall be no discharge of process wastewater or any other unpermitted wastewater as the intent of the general permit is to only cover facilities which discharge relatively clean water, intermittently, and only as a direct result of rainfall from the system. In addition, some subcategories in 40 CFR Part 429-Timber Products Processing Category prohibit the discharge of process wastewater. Boiler blow down and exterior vehicle and equipment washwater is allowed to be routed to the system because in most cases the wastewater is small in volume and/or is intermittent in nature and is relatively pollutant-free provided the above eligibility restrictions are met. Language regarding the maximization of freeboard and the maintaining at a minimum of two feet of freeboard in the re-circulation pond is proposed in order to ensure that the facility safely and efficiently operates the system.

Summary of Proposed Significant Changes from the 2016 WDLS GP

- Removed requirement to obtain a separate industrial stormwater coverage. (Previously ACT 3, T-4(6))
- Removed contiguous landowner notification condition. (Previously ACT 4, S-2)
- Removed additional public notice requirement condition. (Previously ACT 4, S-3)
- Addition of 303(d) language. (ACT 1, T-2(5))
- Addition of National Historic Preservation Act language. (ACT 1, T-3(3))
- Addition of requirement for a detailed site map. (ACT 2, T2-(6))
- Addition of SWPPP requirements for discharges of storm water exposed to industrial activities or materials or discharges of allowable non-storm water that do not drain to the WDLS recirculation pond. (ACT 2, S-1(4))
- Addition of NPDES e-reporting rule language. (ACT 2, T-1; ACT 4, S-3; ACT 4, S-5; ACT 4, S-7)
- Addition of condition for maintaining electronic documents. (ACT 4, R-4)
- Addition of continuation of expired general permit language. (ACT 4, T-29)
- Addition of industrial stormwater requirements. (ACT 5)