

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

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MEMORANDUM

DATE: APR 17 2008

TO: Regional Office Directors
Water Pollution Control Branch

THROUGH: Edward Galbraith, Director
Water Protection Program

FROM: Robert K. Morrison, P.E., Chief
Water Pollution Control Branch

SUBJECT: Low Flow Surveys and Lagoon Operating Permit Renewal Guidance

This memo is to summarize the Water Protection Program's Water Pollution Control Branch guidance regarding lagoon-permitting procedures. 10 CSR 20-7.015(8)(B) "Effluent Regulation" requires discharge from domestic wastewater treatment facilities to meet standard secondary treatment technology effluent limitations for Biochemical Oxygen Demand and Total Suspended Solids. If a facility proposes to use a lagoon or other "equivalent to secondary" treatment technology, state rule requires a water quality impact study to demonstrate that equivalent to secondary treatment will be protective of in-stream water quality.

Many lagoons have not had a water quality impact study conducted as required under state rule. In order to proceed with permit renewal, the department must have assurance that the effluent limitations found in the operating permit are protective of water quality. The program continues to conduct low flow surveys of receiving streams of lagoon facilities using program staff and consultants. These low flow surveys will be considered equivalent to Water Quality Impact Studies by the Program.

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The results of the low flow surveys can be found on the shared T:Drive under the title of "Lagoon Survey Data". At the end of the survey season, the Central Office will notify the Regional Offices which lagoons Water Quality Monitoring and Assessment has identified for follow-up to bring into compliance with water quality standards. The Regional Offices will notify Alan Moreau when a facility's permit has been modified. Permit modifications shall be done in accordance with the Lagoon Operating Permit Renewal Guidance issued April 28, 2006. The modified permit shall include a Schedule of Compliance (SOC) and will have to be placed on public notice. The SOC may require a more detailed evaluation of the stream, corrective action or an upgrade in treatment that will eliminate the observed impact on the stream. Under some circumstances, at the Regional Office Director's discretion, permits that expire in twelve months or less do not need to be immediately reopened and modified. These permits may be modified during their normal renewal cycle. Please see the attached example SOC language that may be used in modifying permits.

If you have any questions regarding this procedure, please contact Alan Moreau of my staff at (573) 522-2553.

EG:ams

- c: Jim Macy, Field Services Division
- Earl Pabst, Division of Environmental Quality
- Daniel R. Schuette, Division of Environmental Quality

Example Lagoon Schedule of Compliance Language

SCHEDULE OF COMPLIANCE

1. By (6 months from the modification date) submit an engineering evaluation and plan for upgrading the facility.
2. By (12 months from the modification date) submit a Waste Load Allocation Study along with a Water Quality Review Sheet (WQRS) request.
3. By (15 months from the modification date) submit an application for a Construction Permit.
4. By (39 months from the modification date) complete construction and send a certificate of work completed. Submit an application to modify the permit.

Note to permit writers:

1. This schedule of compliance is applicable only if the facility is meeting limits but negatively impacting its receiving stream. You may adjust the timeframes from the modification date on a case by case basis.
2. Facilities in significant non-compliance (as defined by the Inspection and Enforcement Manual) must be handled as a compliance/enforcement issue. Once the facility is meeting lagoon limits the central office will need follow-up surveys to determine if equivalent to secondary limits are protective of the receiving stream. The permit writer shall schedule follow-up surveys by contacting the Water Quality Monitoring and Assessment (WQMA) unit. The WQMA unit recommends at a minimum that three surveys over a period of two years will be necessary to determine if the lagoon limits are truly protective of the receiving stream.
3. The engineering evaluation and plan may only require some maintenance work (for example a sludge cleanout of the lagoon). If that is the case then the permittee may not be bound to comply with items 2-4 of the Schedule of Compliance. In this instance the permit must be modified to remove the unneeded items in the SOC.

SCHEDULE OF COMPLIANCE

1. By 6 months from the modification date submit an engineering evaluation and plan for upgrading the facility.
2. By 12 months from the modification date submit a Waste Load Allocation Study along with a Water Quality Review Sheet (WQRS) report.
3. By 15 months from the modification date submit an application for a Construction Permit.
4. By 30 months from the modification date complete construction and rent a certificate of work completed. Submit an application to modify the permit.

Note to permit writer:

1. This schedule of compliance is applicable only if the facility is meeting limits but negatively impacting its receiving stream. You may adjust the timelines from the modification date on a case by case basis.
2. Facilities in significant non-compliance (as defined by the Inspection and Enforcement Manual) must be handled as a compliance enforcement issue. Once the facility is meeting lagoon limits the central office will need follow-up surveys to determine if equivalent to secondary limits are protective of the receiving stream. The permit writer shall schedule follow-up surveys by contacting the Water Quality Monitoring and Assessment (WQMA) unit. The WQMA will recommend at a minimum that three surveys over a period of two years will be necessary to determine if the lagoon limits are fully protective of the receiving stream.
3. The engineering evaluation and plan may only require some maintenance work (for example a sludge cleanout of the lagoon). If that is the case then the permit may not be bound to comply with items 2-4 of the Schedule of Compliance. In this instance the permit must be modified to remove the unneeded items in the SOC.