§ 430.03 Best management practices (BMPs) for spent pulping liquor, soap, and turpentine management, spill prevention, and control.

(a) Applicability. This section applies to direct and indirect discharging pulp, paper, and paperboard mills with pulp production in subparts B (Bleached Papergrade Kraft and Soda) and E (Papergrade Sulfite).

(b) Specialized definitions—(1) Action Level: A daily pollutant loading that when exceeded triggers investigative or corrective action. Mills determine action levels by a statistical analysis of six months of daily measurements collected at the mill. For example, the lower action level may be the 75th percentile of the running seven-day averages (that value exceeded by 25 percent of the running seven-day averages) and the upper action level may be the 90th percentile of the running seven-day averages (that value exceeded by 10 percent of the running seven-day averages).

(2) Equipment Items in Spent Pulping Liquor, Soap, and Turpentine Service: Any process vessel, storage tank, pumping system, evaporator, heat exchanger, recovery furnace or boiler, pipeline, valve, fitting, or other device that contains, processes, transports, or comes into contact with spent pulping liquor, soap, or turpentine. Sometimes referred to as "equipment items."

(3) Immediate Process Area: The location at the mill where pulping, screening, knotting, pulp washing, pulping liquor concentration, pulping liquor processing, and chemical recovery facilities are located, generally the battery limits of the aforementioned processes. "Immediate process area" includes spent pulping liquor storage and spill control tanks located at the mill, whether or not they are located in the immediate process area.

(4) Intentional Diversion: The planned removal of spent pulping liquor, soap, or turpentine from equipment items in spent pulping liquor, soap, or turpentine service by the mill for any purpose including, but not limited to, maintenance, grade changes, or process shutdowns.

(5) Mill: The owner or operator of a direct or indirect discharging pulp, paper, or paperboard manufacturing facility subject to this section.

(6) Senior Technical Manager: The person designated by the mill manager to review the BMP Plan. The senior technical manager shall be the chief engineer at the mill, the manager of pulping and chemical recovery operations, or other such responsible person designated by the mill manager who has knowledge of and responsibility for pulping and chemical recovery operations.

(c) Requirement to implement Best Management Practices. Each mill subject to this section must implement the Best Management Practices (BMPs) specified in paragraphs (c)(1) through (10) of this section. The primary objective of the BMPs is to prevent leaks and spills of spent pulping liquors, soap, and turpentine. The secondary objective is to contain, collect, and recover at the immediate process area, or otherwise control, those leaks, spills, and intentional diversions of spent pulping liquor,
BMPs must be developed according to best engineering practices and must be implemented in a manner that takes into account the specific circumstances at each mill. The BMPs are as follows:

1. The mill must return spilled or diverted spent pulping liquors, soap, and turpentine to the process to the maximum extent practicable as determined by the mill, recover such materials outside the process, or discharge spilled or diverted material at a rate that does not disrupt the receiving wastewater treatment system.

2. The mill must establish a program to identify and repair leaking equipment items. This program must include:
   (i) Regular visual inspections (e.g., once per day) of process areas with equipment items in spent pulping liquor, soap, and turpentine service;
   (ii) Immediate repairs of leaking equipment items, when possible. Leaking equipment items that cannot be repaired during normal operations must be identified, temporary means for mitigating the leaks must be provided, and the leaking equipment items repaired during the next maintenance outage;
   (iii) Identification of conditions under which production will be curtailed or halted to repair leaking equipment items or to prevent pulping liquor, soap, and turpentine leaks and spills; and
   (iv) A means for tracking repairs over time to identify those equipment items where upgrade or replacement may be warranted based on frequency and severity of leaks, spills, or failures.

3. The mill must operate continuous, automatic monitoring systems that the mill determines are necessary to detect and control leaks, spills, and intentional diversions of spent pulping liquor, soap, and turpentine. These monitoring systems should be integrated with the mill process control system and may include, e.g., high level monitors and alarms on storage tanks; process area conductivity (or pH) monitors and alarms; and process area sewer, process wastewater, and wastewater treatment plant conductivity (or pH) monitors and alarms.

4. The mill must establish a program of initial and refresher training of operators, maintenance personnel, and other technical and supervisory personnel who have responsibility for operating, maintaining, or supervising the operation and maintenance of equipment items in spent pulping liquor, soap, and turpentine service. The refresher training must be conducted at least annually and the training program must be documented.

5. The mill must prepare a brief report that evaluates each spill of spent pulping liquor, soap, or turpentine that is not contained at the immediate process area and any intentional diversion of spent pulping liquor, soap, or turpentine that is not contained at the immediate process area. The report must describe the equipment items involved, the circumstances leading to the incident, the effectiveness of the corrective actions taken to contain and recover the spill or intentional diversion, and plans to develop changes to equipment and operating and maintenance practices as necessary to prevent recurrence. Discussion of the reports must be included as part of the annual refresher training.

6. The mill must establish a program to review any planned modifications to the pulping and chemical recovery facilities and any construction activities in the pulping and chemical recovery areas before these activities commence. The purpose of such review is to prevent leaks and spills of spent pulping liquor, soap, and turpentine during the planned modifications, and to ensure that construction and supervisory personnel are aware of possible liquor diversions and of the requirement to prevent leaks and spills of spent pulping liquors, soap, and turpentine during construction.

7. The mill must install and maintain secondary containment (i.e., containment constructed of materials impervious to pulping liquors) for spent pulping liquor bulk storage tanks equivalent to the volume of the largest tank plus sufficient freeboard for precipitation. An annual tank integrity testing program, if coupled with other containment or diversion structures,
may be substituted for secondary contain- 
tainment for spent pulping liquor bulk storage tanks.

(8) The mill must install and main-
tain secondary containment for turpen-
tine bulk storage tanks.

(9) The mill must install and main-
tain curbing, diking or other means of 
isolating soap and turpentine process-
ing and loading areas from the 
wastewater treatment facilities.

(10) The mill must conduct waste-
water monitoring to detect leaks and 
spills, to track the effectiveness of the 
BMPs, and to detect trends in spent 
pulping liquor losses. Such monitoring 
must be performed in accordance with 
paragraph (i) of this section.

(d) Requirement to develop a BMP Plan. (1) Each mill subject to this sec-
tion must prepare and implement a 
BMP Plan. The BMP Plan must be 
based on a detailed engineering review 
as described in paragraphs (d)(2) and (3) 
of this section. The BMP Plan must 
specify the procedures and the prac-
tices required for each mill to meet the 
requirements of paragraph (c) of this 
section, the construction the mill de-
d termines is necessary to meet those re-
quirements including a schedule for 
such construction, and the monitoring 
program (including the statistically 
derived action levels) that will be used 
to meet the requirements of paragraph 
(i) of this section. The BMP Plan also 
must specify the period of time that 
the mill determines the action levels 
established under paragraph (h) of this 
section may be exceeded without trig-
gering the responses specified in para-
graph (i) of this section.

(2) Each mill subject to this section 
must conduct a detailed engineering 
review of the pulping and chemical re-
covery operations—including but not 
limited to process equipment, storage 
tanks, pipelines and pumping systems, 
loading and unloading facilities, and 
other appurtenant pulping and chem-
ical recovery equipment items in spent 
pulping liquor, soap, and turpentine 
service—for the purpose of determining 
the magnitude and routing of potential 
leaks, spills, and intentional diversions 
of spent pulping liquors, soap, and tur-
pentine during the following periods of 
operation:

(i) Process start-ups and shut downs;

(ii) Maintenance;

(iii) Production grade changes;

(iv) Storm or other weather events;

(v) Power failures; and

(vi) Normal operations.

(3) As part of the engineering review, 
the mill must determine whether exist-
ing spent pulping liquor containment 
facilities are of adequate capacity for 
collection and storage of anticipated 
intentional liquor diversions with suffi-
cient contingency for collection and 
containment of spills. The engineering 
review must also consider:

(i) The need for continuous, auto-
matic monitoring systems to detect 
and control leaks and spills of spent 
pulping liquor, soap, and turpentine;

(ii) The need for process wastewater 
diversion facilities to protect end-of-
pipe wastewater treatment facilities 
from adverse effects of spills and diver-
sions of spent pulping liquors, soap, 
and turpentine;

(iii) The potential for contamination 
of storm water from the immediate 
process areas; and

(iv) The extent to which segregation 
and/or collection and treatment of con-
taminated storm water from the imme-
 diate process areas is appropriate.

(e) Amendment of BMP Plan. (1) Each 
mill subject to this section must 
amend its BMP Plan whenever there is 
a change in mill design, construction, 
operation, or maintenance that materi-
ally affects the potential for leaks or 
spills of spent pulping liquor, turpen-
tine, or soap from the immediate pro-
cess areas.

(2) Each mill subject to this section 
must complete a review and evaluation 
of the BMP Plan five years after the 
first BMP Plan is prepared and, except 
as provided in paragraph (e)(1) of this 
section, once every five years there-
after. As a result of this review and 
evaluation, the mill must amend the 
BMP Plan within three months of the 
review if the mill determines that any 
new or modified management practices 
and engineered controls are necessary 
to reduce significantly the likelihood 
of spent pulping liquor, soap, and tur-
pentine leaks, spills, or intentional di-
versions from the immediate process 
areas, including a schedule for imple-
mentation of such practices and con-
trols.
(f) Review and certification of BMP Plan. The BMP Plan, and any amendments thereto, must be reviewed by the senior technical manager at the mill and approved and signed by the mill manager. Any person signing the BMP Plan or its amendments must certify to the permitting or pretreatment control authority under penalty of law that the BMP Plan (or its amendments) has been prepared in accordance with good engineering practices and in accordance with this regulation. The mill is not required to obtain approval from the permitting or pretreatment control authority of the BMP Plan or any amendments thereto.

(g) Record keeping requirements. (1) Each mill subject to this section must maintain on its premises a complete copy of the current BMP Plan and the records specified in paragraph (g)(2) of this section and must make such BMP Plan and records available to the permitting or pretreatment control authority and the Regional Administrator or his or her designee for review upon request.

(2) The mill must maintain the following records for 3 years from the date they are created:

(i) Records tracking the repairs performed in accordance with the repair program described in paragraph (c)(2) of this section;

(ii) Records of initial and refresher training conducted in accordance with paragraph (c)(4) of this section;

(iii) Reports prepared in accordance with paragraph (c)(5) of this section; and

(iv) Records of monitoring required by paragraphs (c)(10) and (i) of this section.

(h) Establishment of wastewater treatment system influent action levels. (1) Each mill subject to this section must conduct a monitoring program, described in paragraph (h)(2) of this section, for the purpose of defining wastewater treatment system influent characteristics (or action levels), described in paragraph (h)(3) of this section, that will trigger requirements to initiate investigations on BMP effectiveness and to take corrective action.

(2) Each mill subject to this section must employ the following procedures in order to develop the action levels required by paragraph (h) of this section:

(i) Monitoring parameters. The mill must collect 24-hour composite samples and analyze the samples for a measure of organic content (e.g., Chemical Oxygen Demand (COD) or Total Organic Carbon (TOC)). Alternatively, the mill may use a measure related to spent pulping liquor losses measured continuously and averaged over 24 hours (e.g., specific conductivity or color).

(ii) Monitoring locations. For direct dischargers, monitoring must be conducted at the point influent enters the wastewater treatment system. For indirect dischargers monitoring must be conducted at the point of discharge to the POTW. For the purposes of this requirement, the mill may select alternate monitoring point(s) in order to isolate possible sources of spent pulping liquor, soap, or turpentine from other possible sources of organic wastewaters that are tributary to the wastewater treatment facilities (e.g., bleach plants, paper machines and secondary fiber operations).

(3) By the date prescribed in paragraph (j)(1)(iii) of this section, each existing discharger subject to this section must complete an initial six-month monitoring program using the procedures specified in paragraph (h)(2) of this section and must establish initial action levels based on the results of that program. A wastewater treatment influent action level is a statistically determined pollutant loading determined by a statistical analysis of six months of daily measurements. The action levels must consist of a lower action level, which if exceeded will trigger the investigation requirements described in paragraph (i) of this section, and an upper action level, which if exceeded will trigger the corrective action requirements described in paragraph (i) of this section.

(4) By the date prescribed in paragraph (j)(1)(vi) of this section, each existing discharger must complete a second six-month monitoring program using the procedures specified in paragraph (h)(2) of this section and must establish revised action levels based on the results of that program. The initial
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(5) By the date prescribed in paragraph (j)(2) of this section, each new source subject to this section must complete a six-month monitoring program using the procedures specified in paragraph (h)(2) of this section and must develop a lower action level and an upper action level based on the results of that program.

(6) Action levels developed under this paragraph must be revised using six months of monitoring data after any change in mill design, construction, operation, or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, soap, or turpentine from the immediate process areas.

(i) Monitoring, corrective action, and reporting requirements. (1) Each mill subject to this section must conduct daily monitoring of the influent to the wastewater treatment system in accordance with the procedures described in paragraph (h)(2) of this section for the purpose of detecting leaks and spills, tracking the effectiveness of the BMPs, and detecting trends in spent pulping liquor losses.

(2) Whenever monitoring results exceed the lower action level for the period of time specified in the BMP Plan, the mill must conduct an investigation to determine the cause of such exceedance. Whenever monitoring results exceed the upper action level for the period of time specified in the BMP Plan, the mill must complete corrective action to bring the wastewater treatment system influent mass loading below the lower action level as soon as practicable.

(3) Although exceedances of the action levels will not constitute violations of an NPDES permit or pretreatment standard, failure to take the actions required by paragraph (i)(2) of this section as soon as practicable will be a permit or pretreatment standard violation.

(4) Each mill subject to this section must report to the NPDES permitting or pretreatment control authority the results of the daily monitoring conducted pursuant to paragraph (i)(1) of this section. Such reports must include a summary of the monitoring results, the number and dates of exceedances of the applicable action levels, and brief descriptions of any corrective actions taken to respond to such exceedances. Submission of such reports shall be at the frequency established by the NPDES permitting or pretreatment control authority, but in no case less than once per year.

(j) Compliance deadlines—(1) Existing direct and indirect dischargers. Except as provided in paragraph (j)(2) of this section for new sources, indirect discharging mills subject to this section must meet the deadlines set forth below. Except as provided in paragraph (j)(2) of this section for new sources, NPDES permits must require direct discharging mills subject to this section to meet the deadlines set forth below. If a deadline set forth below has passed at the time the NPDES permit containing the BMP requirement is issued, the NPDES permit must require immediate compliance with such BMP requirement(s).

(i) Prepare BMP Plans and certify to the permitting or pretreatment authority that the BMP Plan has been prepared in accordance with this regulation not later than April 15, 1999;

(ii) Implement all BMPs specified in paragraph (c) of this section that do not require the construction of containment or diversion structures or the installation of monitoring and alarm systems not later than April 15, 1999.

(iii) Establish initial action levels required by paragraph (h)(3) of this section not later than April 15, 1999.

(iv) Commence operation of any new or upgraded continuous, automatic monitoring systems that the mill determines to be necessary under paragraph (c)(3) of this section (other than those associated with construction of containment or diversion structures) not later than April 17, 2000.

(v) Complete construction and commence operation of any spent pulping liquor, collection, containment, diversion, or other facilities, including any associated continuous monitoring systems, necessary to fully implement BMPs specified in paragraph (c) of this section not later than April 16, 2001.
(vi) Establish revised action levels required by paragraph (h)(4) of this section as soon as possible after fully implementing the BMPs specified in paragraph (c) of this section, but not later than January 15, 2002.

(2) New sources. Upon commencing discharge, new sources subject to this section must implement all of the BMPs specified in paragraph (c) of this section, prepare the BMP Plan required by paragraph (d) of this section, and certify to the permitting or pretreatment authority that the BMP Plan has been prepared in accordance with this regulation as required by paragraph (f) of this section, except that the action levels required by paragraph (h)(5) of this section must be established not later than 12 months after commencement of discharge, based on six months of monitoring data obtained prior to that date in accordance with the procedures specified in paragraph (h)(2) of this section.

(k) The provisions of paragraphs (c) through (j) of this section do not apply to the bleached papergrade kraft mill, commonly known as the Androscoggin Mill, that is owned by International Paper and located in Jay, Maine. In lieu of imposing the requirements specified in those paragraphs, the permitting authority shall establish conditions for the discharge of COD and color for this mill on the basis of best professional judgment.


<table>
<thead>
<tr>
<th>Pollutant or pollutant property</th>
<th>Maximum for any 1 day</th>
<th>Average of daily values for 30 consecutive days</th>
<th>Non-continuous dischargers</th>
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<tr>
<td>BOD5</td>
<td>23.6</td>
<td>12.25</td>
<td>6.88</td>
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<tr>
<td>TSS</td>
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<td>pH</td>
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* Within the range of 5.0 to 9.0 at all times.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, resulting from the use of wet barking operations, which may be discharged by a point source subject...