

*Revised Draft*

# **WORK PLAN**

## **ENGINEERING EVALUATION/COST ANALYSIS ARKEMA REMOVAL ACTION**

**PORTLAND, OREGON**

### **APPENDIX G NPDES PERMIT #100752**

*Prepared for*

## **Legacy Site Services, LLC**

468 Thomas Jones Way  
Exton, PA 19341

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

*Prepared by*



319 SW Washington Street, Suite 1150  
Portland, OR 97204

July 14, 2006

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT**

Oregon Department of Environmental Quality  
Northwest Region Office  
2020 SW 4<sup>th</sup> Avenue, Suite 400, Portland, OR 97201  
Telephone: (503) 229-5263

Issued pursuant to ORS 468B.050 and the Federal Clean Water Act

**ISSUED TO:**

Permittee:  
Arkema, Inc.  
6400 NW Front Avenue  
Portland, OR 97210

**SOURCES COVERED BY THIS PERMIT:**

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Storm Water	001	R.M. 7.4
Storm Water	002	R.M. 7.4
Storm Water	003	R.M. 7.3
Storm Water	004	R.M. 7.3

**PLANT TYPE AND LOCATION:**

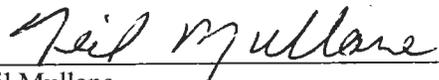
Former Chemical Manufacturing  
Facility  
6400 NW Front Avenue  
Portland, Oregon

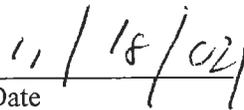
**RECEIVING STREAM INFORMATION:**

Basin: Willamette  
Sub-Basin: Lower Willamette  
Receiving Stream: Willamette River  
Hydro Code: 22=-WILL 7.4D  
LLID: 1227618456580/7.4  
County: Multnomah

EPA REFERENCE NO : OR 000159-7

This permit is issued in response to Renewal Application No. 992858 received November 29, 1995.  
Updated information submitted on August 21, 2003.

  
\_\_\_\_\_  
Neil Mullane  
Manager, Water Quality Source Control  
Northwest Region

  
\_\_\_\_\_  
Date



**Permitted Activities**

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewaters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

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Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharge to an underground injection control system.

## Schedule A Waste Discharge Limitations

### 1. Preparation and Implementation of the Storm Water Pollution Control Plan (SWPCP)

The permittee must prepare and implement the SWPCP according to the following:

- a. The SWPCP must be prepared according to the requirements in Schedule A.2 by a person knowledgeable in storm water management and familiar with the facility. The person(s) preparing the plan must be identified in the plan.
- b. The SWPCP must be signed in accordance with 40 CFR §122.22. Updates and revisions to the SWPCP must also be signed and certified pursuant to 40 CFR §122.22.
- c. The SWPCP must be prepared and implemented according to the time frames set forth in Schedule C.
- d. The SWPCP must be kept current and updated as necessary to reflect any changes in facility operation.
- e. The SWPCP and updates to the SWPCP must be submitted to the Department in accordance with Schedule C.
- f. A copy of the SWPCP must be kept at the facility and made available upon request to government agencies responsible for storm water management in the permittee's area.

### 2. Storm Water Pollution Control Plan Requirements

- a) **Site Description.** The SWPCP must contain the following information:
  - i) A description of the industrial activities conducted at the site. Include a description of the significant materials (see Schedule D.3, Definitions) that are stored, used, treated and/or disposed of in a manner that allows exposure to storm water. Also describe the methods of storage, usage, treatment and/or disposal.
  - ii) A general location map showing the location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features.
  - iii) A site map including the following:
    - (1) drainage patterns
    - (2) drainage and discharge structures
    - (3) outline of the drainage area for each storm water outfall
    - (4) paved areas and buildings within each drainage area
    - (5) areas used for outdoor manufacturing, treatment, storage, and/or disposal of significant materials
    - (6) existing structural control measures for reducing pollutants in storm water runoff
    - (7) material loading and access areas
    - (8) hazardous waste treatment, storage and disposal facilities
    - (9) location of wells including waste injection wells, seepage pits, drywells, etc.
    - (10) location of springs, wetlands and other surface water bodies.
  - iv) Estimates of the amount of impervious surface area (including paved areas and building roofs) relative to the total area drained by each storm water outfall.
  - v) For each area of the site where a reasonable potential exists for contributing pollutants to storm water runoff, identify the potential pollutants that could be present in storm water discharges.
  - vi) The name(s) of the receiving water(s) for storm water drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality.
  - vii) Identification of the discharge outfall(s) and the point(s) where storm water monitoring will occur as required by Schedule B. If multiple discharge outfalls exist but will not all

be monitored (as allowed in Schedule B.1), a description supporting this approach must also be included.

- b) **Site Controls.** The permittee must maintain existing controls and/or develop new controls appropriate for the site. The purpose of these controls is to eliminate or minimize the exposure of pollutants to storm water. In developing a control strategy, the SWPCP must have the following minimum components. A description of each component must be included in the SWPCP.
- i) *Storm Water Best Management Practices.* If technically and economically feasible, the following best management practices must be employed at the site. A schedule for implementation of these practices must be included in the SWPCP if the practice has not already been accomplished. This schedule must be consistent with the requirements for developing and implementing the SWPCP in Schedule C of the permit.
- (1) Containment - All hazardous substances (see Schedule D.3, Definitions) must be stored within berms or other secondary containment devices to prevent leaks and spills from contaminating storm water. If the use of berms or secondary containment devices is not possible, then hazardous substances must be stored in areas that do not drain to the storm sewer system.
  - (2) Oil and Grease - Oil/Water separators, booms, skimmers or other methods must be employed to eliminate or minimize oil and grease contamination of storm water discharges.
  - (3) Waste Chemicals and Material Disposal - Wastes must be recycled or properly disposed of in a manner to eliminate or minimize exposure of pollutants to storm water. All waste contained in bins or dumpsters where there is a potential for drainage of storm water through the waste must be covered to prevent exposure of storm water to these pollutants. Acceptable covers include, but are not limited to, storage of bins or dumpsters under roofed areas and use of lids or temporary covers such as tarps.
  - (4) Erosion and Sediment Control - Erosion control methods such as vegetating exposed areas, graveling or paving must be employed to minimize erosion of soil at the site. Sediment control methods such as detention facilities, sediment control fences, vegetated filter strips, bioswales, or grassy swales must be employed to minimize sediment loads in storm water discharges. For activities that involve land disturbance, the permittee must contact the local municipality to determine if there are other applicable requirements.
  - (5) Debris Control - Screens, booms, settling ponds, or other methods must be employed to eliminate or minimize debris in storm water discharges.
  - (6) Storm Water Diversion - Storm water must be diverted away from fueling, manufacturing, treatment, storage, and disposal areas to prevent exposure of uncontaminated storm water to potential pollutants.
  - (7) Covering Activities - Fueling, manufacturing, treatment, storage, and disposal areas must be covered to prevent exposure of storm water to potential pollutants. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps.
  - (8) Housekeeping - Areas that may contribute pollutants to storm water must be kept clean. Sweeping, prompt clean up of spills and leaks, and proper maintenance of vehicles must be employed to eliminate or minimize exposure of storm water to pollutants.
- ii) *Spill Prevention and Response Procedures.* Methods to prevent spills along with clean-up and notification procedures must be included in the SWPCP. These methods and procedures must be made available to appropriate personnel. The required clean up

material must be on-site or readily available. Spills prevention plans required by other regulations may be substituted for this provision providing that storm water management concerns are adequately addressed.

- iii) *Preventative Maintenance.* A preventative maintenance program must be implemented to ensure the effective operation of all storm water best management practices. At a minimum the program must include:
    - (1) Monthly inspections of areas where potential spills of significant materials or industrial activities could impact storm water runoff.
    - (2) Monthly inspections of storm water control measures, structures, catch basins, and treatment facilities.
    - (3) Cleaning, maintenance and/or repair of all materials handling and storage areas and all storm water control measures, structures, catch basins, and treatment facilities as needed upon discovery. Cleaning, maintenance, and repair of such systems must be performed in such a manner as to prevent the discharge of pollution.
  - iv) *Employee Education.* An employee orientation and education program must be developed and maintained to inform personnel of the components and goals of the SWPCP. The program must also address spill response procedures and the necessity of good housekeeping practices. A schedule for employee education must be included in the SWPCP. The Department recommends this education and training occur at the time of an employee's hire and annually thereafter.
- c) **Record Keeping and Internal Reporting Procedures.** The following information must be recorded and maintained at the facility and provided to the Department and other government agencies upon request. This information does not need to be submitted as part of the SWPCP.
- i) Inspection, maintenance, repair and education activities as required by the SWPCP.
  - ii) Spills or leaks of significant materials that impacted or had the potential to impact storm water or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature.
3. **Oregon Administrative Rule 340-041-0026(3)(a)(D), Surface Water Temperature Management Plan** The discharge of storm water is not expected to cause a measurable increase in stream temperature because the discharges mainly occur at a time of year when ambient stream and runoff temperatures are relatively low. Compliance with this permit meets the requirement of OAR 340-041-0026(3)(a)(D) to develop and implement a surface water temperature management plan. If permitted storm water discharges in a particular basin are assigned waste load allocations under a Total Maximum Daily Load for temperature, then permittees in this basin will be required to implement additional management practices to reduce the temperature of the discharges. These practices include, but are not limited to, increased vegetation to provide for shading, underground conveyance systems or detention vaults, and filter treatment systems to reduce detention times.
4. **Storm Water Discharge Benchmarks for Outfalls 001, 002, 003, and 004**  
Benchmarks are guideline concentrations not limitations. They are designed to assist the permittee in determining if the implementation of their SWPCP is reducing pollutant concentrations to below levels of concern. The following benchmarks apply to each point source discharge of storm water associated with industrial activity:

Parameter	Benchmark
Oil & Grease	10 mg/L
Copper	0.1 mg/L
Lead	0.4 mg/L
Zinc	0.6 mg/L
pH	5.5 – 9.0 S.U.
Total Suspended Solids	130 mg/L
Floating solids (associated with industrial activity)	No Visible Discharge
Oil & Grease Sheen	No Visible Sheen

5. **Review of SWPCP.** If benchmarks are not achieved, the permittee must investigate the source of the elevated pollutant levels and review and, if necessary, revise the SWPCP within 60 days of receiving sampling results. The purpose of this review is to determine if the SWPCP is being followed and to identify any additional technically and economically feasible site controls that need to be implemented to further improve the quality of storm water discharges. These site controls include best management practices, spill prevention and response procedures, preventative maintenance, and employee education procedures.

- a. **SWPCP Revision.** Any newly identified site controls must be implemented in a timely manner and incorporated into the SWPCP as an update. A new SWPCP is not required. If no additional site controls are identified, the permittee must state as such in an update to the SWPCP.
- b. **SWPCP Revision Submittal.** Results of this review must be submitted to the Department and made available upon request to government agencies responsible for storm water management in the permittee's area. The permittee must submit any revisions to the SWPCP within 14 days after the SWPCP is revised. If the Department does not review and comment on the revised SWPCP within 30 days, the permittee must implement the revisions as proposed. The permittee may proceed immediately with implementation of the following management practices as described in Schedule A.2.b without waiting for Department comment: waste chemical and materials disposal, debris control, storm water diversion, covering activities, housekeeping, and preventative maintenance.
- c. **Background or Natural Conditions.** If the permittee demonstrates that background or natural conditions not associated with industrial activities at the site cause an exceedance of a benchmark, then no further modifications to the SWPCP are required for that parameter. Upon successful demonstration of natural or background conditions through monitoring of the same storm event used to evaluate benchmarks the permittee would be eligible for the monitoring reduction as outlined in Schedule B.

6. **Water Quality Standards**

Except as provided for in Oregon Administrative Rule (OAR) 340-045-0080, no wastes may be discharged and no activities may be conducted that violate Water Quality Standards as adopted in OAR 340-041-0445 except in the defined mixing zone:

Outfalls 001, 002, 003 and 004: The mixing zone is that portion of the Willamette River within a 25-foot radius from the point of discharge. The Zone of Immediate Dilution (ZID) is that portion of the Willamette River within a radius of 2.5 feet from the point of discharge.

**Schedule B**  
**Monitoring and Reporting Requirements**

**1. Monitoring Requirements**

**a) Outfalls 001, 002, 003 and 004: Storm Water Discharge to Willamette River**

Parameter <sup>1</sup>	Minimum Frequency <sup>2,3</sup>	Sample Type
Oil & Grease	1/quarter	Grab
Copper	1/quarter	Grab
Lead	1/quarter	Grab
Zinc	1/quarter	Grab
pH	1/quarter	Grab
Total Suspended Solids	1/quarter	Grab
Floating solids	1/month	Grab
Oil & Grease Sheen	1/month	Grab

<sup>1</sup> Parameters must be analyzed on samples collected from the same storm event.

<sup>2</sup> Monitoring is required when rainfall is sufficient to generate runoff.

<sup>3</sup> The permittee may apply for and receive Department approval for reduced monitoring if one year of sampling shows that the discharge is consistently meeting effluent limits in Schedule A of the NPDES permit. If substantive alternations to the facility are expected, the permittee will not be eligible for the reduction in monitoring.

b) **Multiple Point Source Discharges.** The permittee may reduce the number of storm water monitoring points provided the outfalls have substantially identical effluents. Substantially identical effluents are discharges from drainage areas serving similar activities where the discharges are expected to be similar in composition. Outfalls serving areas with no exposure of storm water to industrial activities are not required to be monitored.

c) **Reinstatement of Monitoring Requirements**

- i) The permittee must conduct monitoring as specified in Schedule B.1.a if changes to site conditions are expected to affect storm water discharge characteristics.
- ii) The Department may reinstate monitoring requirements as specified in Schedule B.1.a if prior monitoring efforts were improper or results were incorrect. The Department will notify the permittee of reinstatement in writing.
- iii) Monitoring may also be reinstated if future sampling efforts by the permittee or the Department indicate benchmarks are being exceeded.

**2. Reporting Requirements**

- a) **Reporting Frequency.** Monitoring results must be reported on approved forms. Reports must be submitted to the Department's Northwest Region – Portland Office by the 15th day of the following month.
- b) The permittee must monitor the parameters as specified below at the locations indicated. The laboratory used by the permittee to analyze samples must have a quality assurance/quality control (QA/QC) program to verify the accuracy of sample analysis. If

QA/QC requirements are not met for any analysis, the results must be included in the report, but not used in the calculations required by this permit. When possible, the permittee must re-sample in a timely manner for parameters failing QA/QC requirements, analyze samples, and report results.

- c) **Reporting of Non-Detect Sample Results.** For all pollutants, if a value is less than the permit limit and less than the "minimum quantitative level (MQL)", the permittee shall report Non-Detect "ND (detection level in mg/L)" for the parameter. For example, if the MQL for a pollutant is 10 µg/L and the value of the analytical result is below the MQL, the permittee shall report ND (0.010)" in the Discharge Monitoring Report.
- d) **Monitoring Records Prepared in Ink.** All bench sheets, laboratory analysis sheets, and other records to support the data reported on the Discharge Monitoring Report (DMR) shall be prepared in ink. Pencil entries or *liquid paper* corrections shall be prohibited by appropriate laboratory operating procedures. Changes to any supporting records that may be required to correct the original data shall be made by lining through the original data. The date of the change and the initials of the individual making the change shall be recorded in ink adjacent to the change.

## **Schedule C**

### **Compliance Conditions and Schedules**

1. **Storm Water Pollution Control Plan (SWPCP) Submittal and Implementation.**
  - a. Within 3 months of permit issuance, the permittee must prepare and submit a SWPCP. Except for site controls that require capital improvements (see Schedule D.3, Definitions), the permittee must implement the SWPCP within 6 months of permit issuance. The elements of the SWPCP are specified in Schedule A of the NPDES Permit.
  - b. At least thirty (30) days prior to conducting activities that would result in soil disturbance at the facility, the permittee must update the SWPCP to include an erosion and sediment control component. The updated SWPCP must ensure that proper measures are implemented to control legacy contaminants (see Schedule C.2). The permittee must implement necessary erosion and sediment control measures to control the discharge of legacy contaminants before proceeding with activities that would result in soil disturbance.
  - c. All other updates to the SWPCP must be submitted to the Department within 14 days after completion.
  
2. **Storm Water Characterization for Legacy and 303(d) Pollutants.** The permittee is required to conduct monitoring for the following legacy and 303(d) pollutants to determine whether they are of concern in the storm water discharge: total dissolved solids, iron, manganese, mercury, hexavalent chromium, DDT, DDT metabolites (DDD and DDE), PAHs, PCBs, chlorobenzene, pentachlorophenol, perchlorate and chloride. Monitoring is required for the above-referenced pollutants once per month at each outfall for a one year period. Monitoring is required during those months when rainfall generates runoff. The results of the monitoring will be submitted quarterly to the DEQ Cleanup Project Manager as part of the Quarterly Progress Report for the facility remedial investigation and feasibility study. A report summarizing the one year monitoring is to be submitted to the Department within fourteen (14) months after permit issuance date. If the monitoring indicates that the discharge has a potential to violate water quality standards for the legacy pollutants or 303(d) pollutants, the Department will notify the permittee and require that the permittee to submit appropriate fees to modify the permit to include effluent limits and/or implementation of additional controls.
  
3. The permittee is expected to meet the compliance dates that have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee must submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

## Schedule D Special Conditions

### 1. Re-opening of Permit

This permit may be reopened for the inclusion of additional limitations, monitoring requirements, or both. Upon completion of the Total Maximum Daily Load for the Willamette River, and the assignment of a Waste Load Allocation (WLA) to the Permittee, the WLA shall be incorporated into this permit, or subsequent permit renewal. Additional monitoring requirements may also be identified at the completion of the Remedial Investigation Report for the DEQ Cleanup Program, or the Record of Decision.

### 2. Environmental Supervision and Management

The permittee shall designate an environmental supervisor to coordinate and carry out all necessary functions related to maintenance and operation of waste collection, treatment, and disposal facilities. This person shall be allowed access to all information relevant to the generation of wastes in the various process areas.

### 3. Definitions

- a. *Capital Improvements* means the following improvements that require capital expenditures:
  - i. Treatment best management practices including but not limited to settling basins, oil/water separation equipment, catch basins, grassy swales, detention/retention basins, and media filtration devices.
  - ii. Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
  - iii. Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of storm water to treatment systems.
  - iv. Roofs and appropriate covers for manufacturing areas.
- b. *Hazardous Substances* as defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.
- c. *Material Handling Activities* include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.
- d. *Point Source* means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.
- e. *Significant Materials* includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with storm water discharges.

- ### 4. Availability of SWPCP and Monitoring Data.
- The Storm Water Pollution Control Plan and/or storm water monitoring data must be made available to government agencies responsible for storm water management in the permittee's area.

## **Schedule F General Conditions**

### **SECTION A. STANDARD CONDITIONS**

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025 and is grounds for enforcement action; for permit termination, suspension, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations

Oregon Law (ORS 468.140) allows the Director to impose civil penalties up to \$10,000 per day for violation of a term, condition, or requirement of a permit.

In addition, a person who unlawfully pollutes water as specified in ORS 468.943 or ORS 468.946 is subject to criminal prosecution.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee shall correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application shall be submitted at least 180 days before the expiration date of this permit.

The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions

This permit may be modified, suspended, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit References

Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

## **SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS**

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality and/or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

- (1) Bypass is prohibited unless:
    - (a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;
    - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
    - (c) The permittee submitted notices and requests as required under General Condition B.3.c.
  - (2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).
- c. Notice and request for bypass.
- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, if possible at least ten days before the date of the bypass.
  - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and
  - (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Event

For purposes of this permit, A Single Operational Event which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

a. Definitions

- (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
- (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.

b. Prohibition of overflows. Overflows are prohibited unless:

- (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
- (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.

c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permittee shall take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of

the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

**SECTION C. MONITORING AND RECORDS**

1. Representative Sampling

Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years or both.

5. Reporting of Monitoring Results

Monitoring results shall be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports shall be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value shall be recorded unless otherwise specified in this permit.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.

8. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

9. Records Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

**SECTION D. REPORTING REQUIREMENTS**

1. Planned Changes

The permittee shall comply with Oregon Administrative Rules (OAR) 340, Division 52, "Review of Plans and Specifications". Except where exempted under OAR 340-52, no construction, installation, or modification involving disposal systems, treatment works, sewerage

systems, or common sewers shall be commenced until the plans and specifications are submitted to and approved by the Department. The permittee shall give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permittee becomes aware of the circumstances. During normal business hours, the Department's Regional office shall be called. Outside of normal business hours, the Department shall be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. If the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, and in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected;
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
- e. Public notification steps taken, pursuant to General Condition B.7.

The following shall be included as information that must be reported within 24 hours under this paragraph:

- a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
- b. Any upset which exceeds any effluent limitation in this permit.

- c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.

9. Falsification of Information

A person who supplies the Department with false information, or omits material or required information, as specified in ORS 468.953 is subject to criminal prosecution.

10. Changes to Indirect Dischargers - [Applicable to Publicly Owned Treatment Works (POTW) only]

The permittee must provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

11. Changes to Discharges of Toxic Pollutant - [Applicable to existing manufacturing, commercial, mining, and silvicultural dischargers only]

The permittee must notify the Department as soon as they know or have reason to believe of the following:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) One hundred micrograms per liter (100 µg/L);
  - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - (4) The level established by the Department in accordance with 40 CFR 122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) Five hundred micrograms per liter (500 µg/L);
  - (2) One milligram per liter (1 mg/L) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - (4) The level established by the Department in accordance with 40 CFR 122.44(f).

**SECTION E. DEFINITIONS**

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. mg/L means milligrams per liter.
4. kg means kilogram.
5. m<sup>3</sup>/d means cubic meters per day.
6. MGD means million gallons per day.
7. Composite sample means a sample formed by collecting and mixing discrete samples taken at least one time per hour and based on time or flow.
8. FC means fecal coliform bacteria.
9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-41.
10. CBOD means five-day carbonaceous biochemical oxygen demand.
11. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
12. Quarter means January through March, April through June, July through September, or October through December.
13. Month means calendar month.
14. Week means a calendar week of Sunday through Saturday.
15. Total residual chlorine means combined chlorine forms plus free residual chlorine.
16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.

17. POTW means a publicly owned treatment works.
  18. L/s means liters per second.
  19.  $\mu\text{g/L}$  means microgram per liter.
  20. C means degrees Celsius.
  21.  $\text{TU}_a$  means acute toxicity units.
  22.  $\text{TU}_c$  means chronic toxicity units.
  23. NOEC means "no observed effect concentration."
  24.  $\text{LC}_{50}$  means the effluent concentration at which 50 percent of the test organisms died.
  25. "Shall" means a mandatory action or requirement; a duty to perform a specified function or activity.
  26. "Must" means the same as "shall."
  26. "May" means permissive; optional; not required.
  27.  $\text{m}^3/\text{s}$  means cubic meters per second.
  28. RM means river mile (above mouth).
  29. Rkm means river kilometer (above mouth).
  30. "t" or "ton" means a mass of 1000 kg.
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