

**WATER POLLUTION CONTROL FACILITIES GENERAL PERMIT**

Oregon Department of Environmental Quality  
700 NE Multnomah St Suite 600  
Portland, OR 97232  
Phone: 503-229-5696

**Issued pursuant to ORS 468B.050**

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**GEN 2401**

**ISSUED TO:**

WQ File No:

County/Region:

Registered date:

Legal Name:

Mailing Address :

Site Location:

Email:

**SOURCES COVERED BY THIS PERMIT:**

This permit applies to graywater reuse and disposal systems that:

- Generate graywater from a single family residence or a residential duplex having no more than four bedrooms.
- Collect for reuse no more than 300 gallons of graywater per day.
- Collect and reuse only Type 1 graywater as defined under OAR 340 Division 053.
- Use graywater only for subsurface irrigation.
- Are not located in an area covered by a geographic general permit.

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Lydia Emer  
Operations Division Administrator

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Date signed  
**Effective date: June 1, 2017**

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**PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a graywater reuse and disposal system in conformance with all local building codes as well as 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.

## COVERAGE AND ELIGIBILITY

1. A person registered under this permit may reuse graywater only for subsurface irrigation.
2. A person registered under this permit may not allow graywater to discharge to waters of the state which include surface water or groundwater.
3. Graywater unsuitable for reuse or exceeding the volume required for reuse must be discharged to a sanitary sewer or onsite wastewater treatment system.
4. Graywater may originate from a single family residence or residential duplex with no more than four bedrooms.
5. The graywater system must be connected to a sanitary sewer or an onsite wastewater system.
6. Any person not wishing to be covered or limited by this permit may apply for an individual permit in accordance with the procedures in OAR 340-045-0030.

## HOW TO APPLY FOR COVERAGE UNDER THIS GENERAL PERMIT

### **Permit Application Requirements**

1. A person seeking new registration under this permit must do the following:
  - a. Complete an application. Applicants may obtain a DEQ application form by:
    - i. Mail or in person from any DEQ regional office, or
    - ii. Downloading the application from the DEQ website.
  - b. Submit a completed application to the DEQ office identified below at least 30 days prior to the planned activity:

Oregon Department of Environmental Quality  
Attn: Business Office  
700 NE Multnomah St., Suite 600  
Portland, OR 97232
  - c. Submit all applicable fees specified in OAR 340-045-0070 with the application.
  - d. Satisfy all local permitting authority requirements, including but not limited to securing all applicable building permits, plumbing permits and inspections.
2. A person currently registered will have continued permit coverage upon the effective date of this permit if a timely and complete renewal application is received by DEQ on or before April 15, 2017.

### **Permit Renewal Requirements**

1. Permittees registered under this General Permit can operate a graywater reuse and disposal system until the expiration date provided on the cover page (unless coverage under the Permit is terminated or extended under Other Application Conditions, below). A registered owner or operator of a graywater reuse and disposal system seeking to continue coverage under this General Permit after the expiration date must submit a complete renewal application form to DEQ no later than March 2, 2027. DEQ may grant permission to submit the application after that date but in no case may an application be submitted after the permit expiration date.

### **Other Application Conditions**

1. Coverage under this permit will continue after the expiration date if the permittee submits a complete renewal application, as described above, and DEQ has not issued a new permit.
2. If DEQ does not receive a renewal application, as described above, coverage under this General Permit is terminated and all operations authorized under this permit must cease by removing the graywater diversion device and directing all graywater flow to a wastewater disposal system.
3. Any person not wishing to be covered or limited by this General Permit may apply for an individual permit in accordance with the procedures in OAR 340-045-0030.

### Notification of coverage

1. DEQ will notify the permittee of coverage under this general permit by sending a notice of coverage and copy of the signed permit to the email address or mailing address provided on the permit application. If the permittee elects to receive notification of coverage by email and DEQ is unable to contact the permittee by email, notification of coverage will be sent to the mailing address provide on the permit application.

### **DEFINITIONS**

“**Beneficial purpose or reuse**” means graywater is used for a resource value, such as to provide moisture. Examples include, but are not limited to, the irrigation of landscape vegetation, planters, greenhouses, vegetated roofs, and compost.

“**BOD5**” means five-day biochemical oxygen demand.

“**Evapotranspiration**” means the combined loss of water from a given area, and during a specified period of time, by evaporation from the soil surface and by transpiration from plants.

“**Graywater**” means shower and bath wastewater, bathroom sink wastewater, kitchen sink wastewater and laundry wastewater. Graywater does not mean toilet or garbage wastes or wastewater contaminated by soiled diapers.

“**Type 1 graywater**” means graywater that contains dissolved oxygen and may have passed through primary graywater treatment, but has not passed through secondary graywater treatment.

“**Graywater reuse and disposal system**” means any existing or proposed graywater collection and distribution system equipped with a diversion device that can direct graywater between beneficial reuse and disposal.

“**Graywater treatment**” means the alteration of the quality of graywater by physical, chemical, or biological means or combination thereof to reduce the risk of failure of the graywater reuse and disposal system, degradation of water quality of the environment, and risk to public health.

“**Primary graywater treatment**” means a physical process to remove a portion of the grease, and floatable and settleable solids from graywater.

“**Secondary graywater treatment**” means a chemical or biological process to remove a portion of the dissolved or suspended biodegradable organic matter and other suspended solids.

“**Irrigation**” means the application of water to soil, mulch or compost usually to supplement precipitation and supply moisture for the growth of vegetation or for the production of compost.

“**mg/L**” means milligrams per liter.

“**Month**” means a calendar month.

“**Mulch**” means a protective covering spread or left on the ground to reduce evaporation, maintain even soil temperature, prevent erosion, control weeds or enrich the soil.

“**Onsite wastewater treatment system**” means any existing or proposed subsurface onsite wastewater treatment and dispersal system including but not limited to a standard subsurface, alternative, experimental, or nonwater-carried sewage system. It does not include systems that are designed to treat and dispose of industrial waste as defined in OAR chapter 340, division 045.

“**Oxidized graywater**” means a treated graywater in which the organic matter is stabilized, nonputrescible, and contains dissolved oxygen.

“**Residential strength wastewater**” means septic tank effluent that does not typically exceed five-day biochemical oxygen demand (BOD5) of 300 mg/L; total suspended solids (TSS) of 150 mg/L; total Kjeldahl nitrogen (TKN) of 150 mg/L; oil & grease of 25 mg/L; or concentrations or quantities of other contaminants normally found in residential sewage.

“**Sewerage system**” means pipelines or conduits, pumping stations, and force mains, and all other structures, devices, appurtenances and facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal.

“**Stormwater management structure**” means both public and private structural stormwater controls such as swales, infiltration basins, underground injection control (UIC) systems or similar structures intended to infiltrate stormwater into the ground.

“**Subsurface irrigation**” means the slow release of water below the surface of soil, compost or mulch for the purpose of supplying moisture.

“**TSS**” means total suspended solids.

“**Vegetated roof**” means a system of soil and vegetation that partially or completely covers the roof of a building or man-made structure. Vegetated roofs are also known as living roofs, green roofs or eco-roofs.

“**Waters of the state**” include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

## SCHEDULE A

### Graywater Reuse and Disposal Limitations

The permittee may construct, install, and operate a graywater reuse and disposal system pursuant to the following limitations:

1. **Beneficial Purposes.** The permittee may reuse graywater only for the following beneficial purposes:
  - a. Subsurface irrigation of gardens, lawns and landscape plants;
  - b. Subsurface irrigation of food crops, except root crops or crops that have edible portions that touch graywater;
  - c. Subsurface irrigation of vegetated roofs that do not drain to stormwater management structures; and
  - d. Subsurface irrigation of compost.
2. **Prohibited Uses.** The permittee may not use graywater for drinking, personal hygiene bathing, showering, cooking, dishwashing, or maintaining oral hygiene.
3. **Connection to wastewater disposal system required.** The graywater reuse and disposal system must be equipped with a graywater diversion valve that allows graywater flow to be directed between beneficial reuse and either an approved sewerage system, or a functioning onsite wastewater treatment system approved under OAR 340 Division 071. Graywater not suitable for reuse as described in this permit or the rules under OAR 340 Division 053 as well as graywater exceeding the volume needed for reuse must be diverted to a sewerage system or a functioning onsite wastewater treatment system.

4. **No discharge to surface water or stormwater systems allowed.** The permittee must not allow graywater discharge to:
  - a. Surface waters of the state;
  - b. A municipal separate storm sewer system (MS4);
  - c. An industrial stormwater system; or
  - d. A stormwater management system including swales, infiltration basins, underground injection control (UIC) systems, or other structures intended to infiltrate stormwater into the ground.
5. **No groundwater impacts allowed.** The permittee must apply graywater at a rate and in a manner that minimizes the movement of contaminants to groundwater and does not adversely impact groundwater quality. At the time of irrigation, the minimum separation distance between the point of graywater release and groundwater must be at least four feet.
6. **Graywater limitations.** The permittee must divert the following wastewaters to a sewerage system or onsite wastewater treatment system:
  - a. Wastewater originating from kitchen sinks that has not passed through primary graywater treatment;
  - b. Wastewater from dishwashers, garbage disposals, or both;
  - c. Wastewater resulting from the washing of soiled diapers or other similarly infectious or soiled materials; and
  - d. Wastewater containing residual waste from activities such as, but not limited to, cleaning of oily rags; rinsing of paint brushes; disposal of pesticides, herbicides, or other chemicals; or disposal of waste solutions from hobbyist activities like home photo labs.
7. **Graywater reuse and disposal system design.** The graywater reuse and disposal system must be designed to reuse the volume of water needed for a specified beneficial purpose or beneficial purposes. Graywater in excess of the design flow must be diverted to an approved sewerage system or a functioning onsite wastewater treatment system approved under OAR 340-071. The system design must be documented in a written system design plan and transferred to the new owner or operator on property transfer.
8. **Graywater treatment and storage.**
  - a. All graywater originating from kitchen sinks must pass through a physical process to remove a portion of the grease, floatable and settleable solids.
  - b. Graywater may not be stored for more than 24 hours.
9. **Setbacks.** The graywater system must be designed, installed, and operated to meet the following setbacks (in feet):

Feature requiring setback	Graywater storage or surge tank	Point of graywater discharge to landscape
Groundwater supplies and wells	50	100
Springs	50	100
Surface water of the state, excluding springs	50	50
Stormwater management structures, collection systems, and catch basins	10	10
Underground injection control systems (UICs)	10	10
Property boundaries	5	2
Building structures	0	0

10. **Access and Exposure.** The permittee must implement the following access and exposure controls when using graywater:
  - a. All reasonable steps must be taken to ensure that contact with graywater by humans and domestic pets is avoided.

- b. The point of graywater discharge must be covered by at least two inches of soil, mulch, compost or other suitable material.
11. **Graywater irrigation management.** The permittee may irrigate with graywater pursuant to the following limitations:
    - a. Irrigation sites must be located on stable geologic formations not subject to flooding or excessive runoff from adjacent land at the time of irrigation.
    - b. Graywater may not be applied to areas with slopes exceeding 45 percent.
    - c. Graywater may not be discharged to frozen or saturated soils.
    - d. Irrigation may only occur when evapotranspiration exceeds precipitation.
    - e. The soil and vegetation in the irrigation area must have capacity to accommodate the volume and rate of graywater applied so that discharge to surface water or groundwater does not occur.
    - f. When irrigating a parcel for the production of a food crop, the edible portion of the crop must not contact the graywater, and fruit or nuts must not be harvested off the ground for human consumption.
    - g. Graywater must not surface, pond, or runoff.
    - h. Graywater irrigation must not create objectionable odors, fly and mosquito breeding, or other nuisance conditions.
  12. **Operation and maintenance.** The owner or operator of the graywater reuse and disposal system must operate the system as specified in the written operations and maintenance manual that is specific to the system and remains with the system on property transfer.
  13. **Property lines crossed.** The permittee may reuse graywater only on the property on which it was generated, unless all of the following conditions are met:
    - a. Both the person generating graywater and the person reusing graywater agree to reuse graywater in accordance with the rules in OAR Chapter 340, Division 53.
    - b. A written agreement exists and is being honored between the person generating graywater and owner of the property where graywater reuse occurs.
    - c. The state's officers, agents, employees and representatives are allowed access to enter and inspect all portions of the graywater reuse and disposal system, regardless of location.
  14. **Waste strength limitations.** The permittee may not divert graywater from an onsite wastewater treatment system if the resulting septic tank effluent concentration exceeds the criteria for residential strength wastewater. If the resulting septic tank effluent concentration does exceed the criteria for residential strength wastewater, the permittee must take appropriate measures to reduce the septic tank effluent waste strength, such as but not limited to reducing the amount of graywater diverted from the onsite wastewater treatment system.
  15. **Graywater reuse and disposal system abandonment.** A permittee that abandons a graywater reuse and disposal system must remove the graywater diversion valve and direct all graywater flow to an approved sewerage system or a functioning onsite wastewater treatment system approved under OAR 340 Division 071.

## SCHEDULE B

### Minimum Monitoring and Reporting Requirements

1. **Monitoring and reporting.** The permittee must monitor the operation of the graywater reuse and disposal system. In lieu of an annual permit fee, the permittee may submit an annual report to DEQ by January 15 with a statement certifying that during the previous year, the system was operated in compliance with this permit and the rules in OAR 340 Division 053. The annual report must be submitted on a form approved by DEQ and must contain the following information:
  - a. The months during which graywater was used for irrigation;

- b. A brief description of any maintenance activities completed on the system, such as, but not limited to, cleaning or replacing filters, replacing worn or damaged components, or flushing the system to remove accumulated debris;
- c. A brief description of any changes to the graywater reuse and disposal system, including but not limited to:
  - i. The addition or removal of any fixtures on the graywater collection system;
  - ii. Any changes to graywater storage such as the addition or removal of a graywater storage or surge tank;
  - iii. Modification of the graywater distribution system; and
  - iv. The addition or removal of graywater irrigation areas.
- d. Any changes or updates made to the system design plan or operations and maintenance manual or both.

## SCHEDULE D

### Special Conditions

1. **System design plan.** The permittee must implement and maintain a written system design plan that includes, but is not limited to, the following information:
  - a. Location of the system;
  - b. Fixtures that are the source of graywater;
  - c. Design flow of the graywater reuse and disposal system;
  - d. Design of the distribution and reuse system;
  - e. Description of any graywater treatment system used;
  - f. Beneficial reuses of graywater; and
  - g. Name and contact information for the person responsible for the design of the system, including:
    - i. Name;
    - ii. Address;
    - iii. Phone number;
    - iv. Email address, if available.

The design plan must be made available for review on request by DEQ or DEQ's agent.

2. **Graywater irrigation site evaluation.** The permittee must evaluate and maintain a record on all graywater irrigation areas, including the following:
  - a. A diagram of the property receiving graywater showing:
    - i. Area and slope of the graywater reuse area;
    - ii. Surface streams, springs or other bodies of water;
    - iii. Onsite wastewater treatment systems;
    - iv. Stormwater management structures or stormwater collection systems;
    - v. Existing and proposed wells;
    - vi. Escarpments, cuts and fills; and
    - vii. Any unstable landforms;
  - b. Parcel size;
  - c. Soil descriptions, including water infiltration rates;
  - d. Water table levels;
  - e. Description of vegetation in the reuse area;
  - f. Evapotranspiration rates for the vegetation during the period of use; and
  - g. Any other observations or information relevant to the evaluation of the graywater irrigation site, including offsite features, as appropriate.
3. **Operation and maintenance manual.** The permittee must maintain a written operation and maintenance manual that includes, but is not limited to, the following information:
  - a. A detailed description of the graywater system, including any graywater treatment, and

- b. A detailed description of any activities required to operate and maintain the system. Examples of operation and maintenance activities include but are not limited to: steps for turning on the system, operating the graywater diversion device, cleaning filters, flushing distribution lines, and draining irrigation lines before winter.

The operation and maintenance manual must be kept up to date and revised when modifications are made to the system design or operation.

4. **Construction Standards.** The permittee must ensure that a graywater reuse and disposal system meets the following standards:
  - a. Graywater collection system. All pipes, valves and other plumbing appurtenances of the graywater collection system must comply with the requirements of the Oregon Plumbing Specialty Code.
  - b. Diversion valve. The graywater diversion valve must be readily accessible and clearly labelled. The diversion valve must be constructed of material that is durable, corrosion resistant, watertight, and designed to accommodate the inlet and outlet pipes in a secure and watertight manner.
  - c. Cross connection control. A direct-connection between a potable water supply system and graywater reuse and disposal system is not allowed.
  - d. Storage and surge tanks. If a storage or surge tank is installed, it must be:
    - i. Sized to accommodate peak graywater flow;
    - ii. Fitted with controls to limit access to humans, domestic pets and vectors;
    - iii. Installed below ground on level, well-compacted soil, or above ground on a level, stable footing, per the manufacturer's installation instructions;
    - iv. Equipped with an antibuoyancy device, if installed below ground where high groundwater could dislodge the tank;
    - v. Designed to prevent overturning, if installed above ground;
    - vi. Labelled with "Caution – Nonpotable Water – Not Safe to Drink"; and
    - vii. Fitted with an overflow drain with a diameter at least equal to that of the inlet that flows by gravity to an approved sewerage system, or a functioning onsite wastewater treatment system or holding tank system approved under OAR 340 Division 071. The overflow drain must not be equipped with a shutoff valve.
  - e. Distribution system. The graywater distribution system, excluding irrigation components, must satisfy the following requirements:
    - i. All piping and other plumbing components must be listed by an ANSI accredited product listing program.
    - ii. The manufacturer of system components must be properly identified.
    - iii. Installation must conform to the equipment and installation methods identified by the manufacturer and product listing.
    - iv. All exterior graywater piping, valves and other graywater equipment must be marked or labelled to identify it as containing nonpotable water. All exterior piping and tanks must be labelled: "Caution – Nonpotable Water – Not Safe to Drink."
  - f. Irrigation system. Irrigation components must be marked or labelled as containing nonpotable water and meet the irrigation specifications in the system design plan.
5. **System alterations.** The permittee must obtain permits from the local authority, as necessary, to make system alterations, such as plumbing permits. The permittee must notify DEQ in writing of any physical changes to the graywater reuse and disposal system that makes the system ineligible for this general permit.
6. **Revocation.** As described in OAR 340-045-0033, DEQ may revoke a general permit as it applies to any person and require such person to apply for and obtain an individual permit if:
  - a. The permitted source or activity causes a serious danger to public health, safety, or the environment;



- b. The permitted source or activity is a significant contributor of pollution or causes environmental problems;
- c. The permittee is not in compliance with the terms and conditions of this general permit;
- d. Conditions or standards have changed so that the source or activity no longer qualifies for a general permit.

## **SCHEDULE F WPCF GENERAL CONDITIONS – GRAYWATER**

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

1. **Duty to Comply with Permit.** The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and grounds for an enforcement action. Failure to comply is also grounds for DEQ to modify, revoke, or deny renewal of a permit.
2. **Property Rights and Other Legal Requirements.** Issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other rights, or any infringement of federal, tribal, state, or local laws or regulations.
3. **Liability.** DEQ or its officers, agents, or employees may not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities or systems because of this permit.
4. **Permit Actions.** After notice by DEQ, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:
  - a. Violation of any term or condition of this permit, any applicable rule or statute, or any order of the Commission;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
5. **Transfer of Permit.** This permit may not be transferred to a third party. On the transfer of a property with a graywater reuse and disposal system, the person releasing claim to the property must notify the receiving person that a graywater reuse and disposal system is present. The person taking possession of the property must obtain a permit to operate the system or must abandon the system as specified under OAR 340-053-0100.
6. **Permit Fees.** The permittee must pay the fees required by Oregon Administrative Rules.

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

1. **Proper Operation and Maintenance.** At all times the permittee must properly operate as efficiently as possible and maintain in good working order all treatment or control facilities or systems installed or used by the permittee to comply with the terms and conditions of this permit.
2. **Standard Operation and Maintenance.** All graywater collection, control, treatment, reuse, and disposal facilities or systems must be operated in a manner consistent with the following:
  - a. At all times, all facilities or systems must be operated as efficiently as possible in a manner that will prevent discharges, health hazards, and nuisance conditions.
  - b. All screenings, grit, and sludge must be disposed of in a manner approved by DEQ to prevent any pollutant from the materials from reaching waters of the state, creating a public health hazard, or causing a nuisance condition.
3. **Noncompliance and Notification Procedures.** If the permittee is unable to comply with conditions of this permit because of a breakdown of equipment, facilities or systems; an accident caused by human error or negligence; or any other cause such as an act of nature, the permittee must:

- a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.
- b. Immediately notify DEQ's Regional office so that an investigation can be made to evaluate the impact and the corrective actions taken, and to determine any additional action that must be taken.
- c. If a graywater or wastewater discharge occurs to a public right-of-way, stormwater catch basin or other stormwater management structure, the permittee must immediately notify the local authority having jurisdiction, such as the appropriate city or county agency.
- d. Within 5 days of the time the permittee becomes aware of the circumstances, the permittee must submit to DEQ a detailed written report describing the breakdown, the actual quantity and quality of waste discharged, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or liability for failure to comply.

### **SECTION C. MONITORING AND RECORDS**

1. **Inspection and Entry.** The permittee must at all reasonable times allow authorized representatives of DEQ to:
  - a. Enter upon the permittee's premises where a waste source, reuse, or disposal system is located or where any records are required to be kept under the terms and conditions of this permit;
  - b. Have access to and copy any records required by this permit;
  - c. Inspect any treatment, reuse, or disposal system, practices, operations, monitoring equipment, or monitoring method regulated or required by this permit; or
  - d. Sample or monitor any substances or permit parameters at any location at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by state law.
2. **Retention of Records.** The permittee must retain records of all monitoring and maintenance information, including all calibrations, 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. DEQ may extend this period at any time.

### **SECTION D. REPORTING REQUIREMENTS**

1. **Plan Submittal.** Pursuant to Oregon Revised Statute 468B.055, unless specifically exempted by rule, construction, installation, or modification of disposal systems, treatment works, or sewerage systems may not commence until plans and specifications are submitted to and approved in writing by DEQ. All construction, installation, or modification shall be in strict conformance with DEQ's written approval of the plans.
2. **Change in Discharge.** Whenever a facility expansion, production increase, or process modification is expected to result in a change in the character of pollutants to be discharged or in a new or increased discharge that will exceed the conditions of this permit, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. A change may not be made until plans have been approved and a new permit or permit modification has been issued.
3. **Signatory Requirements.** All applications, reports, or information submitted to DEQ must be signed and certified by the official applicant of record (owner) or authorized designee.