

Biodiesel Facility

Large Scale Environmental Permitting Fact Sheet

In Washington, a number of laws apply to the construction and operation of any industrial facility. These laws are in place to protect public health, safety, and environmental quality. Typically, these restrictions are written into permits issued by local, state or federal agencies.

This fact sheet assumes your project is not within 200 feet of a shoreline. If your project falls within a shoreline area contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) Information Center for additional permit requirements.

- Contact the Information Center: <http://www.oria.wa.gov/>

This fact sheet gives you:

- The four steps to biodiesel permitting that describe the most common permits you will need.
- Online resources to help you through the permitting process like flow charts and applications.
- Contact information for ORIA, who can answer your questions.

Four Steps to Biodiesel Permitting

Step #1: Zoning and Environmental Review

Zoning: Contact local planning agency.

Critical Area Ordinance Evaluation:

Contact local planning agency.

Environmental Review or the State Environmental Policy Act (SEPA): <http://www.ecy.wa.gov/programs/sea/sepae-review.html>

Step #2: Typical Permits and Approvals to Develop a Facility

Below is a description of the typical local, regional and state permits you will need to develop your facility.

Local Permits

Local ordinances and permits vary from jurisdiction to jurisdiction. It is important to contact the local agencies in the jurisdiction where your site is located. They can confirm the exact local requirements for your project.

Local Permits Affecting Most Facilities:

- Building of Grading Permit
- Conditional Use or Special Use Permit
- Electrical, Plumbing, and Mechanical Permits
- Road Permit
- Floodplain Permit

Other Unique Local Permits:

Fire Code. Biodiesel facilities need local fire department permits based on the International Fire Code and additional local conditions. Fire permits may be issued as part of the building permit process or separately. Permit requirements can apply to safety, fire protection, above ground storage tanks, corrosives, cryogenic fluids, flammable and combustible liquid, liquefied petroleum gas, and hazardous materials. Contact the local fire district for specific requirements and find out whether they issue one permit, or separate permits.

- See the International Fire Code: <http://www.iccsafe.org/>.

Boiler/Pressure Permit. Some cities and counties require boiler or pressure vessel permits. Check with the local building department to find out if you will need this permit. Read more information about boiler/pressure vessel installation permits under Regional and State Permits below.

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Solid Waste Handling Permit and Testing. You may need a solid waste handling permit if you:

- Store waste in surface impoundments.
- Store and process used cooking oil (vegetable oil), yellow grease, brown grease, or tallow.
- Landfill solid waste on-site.
- Spread solid waste on the land.
- Compost.
- Store waste in piles.
- Store Waste in tanks.

Farmers who grow crops for biodiesel production do not need a solid waste permit. Contact the local health department about your specific solid waste handling, recycling and disposal plans.

- Find local health departments and districts: <http://www.doh.wa.gov/LHJMap/LHJMap.htm>

On-Site Sewage System Permit. Process (non-domestic) wastewater cannot be discharged into a septic system. If you are not able to hook up to a wastewater treatment plant for domestic sewage on your site, you can choose to design and install a sewage treatment system that includes septic tanks and a drain field to treat domestic sewage.

Local health departments approve permits for systems that will receive less than 3,500 gallons of domestic sewage per day. The Washington State Departments of Health or Ecology will review and approve the permit for larger on-site sewage systems.

Regional, State and Federal Permits

Regional, state, and federal agencies implement rules that protect public health and environmental quality. Many pollution control laws are assigned to state agencies. This promotes a consistent approach to protecting communities and lands across the state from environmental pollution.

Fuel Tax License. If you plan to blend fuel at your biodiesel facility you will need a fuel tax license from the Washington State Department of Licensing (DOL). This license allows you to blend taxed fuel with another liquid that is not taxed to produce an end product. Tax is imposed on the volume of product that was not previously taxed.

- More information and license application: <http://www.dol.wa.gov/forms/441750.pdf>.
- Fuel Tax Fact Sheet: <http://www.dol.wa.gov/vehicleregistration/fueltax.html>.

Air Quality Notice of Construction (NOC). You will need an NOC permit prior to beginning construction. Biodiesel processing facilities are a new source of air contamination. Depending on what county you are in the local clean air agency or the Washington State Department of Ecology's (Ecology's) regional office will review and approve this permit. The timeframe to get this permit is typically 90 to 120 days (following the submittal of a complete application). This permit must be issued before starting project construction.

- Learn how to apply for an air quality NOC: <https://fortress.wa.gov/ecy/publications/SummaryPages/ECY070410.html>
- See the Regulatory Handbook for the application and process flow chart:
http://www.ecy.wa.gov/programs/sea/pac/ppds_info/air_quality_Notice_of_Construction_Schematic.pdf
- Find the clean air authority that can help you: <http://www.ecy.wa.gov/programs/air/local.html>.
- Read about air pollution requirements prior to construction: <https://fortress.wa.gov/ecy/publications/publications/0802015.pdf>

In addition to meeting requirements of state and local air pollution control regulations, a number of federal requirements may apply depending on the process steps and size of the biodiesel operation. The agency that will process your NOC application can assist you in identifying which state and federal air quality rules will apply.

You can operate your biodiesel system, under the NOC permit terms, as soon as it is installed. The same agency that would issue the NOC permit may also require an Air Operating Permit (AOP). The AOP requirement is dependent upon the type and quantity of your emissions. Contact the relevant agency for details.

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Water Supply (Planning and Engineering Approvals). Your facility will need a water supply. Your water supply will either be provided by a new or existing public water system, depending upon location and availability.

If you are considering siting your facility within or near the boundaries of an existing public water system, you should discuss your water supply needs with representatives of the public water system (purveyor) very early in your siting process. The purveyor will need to determine their ability to serve and impacts your facility would have on their system. The purveyor's consideration of your facility should include:

- Availability of sufficient water supply capacity. The purveyor's supply must be sufficient to meet its existing maximum daily demands, other commitments the purveyor has made for water supply, and your planned facility's maximum daily water supply needs.
- Water rights sufficiency. The purveyor must hold water rights sufficient to meet (at least) the purveyor's water supply commitments.
- Water storage and hydraulic capacity. The purveyor's water storage and distribution system must be capable of delivering the water to the site in a reliable manner under all anticipated water demand conditions. Typically, a site-specific engineering analysis will be conducted to assure the water system facilities will be capable of delivering water under adequate pressure during periods of peak demand.

Timeframes for these processes are dependent upon the current status of the public water system. In the event that an existing public water system is unable or unwilling to service your facility, you will need to develop your own public water system.

- See the Washington State Department of Health's web site for further information about approval and on-going regulatory requirements for public water systems: <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater.aspx>.

It is likely you will need a water right if you plan to develop your own public water system. You will need to submit evidence of a valid, sufficient water right for your proposed water system if:

- You need more than 5,000 gallons of water a day.
- You plan to use any amount of surface water as your water source.

Obtaining a water right through purchase or new application can be a lengthy and complex process. Investigation of the availability of water early in your siting process may avoid delays and disappointments later.

Wastewater Discharge Permits. The type of wastewater discharge permit you need depends on where your industrial wastewater and stormwater will go: sanitary sewer, surface water, or to land (ground water). We encourage you to schedule a pre-application meeting with Ecology to discuss your wastewater permits. These meetings can give you technical feedback on how to design and operate your facility to minimize pollution. The meetings also explain the permit process and timeframes. If you will be discharging non-domestic wastewater to sanitary sewers, you may need a pretreatment permit. In some areas these are issued by the local wastewater treatment plant.

You will need a State Waste Discharge Permit if your facility will:

- Discharge wastewater and stormwater to a sanitary sewer system that is publicly-owned.
- Construct and/or operate a privately-owned treatment plant.
- Discharge industrial wastewater to land.

Permits are required prior to starting construction or operation of the facility. The permitting process takes about 60 days, depending on the type of permit. Some individual permits may take considerably longer.

You will need to submit an Engineering Report at least 60 days prior to commencement of construction:

- Treating wastewater prior to discharge to waters of the State.
- Pretreating wastewater prior to discharge to a Publicly Owned Treatment Works (POTW).
- Read the regulations: <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-240>

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If your facility will reclaim and reuse water you will need a reclaimed water permit from Ecology and the Department of Health. This permit may be combined with a State Waste Discharge Permit or an National Pollutant Discharge Elimination System (NPDES) Permit depending on the circumstance.

- Visit the Reclaimed Water Website: <http://www.ecy.wa.gov/programs/wq/reclaim/index.html>
- See the Regulatory Handbook for the application and process flow chart:
<http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=74>

You will need a NPDES Permit if your facility will discharge construction stormwater or industrial wastewater directly into surface waters of the state.

- See the process flow charts: http://www.ecy.wa.gov/programs/sea/pac/ppds_info/Links/Construction_Stormwater_LINK_A.pdf (for construction stormwater permit), or
http://www.ecy.wa.gov/programs/sea/pac/ppds_info/state_wastewater_discharge_permit.pdf (for discharge of process wastewater).
- Download the application: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>
- Read the guidance: <https://fortress.wa.gov/ecy/publications/summarypages/0310013.html>

NPDES Construction Stormwater General Permit. You will need an NPDES Construction Stormwater Permit if you grade, re-contour or otherwise disturb one acre or of soil at your site. This permit is required prior to grading or soil disturbance. The permit sets requirements for stormwater control while your facility is under construction. Once the soil at your site is stabilized and you are finished with construction, the permit is closed. Once your facility is built and ready to operate, you may need an NPDES Industrial Stormwater Permit. Expect to receive the permit about 60 days after submitting a complete application.

- See the Regulatory Handbook for the application and process flow chart:
<http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=16>.

NPDES Industrial Stormwater General Permit Coverage. Once your facility is built, an NPDES Industrial Stormwater General Permit is needed for industrial sites that:

- Store materials and products or conducts industrial activities exposed to weather that may contaminate stormwater.
- Discharges contaminated stormwater to surface waters.

You do not need this permit if your stormwater is combined with your other wastewater that goes to a wastewater treatment plant.

- See the Regulatory Handbook for the process flow chart: <http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=17>.
- Read guidance and download the application: <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>.

Storage Tank Regulations. Underground storage tanks (USTs) at your facility that contain 100% biodiesel are not subject to UST regulations. Tanks that contain a blend of biodiesel with petroleum diesel and other petroleum products or hazardous substances must comply with UST regulations.

- See the Regulatory Handbook for the application and process flow chart:
<http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=11>
- Read the fact sheet: <https://fortress.wa.gov/ecy/publications/summarypages/0309103.html>.
- Visit the UST Web site: <http://www.ecy.wa.gov/programs/tcp/ust-lust/tanks.html>

Certain aboveground storage tanks may be subject to the Oil Handling Transfer Standards (WAC 173-180). Aboveground storage tanks are regulated by local fire marshals. If you will store biological oils, including biodiesel or pure vegetable oil in an aboveground storage tank, take a look at:

- Focus on Aboveground Storage Tanks: <https://fortress.wa.gov/ecy/publications/SummaryPages/0308014.html>
- Facility Oil Handling Standards Rule: <https://fortress.wa.gov/ecy/publications/summarypages/94195.html>

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Boiler/Pressure Vessel Installation Permit. If your facility will have a boiler, you will need a boiler/pressure vessel installation permit from the Washington State Department of Labor and Industries (L&I). You must have the permit before you install, move or reinstall any boiler or pressure vessel at your facility.

- Get more information: <http://www.lni.wa.gov/TradesLicensing/Boilers/>.
- Download the application: <http://www.lni.wa.gov/TradesLicensing/Boilers/PermitInspect/default.asp#2>

Road Approach Permit. If state roads will need improvement or expansion to support your facility or because of traffic impacts from your facility, you will need a Road Approach Permit from the Washington State Department of Transportation (WSDOT). Contact them early in the project to find out if you need this permit.

- WSDOT regional offices: <http://www.wsdot.wa.gov/contact/officelocation.htm>.

Archaeological Permit. If you discover a historic or archaeological artifact while you are constructing a new facility you will need an Archaeological Permit. Contact the Washington State Department of Archaeology and Historic Preservation (DAHP) before you start your project. They can tell you if historic or archaeological sites have been found nearby. If you are receiving federal grants or loans to help construct your facility you are required to have a Cultural Resource Assessment.

- DAHP: <http://www.dahp.wa.gov/>.
- See the Regulatory Handbook for the application: <http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=4>

Washington State Business License. Biodiesel facility operators must get a business license from the Business Licensing Service (BLS). A BLS licensing specialist can help you develop a "licensing package" customized for your specific needs. They can also answer questions about contracting licenses or bonding.

- For more information: <http://www.bls.dor.wa.gov/>.

National Type Evaluation Program (NTEP). The Washington State Department of Agriculture (WSDA) requires each fuel dispensing device to be an NTEP approved device. See RCW 16-664 for details. Check your device to verify if it is an NTEP approved device.

- For more information: http://www.agr.wa.gov/inspection/weightsmeasures/is_your_device_legal.aspx.

Common Carrier Permit. Transportation of general commodities, including hazardous materials, over public highways within the State of Washington, requires a Common Carrier permit (WAC 480-14). This permit can be obtained from the Washington State Utilities and Transportation Commission. Insurance requirements for obtaining the permit are based on your gross vehicle weight.

- For more information: <http://www.utc.wa.gov/regulatelndustries/transportation/commonCarriers/Pages/default.aspx>

Step #3: Additional Regulatory Steps for Operating a Facility

Fuel Registration Requirement. Biodiesel producers who plan to sell fuel commercially need to register their fuel with the Environmental Protection Agency (EPA). New fuel must pass the Tier 1, Tier 2 human health and the environment testing. The National Biodiesel Board currently holds rights to the EPA approved biodiesel tests. To get the rights to use these test results, you must join the National Biodiesel Board and pay a fee.

- National Biodiesel Board: <http://www.biodiesel.org/>.
- EPA's diesel fuel website: <http://www.epa.gov/otaq/fuels/dieselfuels/index.htm>.

Motor Fuel Labeling Requirement. WAC 16-662 requires fuel sales to disclose oxygenates. Biodiesel must be labeled at the pump and disclose the volume percentage of biodiesel.

- For more information: <http://www.agr.wa.gov/bioenergy/standards.aspx>.

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Dangerous Waste Management. If your facility will produce dangerous waste while operating or during maintenance you may need a Resource Conservation and Recovery Act (RCRA) Site Identification Number. You may also need to submit Dangerous Waste Annual Reports to account for your waste management activities. The dangerous wastes you generate at your facility must be properly handled, labeled, stored and disposed.

- Steps for designating waste are in Washington's Dangerous Waste Regulations: <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-303>.
- See the Regulatory Handbook for more information and the process flowchart: <http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=10>.
- For more information on Dangerous Waste Annual Reporting: <http://www.ecy.wa.gov/programs/hwtr/waste-report/index.html>.
- Free downloadable hazardous waste labels: http://www.ecy.wa.gov/programs/hwtr/hw_labels/index.html.

Biodiesel refining produces a dry cake-like ash that should be initially tested to find out if the ash can be disposed in regular trash or if special handling is needed. Read information about special handling under Dangerous Waste below.

- See the Regulatory Handbook for details: <http://apps.oria.wa.gov/permithandbook/permitdetail.asp?id=83>.

Glycerine, a product created during biodiesel production, may not be considered a hazardous waste if the facility has shown that the material has the following characteristics:

- Viable market.
- Value.
- Minimal secondary processing.
- Appropriate management (handling and storage).
- The Department of Ecology will make a case-by-case determination.

Hazardous Substance Use Reporting - Emergency Planning and Community Right to Know Act (EPCRA). If you store hazardous substances or chemicals at your facility you may be required to report to the Washington State Emergency Response Commission and local agencies. Any substance that has a material safety data sheet is potentially reportable. Substances such as methanol, ethanol, potassium, or sodium hydroxide are reportable at 10,000 lbs at any one time. Extremely hazardous substances such as chlorine or ammonia are reportable at much lower thresholds: 100 lbs or 500 lbs respectively.

- More information about EPCRA: <http://www.ecy.wa.gov/epcra/index.html>.

State Spill Prevention and Response Planning/Over Water Oil Transfer. If you plan to transfer liquid with any percentage of petroleum over state waters, you will be subject to Washington State's oil handling standards and oil spill preparedness regulations. These regulations require you to:

- Prepare operating procedures and a training program to reduce human error.
- Keep maintenance and other records.
- Create a contingency plan for quick and effective response to oil spills and practice its use.
- Retain a primary response contractor who will work with you during spill response.
- Have the ability to pre-boom the vessel depending on the transfer operation and the type of vessel involved.

You are also subject to U.S. Coast Guard regulations if you transfer oil to a vessel that has a total oil capacity of 10,500 gallons or more. Some of these documents must be reviewed and approved by Ecology and the U.S. Coast Guard.

You must notify Ecology and the U.S. Coast Guard of your plans to transfer oil over water at least 24 hours in advance, by registering at and using this website:

- <https://secureaccess.wa.gov/myAccess/saw/select.do>
- Look at the Spill Program's website: <http://www.ecy.wa.gov/programs/spills/spills.html>.
- Read the Facility Oil Handling Standards rule: <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-180&full=true>
- Read the Oil Spill contingency Plan Rule: <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-182&full=true>

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Federal Oil Spill Prevention and Response Requirements. Similar to the state requirements, the Spill Prevention, Countermeasure and Control (SPCC) and Facility Response Planning (FRP) regulations apply to a wider variety of bulk oil storage facilities. Anyone storing 1,320 gallons of oil or more, where a spill could affect surface waters, must prepare an SPCC plan. Larger facilities must also prepare an FRP plan. These regulations are administered by the EPA and the U.S. Coast Guard.

→ Read about the Federal Oil Spill Program: <http://www.epa.gov/oilspill/>.

Commercial Feed License. If you have the intent of selling biodiesel biproducts such as cantalina, canola, rapeseed, or distillers grain for animal feed you will need to obtain a Commercial Feed License.

→ For more information contact WSDA: <http://www.agr.wa.gov/FoodAnimal/AnimalFeed/>.

Certificate of Industrial Insurance Coverage. All biodiesel facilities need to get an Employer Liability Certificate from L&I. This certificate verifies that a company has industrial insurance coverage. If the facility will be producing 10,000 lbs or more of biodiesel or the biodiesel production process includes use of a chemical above the threshold quantities listed, they will need to comply with the Process Safety Management regulations found in WAC 296-67.

→ More information about workplace safety: <http://www.lni.wa.gov/Safety/>.

→ Employer Liability Certificate (Certificate of Coverage) Information:
<http://www.lni.wa.gov/ClaimsIns/Insurance/Uninsured/EmpCert/>.

Step #4: Free Technical Assistance and Tax Benefits

Pollution Prevention Free Assistance. Contact the Pollution Prevention Program at an Ecology regional office near your project for free technical assistance. Specialists review your process design to help you find ways to achieve zero hazardous waste discharges and minimize the production of non-hazardous waste.

Technical Resources for Engineering Efficiency (TREE) Program. If you want to use a team of free environmental engineers and specialists to evaluate how your facility can improve process efficiency, save money, and reduce its overall environmental impact, contact the TREE program. Engineers and specialists from Ecology can help you identify opportunities that reduce your facility's environmental impact - while also meeting your company's financial payback requirements. Areas that may be assessed include hazardous waste, water use, wastewater, solid waste, and energy use. As technical assistance officers, TREE team members can visit a facility and make recommendations with no enforcement authority. You choose what opportunities you want to implement.

→ Read more about the TREE Program at: <http://www.ecy.wa.gov/tree/index.html>.

Tax Benefits for Biofuel Sellers. Tax benefits are available for persons who distribute and/or make retail sales of biodiesel fuel. Benefits apply to investments in:

- Construction of new facilities.
- Machinery.
- Equipment.
- Delivery vehicles used for the retail sale of biodiesel. Income from distribution or retail sales of biodiesel fuel may be deducted from the Washington State Business and Occupation tax.

Tax Benefits for Biofuel Manufacturers. Tax benefits for biodiesel manufacturers are available. Tax benefits include: property tax exemption, leasehold tax exemption and a lower Business and Occupation tax rate.

Motor Fuel Quality and Biofuel Program. Washington is taking a proactive approach in biofuel sampling and fuel analysis. The primary goal is to create equity in the biofuel marketplace for refiners, suppliers, distributors, retailers, and to serve as watch keepers for consumers. WSDA's Weights and Measures Program tests and inspects commercial devices, verifies prices, inspects packages, educates the public, monitors fuel quality, and investigates complaints.

→ For more information: <http://agr.wa.gov/bioenergy/standards.aspx>.

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Online Resources to Help You through the Permitting Process

Regulatory Handbook Access the Regulatory Handbook for the most current information about permits in Washington. This handbook gives a summary for the most common local, state and federal environmental permits in Washington. It has contact information, access to permit applications, review time frames, fees, and more.

→ Read the Regulatory Handbook online: <http://apps.oria.wa.gov/permithandbook/>.

Project Questionnaire You can also try the online Project Questionnaire to find out what permits you will need. Fill out the questionnaire to receive a list of permits you will most likely need for your project.

→ Try the Project Questionnaire online: <http://apps.oria.wa.gov/opas/>.

Permit Process Schematics Process schematics are flow charts that break down the steps in each of the permit processes.

→ You can see over 30 schematics online: <http://oria.wa.gov/resources/schematics.asp>.

Contact Information For specific questions, advice, or general tips on how to reduce your permits to save you time and money, contact the ORIA Information Center at 1-800-917-0043 or help@oria.wa.gov.

If you require this document in another format, contact Office for Regulatory Innovation and Assistance. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

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