Universal and Hazardous Waste Program

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1. Rogue Community College operates as a Conditional Exempt Small Quantity Generator of Hazardous Waste under the provisions outlined by the Oregon Department of Environmental Quality. This program anticipates that status will not change under normal operating conditions. Should the College exceed CESQG limits, the College will comply with all applicable conditions outlined by the Oregon Department of Environmental Quality.

2. Rogue Community College is committed to the safe reuse, recycling, and disposal of all universal and hazardous waste materials. In order to accomplish this goal, Rogue Community College operates a safe and effective program which safeguards the environment and public, student, and employee health. The College's program complies with applicable federal, state and local rules and laws, and incorporates best management practices including the following:

    a. RCRA (Resource Conservation Recovery Act)
        i. The federal law regulating hazardous waste, as amended by Oregon law.

    b. Toxic Substances Control Act:
        i. The federal law regulating specific substances with a focus on the following six chemical substances:
            1. PCBs
            2. Asbestos
            3. Radon
            4. Lead
            5. Formaldehyde
            6. Mercury

3. The following methods are used to manage unused, spent and discarded universal and hazardous waste materials in accordance with the following hierarchy of priorities.

    a. Reuse – To the maximum extent practical, viable materials are used on-campus until they are spent.

    b. Recycling – Materials, for which an appropriate and reasonably available recycling outlet exists, are recycled.

c. Inventory Control – RCC only orders the quantity of the substance that are going to be used and does not order excess or bulk quantities if not needed.

d. Chemical Substitution – RCC attempts to utilize least hazardous options or considers substituting a hazardous chemical for something less hazardous or non-hazardous whenever practical.

e. Liquid Waste (sewage)
    i. RVC and TRC – Public sewer systems provided by Rogue Valley Sewer Service.
    ii. RWC and Down Town Center – Public sewer system provided by the City of Grants Pass.
    iii. Kerby – Private sever system with septic tank and leach drain field.

f. Lab Chemical Neutralizing Techniques
    i. Acid-Base Neutralizations. Small quantities of acids or bases, where pH is the ONLY hazardous characteristic, may be neutralized to a pH range of 2.5 - 12.0 and the neutral non-hazardous solution disposed into the sanitary sewer system. DO NOT DUMP any CONTAMINATED neutralized corrosive material down the drain or in the trash.

g. Municipal Solid Waste (trash) – MSW is disposed in accordance with permitted practices at the Landfill.

4. Definitions

a. Acute Hazardous Waste - P-listed wastes found in 40 CFR 261.33(e). These wastes are acutely toxic. Generation or storage of more than 2.2 pounds of these wastes makes a generator a large quantity generator.

b. Cradle to Grave – RCRA established a system to manage by regulation a hazardous waste from its moment of generation through transportation to its treatment, storage, and finally, disposal. The name for this comprehensive management system is Cradle to Grave. Which includes Point of Generation = “Cradle”, Transportation to Treatment, Storage, or Disposal = “to” and Treatment, Storage, and Final Disposal = “Grave”.

c. Discard Material – any material, solid, liquid or contained gas, which is abandoned. (Disposed, burned or incinerated) recycled, or considered inherently waste like.

d. Disposal - the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste or hazardous substance into or on any land or water so that the hazardous waste or hazardous substance or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters of the state as defined in ORS 468.700.

e. Hazardous Waste – a solid waste including liquids or gases which may cause or significantly contribute to an increase in mortality or serious illness or pose a substantial hazard to human health or the environment when improperly managed.

f. Pesticide Residue - A hazardous waste that is generated from pesticide operations and pesticide management, such as, from pesticide use (except household use), manufacturing, repackaging, formulation, bulking and mixing, and spills. Pesticide residue includes, but is not limited to, un- used commercial pesticides, tank or container bottoms or sludge's, pesticide spray mixture, container rinsing's and pesticide equipment washings, and substances generated from pesticide treatment, recycling, disposal and rinsing spray and pesticide equipment. Pesticide residue does not include pesticide-containing materials that are used according to label instructions, and substances such as, but not limited to treated soil, treated wood, foodstuff, water, vegetation, and treated seeds where pesticides were applied according to label instructions.

g. Satellite Accumulation Area - is an area at or near any point of generation where hazardous waste initially accumulates and that is under the control of the operator of the process generating the waste.

h. Solid Waste – is a material that, in general practice, is any discarded or sometimes discarded material not specifically excluded by the hazardous waste regulations.

i. State Only Hazardous Waste - Additional hazardous wastes designated in OAR 340102-0033.

j. Treatment - Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so make the waste non-hazardous.

k. Universal Waste - A universal waste (UW) is a hazardous waste that is produced by a variety of businesses and institutions, not just in traditional industrial settings. In Oregon there are currently four types of waste considered to be

universal wastes including batteries, pesticides, mercury containing equipment and lamps.

5. Document Retention

    a. The Rogue Community College Risk Management Department is the department tasks with management of the Universal and Hazardous Waste Program and will compile and store the following documents for the time limits specified below:
        i. Shipping Manifests
        ii. Lab Testing Results
        iii. Receipts
        iv. Inspection Records
        v. Other related documents

6. Emergency Equipment

    a. Spill Kits
        i. Each area that contains universal and or hazardous waste will be provided with appropriate pre-packaged "spill kits".
        ii. Absorbents and/or contaminated material from such incidents will be collected in an appropriate container and disposed of in the same manner as other chemical waste.

    b. Emergency Showers and Eye Wash Stations
        i. Rogue Community College maintains emergency showers and or eye wash stations in all areas where hazardous waste would be stored in accordance with 29 CFR 1910.151.

    c. First Aid Kits
        i. Rogue Community College maintains first aid kits in all areas in which hazardous waste would be stored.

7. Waste Designation:

    a. Materials are considered Hazardous Waste if they meet one or more of the criteria listed below and the materials are not needed for timely use by the generator.

    b. The waste is:
        i. Ignitable

1. Flammable liquid is defined as a non-aqueous solution, which has a flash point of less than 60 degrees C. (140 degrees F.) as measured by a Pensky-Martens Closed Cup Flash Tester utilizing a specific method.
2. Flammable liquid is also defined as an aqueous solution containing more than 24% alcohol which has a flash point of less than 60 degrees C. (140 degrees F.) as measured by a Pensky-Martens Closed Cup Flash Tester utilizing a specific method.
3. Flammable solid is defined as any material which is not a liquid at standard temperature and pressure, and which may ignite as a result of friction or the absorption of moisture, or which may ignite spontaneously.
4. Flammable gas is defined according to 49 CFR 173.300, as "a compressed gas" in which "any one of the following occurs":
    a. Either a mixture of 13% or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12% regardless of the lower explosive limit (tested using a specified method).
    b. When igniting the gas at the valve, the flame projects more than 18 inches beyond the ignition source with the valve opened fully, or, the flame flashes back and burns at the valve with any degree of valve opening (tested using a specified method).
    c. There is any significant propagation of flame away from the ignition source (tested using a specified method).
    d. There is any explosion of the vapor-air mixture in a drum (tested using a specified method).
    e. Oxidizer is defined as "a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter." Oxidizer is also defined as "an organic compound containing the Bivalent-O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals", unless the material is classified as an explosive, forbidden for transportation, or it is determined that the predominant hazard of the material containing the organic peroxide is other than that of an organic peroxide.

ii. Reactive
    1. Reacts violently upon contact with water, or produces toxic or explosive gases upon contact with water
    2. Is cyanide or sulfide bearing and when exposed to solution of pH less than 2 or greater than 12.5 produces toxic vapors
    3. Is capable of detonation or explosion
    4. Is classified as a Forbidden Material (49 CFR 173.51), Class A Explosive (49 CFR 173.53), or Class B Explosive (49 CFR 173.88) by the U.S. Department of Transportation.

iii. Corrosive
    1. An aqueous solution which exhibits the characteristic of pH less than or equal to 2 or greater than or equal to 12.5.
    2. Any material which corrodes steel (SAE 1020) at a rate of 0.250 inches per year at 55oC.(130oF.).
    3. Any solid or semi-solid material which, when tested using a specified procedure exhibits a pH less than or equal to 2 or greater than or equal to 12.5.
    4. Any waste that exhibits the characteristic of corrosivity due only to #3 above will be designated DW and assigned the waste number WSC2.

iv. Toxic
    1. The toxicity characteristic of a waste is determined by having a laboratory analyze an extract of the waste using the Toxicity Characteristic Leaching Procedure (TCLP). The results of the analysis are compared to the regulatory limits of 40 constituents; 8 heavy metals, and 32 organic compounds (including 10 pesticides/herbicides). If the extract contains levels of any of the 40 constituents at or above regulatory limits, the waste is considered a hazardous waste.
    2. Toxic hazardous wastes have the waste codes of D004 through D043 are included in Appendix 4 “Toxic Characteristics Table.

v. State Only Hazardous Waste
    1. A residue containing a 3 percent or greater concentration of any substance or mixture of substances contained in the federal rule 40 CFR 261.33 (e), (the "P" list) except pesticide wastes and those substances or mixtures of substances containing only those toxic contaminants listed in 40 CFR 261.24 in Table 1 (the TC list). If a residue contains only contaminants on the “P” list, and all those contaminants are ALSO on the TC list, the residue only needs evaluation using the TCLP method. The residue does not need additional evaluation as an Oregon “P” hazardous waste.

2. A residue containing a 10 percent or greater concentration of any substance or mixture of substances contained in 40 CFR 261.33 (f), (the "U" list) except pesticide wastes and those substances or mixtures of substances containing those toxic contaminants listed in 40 CFR 261.24 in Table 1 (the TC list). If a residue contains only contaminants on the “U” list, and all those contaminants are ALSO on the TC list, the residue needs evaluation using the TCLP method. The residue does not need additional evaluation as an Oregon “U” hazardous waste. Note: U075 (Dichlorodifluoromethane) and U121 (Trichloromonofluoromethane), when they are intended to be recycled, are not considered to be Oregon “U” hazardous wastes
3. Waste Pesticide residue, except for those managed as universal wastes or whose constituents are listed in 40 CFR 261.24 (a) but are below the prescribed regulatory levels.

8. Waste Accumulation:

    a. The following procedures apply to the management of Universal and Hazardous Waste as a Conditional Exempt Small Quantity Generator:
        i. Rogue Community College will generate less than 220 lbs. per month of Hazardous Waste and less than 2.2 lbs. of acutely Hazardous Waste per month per campus.
        ii. The College will not accumulate more than 2,200 lbs. of Hazardous Waste or more than 2.2 lbs. of acutely Hazardous Waste at any given time per campus.

    b. Departments coordinate the procurement of all Universal and Hazardous Waste accumulation containers with the Risk Management Department. Containers must meet the following requirements:
        i. Compatible with the material being accumulated and have tight fitting closures.
        ii. Damaged, bulging or rusted containers and containers of unknown origin and integrity are not permitted.
        iii. Containers are kept safe from weathering, damage, upset and unauthorized access.
        iv. Containers are kept closed except when waste is actively being added. Closed is defined as the bung is screwed in tight, the ring is latched and there is no evidence of holes or corrosion.

v. Rogue Community College may require the use of secondary containment for chemical storage at the discretion of the Risk Management Department.
vi. Unlabeled chemical containers are treated as Hazardous Waste. The responsible department(s) will bear all costs associated with testing to identify the contents sufficient to designate the waste.
vii. Containers are labeled appropriately.
    1. Marked with the words "Hazardous Waste" upon the first addition of waste.
    2. Marked with the accumulation start date.
    3. Primary hazards are identified (e.g. flammable, corrosive)
    4. Content constituents identified using proper description(s) and concentration(s)
    5. No formula, structure diagrams, or other abbreviations
viii. Empty containers are recycled or disposed of, as appropriate.
ix. Accumulation of empty containers and drums is not allowed. Any containers that are determined to no longer be serviceable will be rinsed, allowed to dry, flattened and recycled if possible. The residue from rinsing the container will be treated as hazardous waste unless the original contents of the container can be documented.

9. General Rules

a. College employees will not self-transport universal or hazardous waste off site for treatment or disposal without written authorization from the college Risk Management Department.

b. College employees will not use oil, diesel, or old fuel for dust suppression.

c. College employees will not contaminate used oils with brake cleaners, carburetor cleaners, waste fuels or other wastes. This could turn recyclable used oil into hazardous waste.

d. College employees will not dispose of used oils in the trash, on the ground, down any drain or into a septic system.

e. College employees will not mix antifreeze with any other wastes or it may need to be managed as a hazardous waste. For example: If antifreeze becomes excessively contaminated with fuel, metals and sludge, it may need to be handled as hazardous waste.

f. College employees will not mix old fuel with any other waste.

g. College employees will not mix used antifreeze, solvents, old fuel, degreasers, paint or other wastes with the used oil.

h. College employees will not put antifreeze in storm drains, septic tanks, dry wells, or on the ground.

i. College employees will not dispose of waste through evaporation inside or outside a fume hood.

j. College employees will not dispose of solvents or other potentially hazardous wastes by pouring them into containers of dirty shop towels.

k. College employees will not dispose of spent solvent down drains, into the air, or onto the ground.

l. College employees will not mix spent solvents with other wastes.

m. College employees will not put hazardous waste sludge in the dumpster or on the ground.

n. College employees will not throw dirty towels into the dumpster unless they are sure either by knowledge of process or by laboratory analysis that the dirty towel is not a hazardous waste.

o. Wastes are designated by Risk Management personnel or Science Lab Coordinators who have sufficient knowledge to recognize the chemical and physical properties of the waste and any attendant hazards.

10. Empty Container Rules

a. Empty container standard for hazardous waste:
    i. The hazardous waste container or inner liner is empty if:
        1. All waste has been removed that can be removed by pouring, pumping, or by means of suction; and
        2. No more than 1 inch (in.), equivalent to 2.5 centimeters, of residue remains on the bottom of the container or inner liner (commonly referred to as the "one-inch rule"); or

3. No more than 3 percent by weight of total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons (gal) in size; or
4. No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gal in size.

b. Empty container standard for hazardous waste compressed gas:
    i. A container holding compressed gas is empty when the pressure in the container approaches atmospheric pressure. To allow the pressure in the container to reach atmospheric pressure, the container must be opened. Proper precautions must be taken when opening containers of compressed gas.

c. Residue remaining in a non-empty container that is a hazardous waste is subject to the hazardous waste regulations. The rinsate or residue that is generated from cleaning non-empty container or inner liner is subject to all applicable hazardous waste regulations. This newly generated waste must be evaluated at the point of generation to determine if it meets the definition of a hazardous waste. If the container or inner liner held a listed1 hazardous waste, then the rinsate or residue is a listed hazardous waste. Rinsate from triple rinsing a container or inner liner that held an acutely hazardous listed waste remains an acutely hazardous listed waste and is fully regulated. If the residue is being used or reused, or legitimately recycled or reclaimed, it may not be not considered a hazardous waste. An example of a legitimate reuse of the residue includes when the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing intermediate it previously

11. Waste Streams

a. Aerosol Cans
    i. A discarded aerosol can that has not been punctured or drained is a reactive hazardous waste. Its contents may also be a characteristic or listed hazardous waste. College departments are given the option to either purchase and utilize an approved can puncturing device that collects the cans contents or the department may contact the Risk Management Department, which maintains collection drums on each campus. The spray cap must be removed from the aerosol can and then the can maybe placed in the collection drum. Once the collection drum is filled, the Risk Management Department will schedule a pickup with the college's third-party vendor. The entire drum is treated as hazardous

waste. The only aerosol cans that cannot be placed in the drum are cans containing pesticides.

b. Antifreeze
    i. Rogue Community College ships all used antifreeze off-site to be recycled in accordance with 40 CFR 262 - 270 and OAR Chapter 340 Division 100 – 106 and insures that the following management practices are in place. Used antifreeze that is to be recycled does not count toward monthly hazardous waste generator totals.
    ii. Immediately contain used antifreeze and store it in compatible containers that are in good condition and labeled “Used Antifreeze.”
    iii. Used antifreeze must not be mixed with any waste or other material (e.g., solvents, cooling system flushes, used oil, motor fuels).
    iv. Antifreeze collection, storage and transport containers or tanks must be dedicated solely to the transfer and storage of antifreeze, in order to minimize the risk of cross- contamination.
    v. Used antifreeze containers must be kept closed, except when emptying or filling, to minimize the potential for spillage
    vi. Used antifreeze containers must be located in a secure area and properly maintained so that they do not leak, rupture, or tip over when being opened, handled, or stored.
    vii. Spills of used antifreeze must be cleaned up immediately and appropriately managed. (Non- recyclable spill cleanup wastes must undergo a hazardous waste determination prior to disposal.
    viii. Volumes of accumulated used antifreeze will be minimized by routinely recycling to reduce the potential for environmental harm. Used antifreeze shall not be stored for longer than 3 months prior to recycling.
    ix. Proof of recycling (e.g., a log for on-site recycling or an invoice or bill of lading for off-site recycling) is maintained by the Risk Management Department.
    x. Rogue Community College will inform employees who handle or otherwise manage used antifreeze of proper handling and spill response procedures.

c. Batteries
    i. Lithium-ion batteries are rechargeable batteries like the ones in many cell phones and computers. Rechargeable batteries are considered hazardous waste. RCC Risk Management collects all lithium batteries and contracts with a third-party vendor to pickup the batteries up on site and dispose of them.

ii. Lead Acid batteries – All used lead acid batteries generated by Rogue Community College are recycled through an approved third-party contractor and maybe excluded from Hazardous Waste regulations if managed correctly. If not recycled lead acid batteries are designated as Hazardous Waste and shipped off site by a third-party contractor.
iii. Alkaline battery – Are no longer considered a hazard and maybe disposed of in regular trash.
iv. Nickel cadmium, mercury-oxide and silver-oxide button batteries. Never throw nickel cadmium, mercury-oxide and silver-oxide button batteries in the garbage. RCC Risk Management collects all Nickel cadmium, mercury-oxide and silver-oxide button batteries. lithium batteries and contracts with a third-party vendor to pick up the batteries up on site and dispose of them.

d. Broken Glass Containers
    i. Laboratory glassware (e.g., beakers, Erlenmeyer flasks) and broken glass that is not contaminated with hazardous materials maybe disposed of in standard "Broken Glass" boxes. Broken glass containers are provided by the Risk Management Department. When the container is full, Risk Management will schedule disposal through a third-party vendor.

e. Compressed Gas Tanks
    i. Empty compressed gas tanks should be returned to the vendor. If the empty tank cannot be returned to the vendor please contact Risk Management for disposal options.

f. Controlled Substances
    i. Controlled Substance including prescription medication should be reported to local law enforcement and or RCC Campus Security.
    ii. Unused drugs kept in cabinets, tossed in the garbage, or flushed down the toilet or drain can be serious threats to human and environmental health. Risks posed to aquatic organisms by long-term exposure to various pharmaceutical compounds are unknown. Wastewater treatment plants and septic systems usually do not treat or only partially treat pharmaceuticals, so chemical compounds from pharmaceuticals pass through treatment plants or septic systems to rivers or groundwater.
    iii. Drugs of concern include controlled and non-controlled prescription drugs, as well as over-the-counter medications. Proper management of these drugs reduces avoidable poisoning of both children and adults; prevents intentional misuse of unwanted prescription drugs, especially by teenagers; and protects water quality and fish.

g. Electronic Recycling
    i. All old computer monitors, CPU's and other unusable electronic devices are processed through an agreement with a third-party vendor and coordinated by the college Risk Management Department. Disposal containers are maintained at RWC and TRC.
    ii. Used ink cartridges from college owned copy machines and printers are collected by the college IT Helpdesk and are returned the vendor.

h. Gasoline and Diesel
    i. Waste gasoline is considered a hazardous waste because of its low flash point and the fact that is contains benzene. All waste gasoline must be recycled or disposed of as hazardous waste.

    ii. Waste diesel fuel is not typically a hazardous waste. Contact the Risk Management Department to coordinate the testing of any waste diesel fuels. Testing will determine if the fuel is hazardous waste or not.

    iii. Clean up any fuel spills using absorbents and other spill containing materials. Scrape up any contaminated soil. The College Risk Management Department will determine if contaminated spill absorbent or contaminated soil is hazardous waste.

i. Infectious Waste
    i. Under Oregon Law, Infectious Waste falls into four categories:
        1. Pathological waste,
        2. Biological waste,
        3. Cultures and stocks, or
        4. Sharps. The State of Oregon defines "sharps" to include the following: Needles, IV tubing with needles attached, Scalpel blades (including razor blades), Lancets, Glass tubes that could be broken during handling (e.g., capillary tubes, thin-walled test tubes, Pasteur pipettes), Syringes that have been removed from their original sterile containers.
    ii. Risk Management maintains sharps disposal containers in numerous commons areas at every Rogue Community College Campus. The containers are red in color and are labeled with warning stickers identifying the container as a bio hazard. Risk Management will schedule disposal of a full container on an as needed basis through a third-party contract with Southern Oregon Sanitation and Rogue Disposal.

iii. Individual college departments also maintain their own sharps containers and medical waste containers and dispose of them through separate departmental contracts with Southern Oregon Sanitation and Rogue Disposal.

j. Light Bulbs
    i. There are two main types of bulbs that need recycling; compact fluorescents and fluorescent lamps.
        1. Compact fluorescents include CFLs, HIDs (High Intensity Discharge), and circular lamps.
        2. Fluorescent bulbs can include straight and U-bend bulbs and HIDs. Light bulbs are made of a glass shell and contain a small amount of liquid and evaporated mercury, phosphor powder, and metal end-caps with heated filaments. When an electric current passes through mercury vapor inside the bulb it generates ultraviolet energy. On the inside of a bulb a phosphor coating transforms the ultraviolet energy into visible light. A four- foot fluorescent bulb contains 5 to 50 mg. of mercury.
        3. Compact fluorescents and fluorescents lamps are collected by the RCC Facilities Department and are returned to either North Coast Electric Co or Consolidate Electric Distributors for recycling.
        4. In rare cases Rogue Community College replaces outdated and old fluorescent light ballasts that may contain Polychlorinated biphenyls (PCBs). Ballasts manufactured through 1979 may contain PCBs. PCB-containing ballasts become a concern if they are leaking or if they will be removed and disposed of as hazardous waste. According to EPA Toxic Substances Control Act (TSCA) regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. Ballasts that contain PCB's are collected by the RCC Facilities Department and are turned over to the RCC Risk Management Department for disposal through a third-party vendor. Ballasts that contain PCB's must be disposed of with 1 year of being removed from the light fixture.

k. Oil Water Separator Sludge
    i. Rogue Community College maintains multiple oil water separators adjacent to the Diesel Program Facility and the Automotive Technology

Facility. Tanks are tested and pumped on an as needed basis by the Risk Management Department.

l. Parts Solvents
    i. Parts washer solvents utilized by Rogue Community College are provided by a third-party vendor that is contracted to remove and recycle the used solvents and provide new solvents as needed. The College assumes that all parts washer solvents are hazardous waste due to ignitability or heavy metal contamination unless otherwise proven through testing.

m. Pesticide waste
    i. Pesticide waste is any substance or material containing pesticide that cannot or will not be used and will be discarded and disposed of. By definition, pesticide wastes are "hazardous wastes" in Oregon. Pesticide wastes include, but are not limited to:
        1. Pesticide-contaminated absorbent, water, or other materials generated from cleaning up spilled spray solutions.
        2. Empty, contaminated (unrinsed) pesticide containers.
        3. Pesticide-contaminated water produced by cleaning the interior surfaces of the pesticide application equipment or from rinsing empty pesticide containers.
    ii. Pesticide containers - To be considered empty, pesticide containers must be triple-rinsed and the rinseate disposed of as hazardous waste. Also, poke a hole in the container or otherwise make it so that the container cannot be used again.
    iii. The disposal of all pesticides and pesticides containers is coordinated by the Risk Management Department.

n. Used Fuel Filters
    i. Spent fuel filters may be considered a hazardous waste if not fully drained.
    ii. Fully drain filters for 24 hours and capture any used fuel for disposal, recycle or reuse.
    iii. Recycle empty filters as scrap metal only if sufficiently drained.

o. Used Oil
    i. Rogue Community College ships all used oil off-site to be recycled in accordance with 40 CFR 262 - 270 and OAR Chapter 340 Division 100 – 106. Used oil that is to be recycled does not count toward monthly hazardous waste generator totals.

ii. The Oregon Department of Environmental Quality defines used oil as any oil that's been refined from crude or synthetic oil and used as one of the following:
    1. lubricant
    2. electrical insulation oil
    3. hydraulic fluid
    4. heat transfer oil
    5. brake fluid
    6. refrigeration oil
    7. grease
    8. machine cutting oil
iii. Used oil does not include the following:
    1. used oil mixed with hazardous waste except for specific instances
    2. petroleum and synthetic-based products used as solvent
    3. antifreeze
    4. wastewaters from which the oil has been removed
    5. oil-contaminated media or debris
    6. Used oil generated on site will not be burned in a used oil space heater under any conditions or removed from RCC facilities by employees, students or visitors.

p. Used Oil Filters
    i. Used oil filters must be crushed, or punctured and hot drained into a drain pan for at least 12 hours. Hot draining means the oil is at a temperature over 60 degrees Fahrenheit, as it would be if the filter were removed from the engine while still warm. Oil collected goes into a "used oil" container. Puncturing the top of the oil filter releases vacuum and can commonly allow 50% more oil recovery. Drained oil filters are recycled as scrap metal or handled as a solid waste, which can be disposed of in the trash. Drained filters are crushed to save space in the trash container and recover more salable used oil. Filters not crushed or properly drained are potentially a hazardous waste.

q. Used Refrigerant
    i. Most refrigerants are potent greenhouse gases. Some refrigerants also contain chemicals that destroy the earth's protective ozone layer. Therefore, regulations have been developed governing the maintenance and disposal of refrigerant-containing appliances.
    ii. It is unlawful to vent any refrigerant to the air. Federal and state rules require that persons working on refrigeration equipment, including automotive air conditioning systems, obtain training and pass a

certification exam. Please contact the RCC Risk Management Department for disposal options.

r. Used Shop Towels
    i. Rouge Community College maintains a contract with a third-party vendor to deliver new shop towels and recycle used shop towels.
    ii. Remove free liquids before tossing soiled shop towels in containers. Use simple means like hand wringing (while wearing proper protective equipment) or compressing them. Collect and reuse the liquids. If not directly reused, these liquids may be hazardous waste.
    iii. Do not dispose of solvents by pouring them into containers of used shop towels. This is illegal.
    iv. Used towels must be placed inside an approved container and cannot be left laying around.
    v. Do not accumulate used towels longer than 180 days before recycling.
    vi. For safety reasons, keep incompatible wastes separated. For example, don't mix towels with alcohols amid towels with acids.
    vii. Keep hazardous and nonhazardous shop towels segregated.
    viii. Make sure used shop towels contaminated with hazardous substances are collected, transported, and accumulated in closed containers. All containers are labeled with "contaminated shop towels."

s. Waste Generated in a Science Lab
    i. The Science Labs Coordinators at both the Redwood Campus and the Riverside Campus coordinate with the Risk Management Department on an annual basis to identify and dispose of unused chemicals in the Science labs.
    ii. The Science Lab Coordinators utilize a chemical inventory system called Flinn Scientific. Flinn Scientific also provides a detailed catalog that provides specific information regarding each chemical and the approved methods for disposal. Before any chemicals are disposed of, the Science Lab Coordinator would reference the Flinn Scientific Catalog for approved disposal methods.