

SECTION 10

OTHER FEDERAL AND STATE LAWS

**MIXED WASTE FACILITY
RCRA/TSCA PERMIT APPLICATION**

PERMA-FIX NORTHWEST RICHLAND, INC.

RICHLAND, WASHINGTON

Mixed Waste Facility

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SECTION 10.0 OTHER FEDERAL AND STATE LAWS [J]

WAC 173-303-806(a)(xix) states: *Applicants may be required to submit such information as may be necessary to enforce the department to carry out its duties under state or federal laws as required.*

Perma-Fix Northwest Richland, Inc. (PFNW-R) is not subject to the Wild and Scenic River Act, the National Historic Preservation Act of 1966, or the Coastal Zone Management Act. PFWN-R is located in an industrial site near the Hanford Site in an industrial area in the City of Richland. To the best of our knowledge, there are no endangered species or archaeological or historical sites within the property. No historic sites were found using Washington Department of Archaeology and Historic Preservation's online GIS map tool, WISAARD. This online site is designed to locate designated historical sites which are listed on the state and national register. WISAARD provides summary information about the listing sites.

The facility's permits are listed in Table 10-1.

Table 10-1 Facility Permits

PERMIT TYPE	PERMIT NUMBER
WA Dept. of Ecology & EPA Region 10 RCRA/ TSCA	WAR 0000 10355
WA DOH Radiological Materials License	WN105081
WA DOH Radiological Materials License	WN103931
WA DOH Radiological Construction Approval	NOC622
WA DOH Radiological Construction Approval	NOC459
WA DOH Radiological Construction Approval	NOC717
WA DOH Radiological Construction Approval	NOC457
WA DOH Radiological Construction Approval	NOC456
WA DOH Radiological Construction Approval	NOC312
LOCAL REQUIREMENTS	
Benton Clean Air Authority Notice of Construction Order	NOC19990013
Benton Clean Air Authority Notice of Construction Order	NOC2005002
Benton Clean Air Authority Order of Approval	OOA2005002
Benton Clean Air Authority Notice of Construction Order	NOC2007009
Benton Clean Air Authority Order of Approval	OOA2007009
Benton Clean Air Authority Notice of Construction Order	NOC2008009
City of Richland substantial development permit	Unknown

A completed checklist prepared under the State Environmental Policy Act (SEPA) is included.

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State Environmental Policy Act Checklist

Most of the information listed in the State Environmental Policy Act (SEPA) checklist was previously submitted with the facility's previous Part B permit application. The activities and estimated emissions associated with the proposed project described in this application are bounded by Environmental Assessments and Environmental Impact statements already completed for the facility. The original risk assessment was previously submitted and was approved as part of the facility's original RCRA application process. This check list serves as an update to previously submitted information. PFNW-R responses appear in italic font.

A. BACKGROUND

1. Name of proposed project, if applicable:

RCRA/PCB Permit Renewal Application (see new construction listed in Item 6 below)

2. Name of applicant:

Perma-Fix Northwest Richland, Inc.

3. Address and phone number of applicant and contact person:

Richard Grondin

Vice President and General Manager

Perma-Fix Northwest Richland, Inc.

2025 Battelle Blvd.

Richland, Washington

(509) 375-7022

4. Date checklist prepared:

Previous checklist February 14, 1998

Updated April, 2009 RCRA Renewal Application Rev 0

Updated April, 2011 RCRA Renewal Application Rev 1

5. Agency requesting checklist:

Washington Department of Ecology

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6. Proposed timing or schedule (including phasing, if applicable):

New process units as described in this application with anticipated construction dates are summarized below.

<i>New Process Construction Schedule</i>		
<i>Process Description</i>	<i>Process Designation</i>	<i>Proposed Construction Completion Date</i>
<i>Extraction Mixing</i>	<i>TP-10</i>	<i>Second half 2012</i>
<i>Sorting (Not Treatment)</i>	<i>TP-13</i>	<i>Second half 2012</i>
<i>Liquid Treatment</i>	<i>TP-14</i>	<i>Second half 2012</i>
<i>High-Capacity Mixing</i>	<i>TT-01</i>	<i>Second half 2012</i>
<i>Mercury Amalgamation Bulk Scale</i>	<i>TT-09</i>	<i>Second half 2012</i>
<i>Debris Washing</i>	<i>TT-10</i>	<i>Second half 2012</i>

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

See response to number 6.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- *RCRA/TSCA permit renewal Rev 0 application dated April, 2009*
- *RCRA/TSCA permit renewal Rev 1 application dated April 2011*

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposal, if known.

- *RCRA Permit from Washington State Department of Ecology*
- *PCB Permit from United States Environmental Protection Agency Region 10*

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

PNFW-R is a TSD facility that currently operates under RCRA/TSCA permit number WAR 0000 10035. This permit is coming up for renewal. PNFW-R wishes to continue TSD operations at the mixed waste facility. PNFW-R wishes to submit a RCRA/TSCA permit renewal application.

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12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

All units described in this submittal are currently or will be located in the MWF which includes existing Building 13. The PFNW-R facility is located on 45 acres at 2025 Battelle Boulevard in Richland, Washington. This location is in the northwest quarter of Section 22, Township 10 North, Range 28 East, Willamette Meridian with coordinates of Latitude 46 degrees 20 minutes 35 seconds and Longitude 119 degrees 17 minutes 52 seconds.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other

Same as previous submittal: Topography of the site is gently rolling and sloping to the south.

- b. What is the steepest slope on the site (approximate percent slope)?

Same as previous submittal: The steepest slope on the property is approximately 10%.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Same as previous submittal: Sand and gravel are the general types of soils found on the site.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Same as previous submittal: No, there is no indication or history of unstable soils in the immediate vicinity.

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e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Not applicable.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Not applicable.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Currently, approximately 12% of the entire 45 acre facility site is covered with impervious surfaces. This is a slight increase above the previous 10% impervious area value due to the construction of the RLA and TLA in 2011. (Construction was completed in 2011 under an approved Temporary Authorization). No treatment or permitted storage activities will take place in the RLA or TLA.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Standard best management practices are, and will continue to be, followed for erosion control at the facility.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Addition of units will take place inside building, no soil disturbance is required.

When the project is complete, air emitted from the operations will continue to meet regulations under the Clean Air Act and the Resource Conservation and Recovery Act. The air pollution control system for the systems described in this proposal will remove airborne contaminants prior to emitting treated air to the atmosphere. Radiation activity of treated air will continue to be monitored to ensure that levels are within prescribed safety limits.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Same as previous submittal: There are no off-site sources of emissions or odors that might affect this proposal.

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c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The air pollution control system for the systems described in this proposal will remove airborne contaminants prior to emitting treated air to the atmosphere.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Same as previous submittal: The Columbia River is located approximately 1.25 miles east of the project site. The Yakima River is located approximately 2.5 miles southwest of the project site. An intermittent stream channel is located about 0.5 mile to the west.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Same as previous submittal: No fill or dredge material will be required.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Surface water will not be withdrawn or diverted. Water will continue to be supplied through the city's water system.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Same as previous submittal: According to the Federal Emergency Management Association map for the city of Richland, the site is not within a 100-year or 500-year floodplain.

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6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Same as previous submittal: No, this proposal does not involve any discharge of waste materials to surface waters.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Same as previous submittal: No waste material will be discharged into the ground from septic tanks or other sources. The facility is connected to the city of Richland sanitary sewer system.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Same as previous submittal: Rainwater falling on the site will be the primary source of runoff, which will be diverted from buildings to percolate into surrounding soils. The site does not receive significant runoff from adjacent lands. Storage and treatment of dangerous waste occurs inside the building(s).

2) Could waste materials enter ground or surface waters? If so, generally describe.

Same as previous submittal: Waste materials will be treated on impervious surfaces and in buildings designed to contain all materials. Hence, hazardous materials or waste is not expected to be in contact with the ground or with surfaces waters, including storm water runoff.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

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Roof drainage from Building 13 is currently routed to a drainage pit/gravel area.

4. Plants

a. Check or circle types of vegetation found on the site:

_____ deciduous tree: alder, maple, aspen, other

_____ evergreen tree: fir, cedar, pine, other

X shrubs

_____ grass

_____ pasture

_____ crop or grain

_____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

_____ water plants: water lily, eelgrass, milfoil, other

X other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

None.

c. List threatened or endangered species known to be on or near the site.

Same as previous submittal: No threatened or endangered species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Same as previous submittal: None. The site contains few native plants and no native plant communities.

There are no plans to conduct extensive landscaping with plants as part of this project.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:

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mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other:

Same as previous submittal: The project site and vicinity contain little native habitat and are used by common species of birds, such as western meadowlark, white-crowned sparrow, gulls, black-billed magpie, American crow and European starling. Canadian geese, red-tailed hawk, and American kestrel are common in the general area and are likely to occasionally feed in croplands adjacent to the project site.

b. List any threatened or endangered species known to be on or near the site.

Same as previous submittal: None. During a wildlife survey conducted in 1989 at an area less than one mile from the proposed project location, no threatened or endangered species were encountered (DOE 1990). The absence of native vegetation and the industrial nature of the site make it generally unsuitable for threatened or endangered species.

c. Is the site part of a migration route? If so, explain.

Same as previous submittal: The entire Tri-Cities area is within a major waterfowl flyway and wintering area. Waterfowl are expected to fly over the project site and vicinity and may occasionally feed in croplands near the site, especially if grain crops are grown. However, most waterfowl use is concentrated along the Columbia River, and the project site and immediate vicinity are not significant use areas for migrating or wintering waterfowl.

d. Proposed measures to preserve or enhance wildlife, if any:

Same as previous submittal: No significant adverse affects on wildlife are expected, and no measures to preserve or enhance wildlife are proposed.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity is used to run various equipment. Diesel-generators will continue to provide emergency backup power. Some equipment burners require natural gas or propane.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

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Same as previous submittal: No, this project will not affect the potential use of solar energy by adjacent properties.

- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

Piping will be insulated where appropriate to save energy.

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?

If so, describe.

This project is subject to, and existing operations will continue to be subject to, strict protection requirements defined under the Clean Air Act, the Resource Conservation and Recovery Act, the Washington Hazardous Waste Management Act, and the Toxic Substances Control Act. In addition, the facility site was originally selected according to the siting criteria specified in WAC 173-303-282.

- 1) Describe special emergency services that might be required.

Coordination agreements exist with providers of emergency services.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Generally, the latest technology to reduce or eliminate environmental hazards will continue to be used at the facility. The proposed systems include air pollution control technology with various duplicate units for redundancy. Existing containment systems and procedures will continue to be in use.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None. The light industrial facilities nearby the project site generate low levels of noise, but within the industrial context of the project, this noise will have no effect on the project.

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- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Most noise-generating functions of the facility will occur within enclosures, so significant levels of exterior noise are not expected. Vehicles taking materials to and from the site will continue to generate traffic noise.

- 3) Proposed measures to reduce or control noise impacts, if any:

Any construction activities will take place during normal working hours. No other measures are proposed to reduce noise impacts.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?

The site contains low level and mixed low-level radioactive waste treatment facilities. DOE's equipment laydown yard is located approximately 0.25 miles east of the facility. A warehouse for plumbing supplies (currently operated by Furguson Enterprises) is located approximately 0.3 mile west of the facility. A nuclear fuel fabrication and processing facility (currently operated by Areva NP, Inc.) is located approximately 0.25 mile north of the facility. An industrial operation is located to the south of the facility.

- b. Has the site been used for agriculture? If so, describe.

Before the existing facility building was erected, the southern portion of the site was used to grow potatoes.

- c. Describe any structures on the site.

There is a guard shack in addition to 18 other structures on the site, most of which are between 100 and 150 feet long and 25 and 100 feet wide. The RLA concrete pad is approximately 90 feet long and 90 feet wide, and the TLA concrete pad is approximately 60 feet long and 70 feet wide.

- d. Will any structures be demolished? If so, what?

Same as previous submittal: No structures will be demolished as part of this project.

- e. What is the current zoning classification of the site?

Same as previous submittal: The site and immediate vicinity is zoned by the city of Richland for heavy manufacturing.

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f. What is the current comprehensive plan designation of the site?

Same as previous submittal: Industrial.

g. If applicable, what is the current shoreline master program designation of the site?

Same as previous submittal: Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Same as previous submittal: No part of the site has been classified as "environmentally sensitive."

i. Approximately how many people would reside or work in the completed project?

There are currently approximately 100 people working at the facility. This number will not change as a result of this project. There are not and will not be any residents on the property.

j. Approximately how many people would the completed project displace?

Same as previous submittal: None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Same as previous submittal: Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Same as previous submittal: None. The project is compatible with the heavy manufacturing designation of the site.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Same as previous submittal: None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Same as previous submittal: None.

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- c. Proposed measures to reduce or control housing impacts, if any:

Same as previous submittal: Not applicable.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The height and exterior of existing buildings will not be altered as part of this project.

- b. What views in the immediate vicinity would be altered or obstructed?

Same as previous submittal: None.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Same as previous submittal: None.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Existing outdoor lighting will not be altered as part of this project.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

Same as previous submittal: No.

- c. What existing off-site sources of light or glare may affect your proposal?

Same as previous submittal: None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

Exterior lighting levels will continue to be kept at the minimum necessary for safety and security.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Same as previous submittal: None.

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b. Would the proposed project displace any existing recreational uses? If so, describe.

Same as previous submittal: No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Same as previous submittal: Not applicable.

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

Same as previous submittal: No.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Same as previous submittal: None.

c. Proposed measures to reduce or control impacts, if any:

Same as previous submittal: Not applicable.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The facility is accessed by Battelle Blvd. which connects to Kingsgate Way to the west, which connects to state highway 240.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Same as previous submittal: No, the site is not served by public transit. The nearest transit stop is approximately 0.5 miles from the site.

c. How many parking spaces would the completed project have? How many would the project eliminate?

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There are no changes planned to the number of parking spaces on site as part of this project. The facility currently has approximately 100 parking spaces. None will be eliminated.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Not applicable.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

A rail line is located approximately 0.5 mile from the facility. A rail spur has been built onto the southern portion of the site in order for railcars to have access to the RLA.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

No additional vehicular trips are expected. Currently four road vehicle and two rail vehicle trips per day are expected

- g. Proposed measures to reduce or control transportation impacts, if any:

Same as previous submittal: Trucks will continue to take routes compatible for commercial use and will avoid streets in residential or commercial areas.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

Same as previous submittal: None proposed or required.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

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Same as previous submittal: All of the above except a septic system.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utilities are proposed.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: *R. Grand*

Date Submitted: 5/10/11