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**Basin Oil Corporation  
Seattle, Washington**

**DRAFT Facility Closure Plan**

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## Letter of Transmittal

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**ATTENTION:**

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Department of Ecology  
3190 160th Ave SE  
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**DATE:**

10/28/2005

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**PROJECT REFERENCE:**

Basin Oil Corporation

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Don Clabaugh  
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cc: Terry Drexler  
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## 1.0 INTRODUCTION

This closure plan is for the clean closure of the Basin Oil Corporation former used oil recycling facility at 8661 Dallas Ave S in Seattle, Washington (Figure 1). Closure of the facility is required under WAC 173-303-515(9) and WAC 173-303-610(2) and (12).

### 1.1 Facility Contact Information

The facility contact is Terry Drexler, President, Basin Oil Company. Telephone (206) 713-1330. Mailing address 21010 120th Dr SE, Snohomish, WA 98296.

### 1.2 Facility Description

Basin Oil Company closed "for the season" in April 2004 and did not reopen. The business, including clients and some infrastructure, was sold to Emerald recycling in April 2003. In June 2003 a closure plan was submitted to Washington Department of Ecology (WDOE), and decommissioning of the aboveground storage tanks (ASTs) commenced. Work was halted in October 2004 after the City of Seattle placed a "Stop Work Order" on the site. A SEPA checklist has been submitted to the City of Seattle along with plans for the demolition of the remaining ASTs at the facility.

Terry Drexler is the owner and operator of the Basin Oil facility. Mr. Drexler formerly operated Basin Tank and Environmental Service (BTES) at the same facility. BTES removed above ground and underground storage tanks and residential heating oil tanks. An estimated 600 55-gallon drums accumulated during BTES operations and are stored at a private residence across the street to the west of the Basin Oil facility.

### 1.3 Facility History, Function, Location and Layout

Basin Oil was a collector, transporter, and marketer of used oil. Used oil was delivered to the facility by Basin Oil tank trucks and transferred to storage tanks prior to treatment. Figure 2 shows the site layout while the facility was in operation. Treatment included gravity sediment separation and de-emulsification by heating. Following treatment and cooling, the oil was blended for BTU value and transferred into tank trucks for transport to off-site customers. These operations were conducted in an aboveground storage tank farm comprised of approximately 22 tanks with a total capacity of approximately 150,000 gallons.

The north end of the facility was used by Basin Oil to unload used oil for processing and to process and store the product. The ground is surfaced with concrete and was bermed to control drainage. The south end of the facility currently had relatively newer tanks; the south portion of the facility was formerly used for drum crushing and storage and the draining and crushing of used oil filters.

### 1.3.1 Topography

Surface topography at the plant site is relatively flat. The facility slopes gradually to the east toward the Duwamish Waterway. The general terrain and surrounding water bodies are shown on Figure 1.

### 1.3.2 Site Drainage

Average annual rainfall at the site is approximately 36 inches. Surface water drainage in the north portion of the facility is over concrete and channeled by slope and berm to an oil-water separator. Discharge from the oil-water separator was onto Dallas Avenue South toward the Duwamish Waterway under an NPDES permit. The oil-water separator is currently not operated.

Surface water drainage in the south portion of the facility is overland runoff to an oil-water separator. The oil-water separator is not currently operating.

## 1.4 Products and Production Processes

Currently there are no active processes or products at the facility. 18 of the 26 ASTs have been removed. Remaining wastes include crushed oil filters (two approximately 10 foot by 20 foot trailers), cleaning products and approximately 600 55-gallon barrels of BTES wastes as described in Section 1.2.

## 1.5 Waste Management and Units

The approximately 600 55-gallon barrels of BTES wastes will be characterized, segregated and process at the facility. This process is described in Section 3.1.

## 1.6 Unit Description

The information in this section provides a description of the facility that is the subject of the closure plan, its design, and how it worked.

There are no manufacturing or processing operations conducted outdoors that generate significant quantities of dust or particulates.

### 1.6.1 Materials Storage

Most of the hazardous and nonhazardous materials were stored in ASTs. The size and contents of each AST is provided in Table 1. Drums of finished product were stored inside a covered building. Storm water that falls within the process area was channeled to an oil-water separator.

### **1.6.2 Loading/Unloading Operations**

There was one truck loading/unloading area in the northern portion of the facility. Facility personnel supervised all loading/unloading operations to ensure that proper handling procedures are used, and to respond to spills.

### **1.6.3 Maximum Waste Inventory**

The maximum amount of waste that could be present at the facility includes the two 10-foot by 20-foot containers (estimate 20 cubic yards (cy)) and the 600 55-gallon barrels (estimate 165 cy).

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## 2.0 CLOSURE PERFORMANCE STANDARD

The former used-oil recycling facility will be closed in a manner that complies with the performance standard in WAC 173-303-610(2)(a) and, therefore, achieves clean closure.

The objectives of closure activities at the facility are as follows:

- Minimize the need for further maintenance.
- Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, the post-closure escape of dangerous waste, dangerous constituents, contaminated run-off, or dangerous waste decomposition products to the ground, surface water, ground water, or to the atmosphere.
- Remove all waste and waste residues and properly dispose of them off site.
- Remove the tanks, containers, piping, and other items that make up the former used oil recycling facility and properly dispose of them off site.
- Remove concrete berms and base and properly dispose of them off site.
- Perform soil sampling and analysis to ensure soils in the solvent load and unload area meet standard MTCA cleanup levels for unrestricted site use, and remove any soils contaminated above these levels. *typo?*
- Return the land to the appearance and use of surrounding land areas to the degree possible, given the nature of the previous dangerous waste activity.

### 3.0 CLOSURE ACTIVITIES

#### 3.1 Segregation and Characterization of Wastes

Basin Oil plans to contract with Systech's Seattle facility or a similar facility to dispose of BTES waste materials. The material will be characterized according to this Workplan and then processed into three distinct waste streams suitable for disposal at Systech (water, solids and oils). The objective of the waste characterization is to ensure that potentially hazardous materials are not processed, and that dangerous waste is not improperly disposed. The results of the characterization will be relied upon by Basin and Systech to ensure proper disposal of the estimated 600 barrels of BTES waste material.

##### 3.1.1 Step 1 – Segregation by Visual Inspection

Each barrel will be lowered to the ground, numbered, opened and inspected. Barrel number and visual description will be recorded. Based upon the labeling and the visual inspection the barrel will be segregated into one of the following categories:

1. Petroleum contaminated soil (PCS) with BTES label.
2. Sludge with BTES label.
3. Oil with PCS and/or sludge with BTES label.
4. Oil with BTES label.
5. Oily water with PCS and/or sludge with BTES label.
6. Oily water with BTES label.
7. Other (i.e., barrels with more than one label or no BTES label, or barrels with a BTES label and material other than noted above).

The number corresponding with the type of waste will be recorded for each barrel number.

##### 3.1.2 Step 2 – Verification Sampling and Analysis

Barrels with only the BTES label were accumulated during residential heating oil tank removals. Once the barrels have been segregated into the 8 distinct groups by visual identification, waste characterization will be completed as follows.

### **3.1.2.1 Petroleum contaminated soil (PCS) with BTES label.**

Barrels will be characterized by generator knowledge and further segregated based upon odor. The objective of this further segregation is to separate drums with PCS that have greater than 10,000 BTU from drums that have less than 10,000 BTU. Further testing will be completed to determine the BTU content; however, no further testing will be used to characterize the waste. PCS with BTES label will be characterized by generator knowledge.

### **3.1.2.2 Sludge with BTES label.**

Barrels with only sludge and a BTES label probably are not present. Sludge accumulated during the decommissioning of residential oil tanks would typically exist with liquids or solids. If such barrels are observed, then they will be segregated and further characterized by SECOR. Each barrel with sludge will be sampled, and samples will be composited four to one (i.e., discrete samples from four barrels will be used to create one composite sample). Samples will be sent to the laboratory and analyzed for TCLP metals by 6000/7000 series methods and for BTU content.

### **3.1.2.3 Oil with PCS and/or sludge with BTES label.**

Barrels with mixed materials will be further characterized by sampling to ensure that dangerous wastes are not present. These barrels will be further characterized by ENSR.

- Each barrel will be visually inspected: a small volume of the oil will be placed in a glass container; color will be noted and recorded; the container will be emptied back into the barrel and viscosity will be recorded. The objective of this visual inspection is to verify that the oil content is from residential heating oil; residential heating oil has a different color and viscosity than waste oil that can be detected by visual observation. Any barrel with very dark oil or very low viscosity oil will be further segregated.
- Solids and/or sludge from ten percent of the barrels with residential heating oil will be sampled, and samples will be composited four to one (i.e., discrete samples from four barrels will be used to create one composite sample). Samples will be sent to the laboratory and analyzed for TCLP metals by 6000/7000 series methods and for BTU content.
- Solids and/or sludge from each barrel with very dark oil or very low viscosity oil will be sampled, and samples will be composited four to one (i.e., discrete samples from four barrels will be used to create one composite sample). Samples will be sent to the laboratory and analyzed for TCLP metals by 6000/7000 series methods and for BTU content.

#### **3.1.2.4 Oil with BTES label**

Barrels with only oil probably are not present. Oil accumulated by BTES typically would have been recycled at the Basin facility. Each barrel will be visually inspected: a small volume of the oil will be placed in a glass container; color will be noted and recorded; the container will be emptied back into the barrel and viscosity will be recorded. The objective of this visual inspection is to verify that the oil content is from residential heating oil; residential heating oil has a different color and viscosity than waste oil that can be detected by visual observation. Any barrel with very dark oil or very low viscosity oil will be further segregated.

- Barrels containing residential heating oil will be transported to, and recycled at, an operating used-oil recycling facility.
- Oil from each barrel with very dark oil or very low viscosity oil will be sampled, and samples will be composited four to one (i.e., discrete samples from four barrels will be used to create one composite sample). Samples will be sent to the laboratory and analyzed for TCLP metals by 6000/7000 series methods and for BTU content.

#### **3.1.2.5 Oily water with PCS and/or Sludge with BTES label**

A majority of the barrels accumulated during decommissioning of residential heating oil tanks will contain oily water or oily water with some solids. Solids will be placed into a container to settle, and liquids will be decanted. Solids will be further tested to determine the BTU content; however, no further testing will be used to characterize the waste. These solids will be characterized by generator knowledge. The liquids will be recycled at an operating used-oil recycling facility.

#### **3.1.2.6 Oily water with BTES label.**

Barrels with oily water and a BTES label were accumulated during tank rinsing. Liquids will be placed into a tank at the Basin facility, and the oily phase will be allowed to segregate and then decanted. Oil and water will then be characterized by generator knowledge and recycled by an operating used-oil recycling facility.

#### **3.1.2.7 Step 3 – Disposal**

Disposal will be coordinated with System (for non-dangerous waste) or Phillips (for dangerous waste).

### **3.2 Removal of Parts, Equipment, Piping, Containment and Other Equipment**

Remaining facility infrastructure includes 8 ASTs, associated piping and containment, and oil-water separators. Basin Oil plans to decontaminate these materials to meet the appropriate standards.

When WDOE confirms that the tanks are decontaminated, Basin Oil will consider the ASTs clean and will sell them for reuse or recycling or will dispose of them at an appropriate off-site disposal facility.

### **3.3 Unit Inspection Prior to Decontamination**

Prior to decontaminating the facility and removing surface coatings and concrete, cracks and other failures will be examined and recorded by hand measure for use in completing the Sampling and Analysis Plan (SAP) for characterization of surface soil quality. Basin Oil will maintain a record of the location and dimensions of all cracks or other openings identified during this evaluation, as well as any other indication of the potential for spills or releases at or from the facility, and will use this information to determine whether there is any need to recommend focused soil sampling and analysis during closure for Ecology review. The records will be kept in the field notebook used by the independent qualified registered professional engineer overseeing closure.

### **3.4 Decontamination**

Basin Oil will decontaminate metal tanks, containers, and piping during closure. Interior and exterior metal surfaces of the tank systems, including piping, will be decontaminated using water washing and spraying until they meet the clean debris surface standard. Wash water will be collected in the concrete containment structure (provided no cracks or other openings are identified that might allow wash water to be released) and pumped from the oil-water separator into a container truck. When decontamination is complete, wash water used in this process will be sampled, analyzed, and evaluated for disposal purposes, and appropriately disposed of off site. When Ecology confirms that the tanks are decontaminated to meet the clean debris surface standard, Basin Oil will sell them for reuse or recycling or will dispose of them at an appropriate off-site disposal facility.

Basin Oil intends to demolish all concrete containment structures and surfaces. The concrete will be transported and disposed of at an appropriate off-site disposal facility.

### **3.5 Identifying and Managing Contaminated Environmental Media**

The Basin Oil facility is currently listed on the WDOE confirmed and suspected contaminated sites list. Following demolition of the structures and decontamination and removal of concrete surface, the site will be entered into the Voluntary Cleanup Program (VCP). Further management of potentially contaminated soil and groundwater will be addressed through that program.

### **3.6 Confirming Clean Closure**

Basin Oil anticipates conducting sampling and analysis and selected removal actions to achieve clean closure for the facility. These activities will be conducted under the WDOE VCP program.

Confirmation of clean closure, therefore, will be the successful closure of the site through the VCP program and receipt of a "No Further Action" status for detected contamination at the site.

### **3.7 Role of the Independent Qualified Registered Professional Engineer**

An independent qualified registered professional engineer will become familiar with Basin Oil's closure activities by observing field activities and reviewing records. At a minimum, this will include field observation and a review of records of the following activities:

- Removal of waste (and removal of any unit components or other materials) and disposition of waste (and other materials removed) to ensure the removal was complete and materials were properly disposed.
- Decontamination procedures and results to ensure that the closure plan for decontamination was followed and the clean closure standard for decontamination was achieved - this will include inspecting metal tanks and the concrete containment system after decontamination to confirm that a "clean debris surface" and other decontamination performance standards are achieved.
- Management of decontamination residuals to ensure management was properly carried out.
- Sampling procedures and results.
- Locations of sampling to ensure locations were as specified in the sampling and analysis plan.
- Sample labeling and handling, including chain-of-custody procedures.

When closure is complete, the independent qualified registered professional engineer will sign and stamp Basin Oil's certification of clean closure.

### **3.8 Certification of Clean Closure**

Within 60 days of closure of the solvent recycling unit, Basin Oil will submit to Ecology, by registered mail, certification that the unit has been closed in accordance with this closure plan. The certification will be signed by Basin Oil's owner. Basin Oil's owner will make the following certification:

*I certify under penalty of the law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information,*

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*the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing of violations.*

The closure certification also will be signed and stamped by an independent qualified registered professional engineer who is familiar with Basin Oil's closure activities.

Basin Oil will submit the following information to support its closure certification:

- A "No Further Action" status letter from the WDOE VCP Program.
- All field notes and photographs related to closure activities, including the results of the inspection of the unit and containment system for cracks and other openings prior to decontamination.
- A description of any minor deviations from the approved closure plan and justification for these deviations.
- Documentation of the final disposition of all wastes and residues, including contaminated media, debris, and all treatment residuals.
- A description of what the unit area looks like at completion of closure, including a description of what parts of the former unit, if any, will remain after closure.

### **3.9 Conditions That Will Be Achieved When Closure Is Complete**

Basin Oil plans to completely remove the ASTs, associated equipment and piping, concrete surface and all other facility features. When closure is complete, the site will be bare ground; it is not decided whether fencing will remain or be demolished.

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## 4.0 CLOSURE SCHEDULE AND TIMEFRAME

### 4.1 Closure Schedule

Closure activities at the facility have been delayed until a permit can be obtained from the City of Seattle. Once the permit is obtained, it is anticipated that closure will be complete within the total of 180 days allowed for closure. Additional time may be required if enough dry days are not available to segregate the wastes; if necessary an extension to the closure period will be requested.

Notification of intent to close will be sent to Ecology immediately upon receipt of the permit from the City of Seattle. Basin Oil will begin demolition of ASTs at that time. Once ASTs have been demolished, waste segregation and characterization will begin as described in Section 3. Subsequent activities will take approximately 30 days, and at that time Basin Oil will investigate the site and complete necessary soil removal activities under the WDOE VCP.

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## 5.0 COST OF CLOSURE

### 5.1 Closure Cost Estimate

The information presented in this section for implementing the Closure Plan has been prepared in accordance with WAC 173-303-620(3). The following assumptions were used in developing the cost estimate:

- A third party will be used to conduct closure activities.
- The maximum dangerous waste volume will be present on site and managed during closure.
- Salvage value of recyclable solvents is not included in the closure cost estimate. The salvage value for recyclable solvents was determined based on the average value of recycled solvents in the past calendar year.
- Costs will be incurred for management of wastes handled during closure.
- Closure certification activities will be conducted by an independent qualified registered professional engineer registered in Washington State and a certification that closure has been done in accordance with the approved closure plan will be submitted to Ecology as required in WAC 173-303-610(6).
- Costs for closure labor, equipment, and analytical services are based on currently available rates. At the time of implementation of this Closure Plan, Basin Oil reserves the option to use any other appropriately-permitted facility for disposal or recycling of wastes.

### 5.2 Financial Assurance for Closure

Basin Oil will meet the financial assurance requirements specified under WAC 173-303-620(4) through continual maintenance of a financial assurance mechanism for closure with the Department of Ecology.

### 5.3 Financial Assurance for Liability

Basin Oil will meet the financial assurance requirements for specified under WAC 173-303-620(8) through a corporate guarantee issued by Terry Drexler, Basin Oil's President and Owner.

**TABLE 1**

*Aboveground Storage Tank Capacity  
Basin Oil Company, Inc., Seattle, Washington*

TANK	CAPACITY (gallons)	DIAMETER (feet)	CONTENTS
A-1	6000	8	New Anti Freeze
A-2	6000	8	Used Anti Freeze
B-1	100	1.2	Thermal Oil Heater
B-2	100	2	Thermal Oil Heater
C-1	4000	6.37	Heating Tank
C-2	4000	6.37	Heating Tank
CD-1	4000	6.37	Cool Down Tank
CD-2	4000	6.37	Cool Down Tank
F-1	4000	6	Diesel for Refueling Fleet
F-2	1500	5.09	Plant Fuel
K-1	110	1.2	Stove Oil
T-1	10000	6.37	Non-potable Water
T-2	10000	8.06	Used Oil
T-3	10000	8.06	Processed Oil
T-4	10000	8.06	Used Oil
T-5	6000	7.96	Non-potable Water
T-6	5000	6.37	Non-potable Water
T-7	20000	12	Processed Oil
T-8	20000	12	Processed Oil
T-9	12000	10	Used Oil
T-10	8000	9	Used Oil
T-11	6000	8	Used Oil
T-12	300	1.5	Used Oil (filter crush)
T-13	500	2	Used Oil
S-1	20000	12	Empty
S-2	20000	12	Empty
S-3	20000	12	Empty
S-4	10000	8	Empty
S-5	20000	12	Empty
S-6	10000	8	Empty
S-7	10000	8	Empty

TOTAL TANK CAPACITY	255,610
TOTAL OIL CAPACITY	111,200
TOTAL WATER CAPACITY	5,610
TOTAL ANITFREEZE CAPACITY	14000