

City of Tacoma Environmental Services Department

August 15, 2014

SENT VIA CERTIFIED MAIL

Martin Powers CH2M Hill 1100 112th Ave. NE , Suite 400 Bellevue, WA 98004-4504

Subject: Industrial Wastewater Discharge Permit Issuance.

Dear Mr. Powers:

The final copy of the Lilyblad Petroleum Site Remediation Project's renewed Industrial Wastewater Discharge Permit and Fact Sheet are enclosed. The Industrial Wastewater Discharge Permit is effective August 17, 2014, through August 16, 2019.

The renewed permit number has been designated as TAC-039-2014. This number is intended to replace old permit number TAC-039-2009. With the issuance of this permit, your old permit is effectively closed out.

Please note that the new permit now requires the submittal of semi-annual reports (two per year) to Environmental Services (ES) due July 15 and January 15 for the respective reporting periods. This change in reporting reflects CH2MHill's request for a reduced sampling and reporting burden. Semi-volatile compounds and total metals are still required to be collected as composite samples.

CH2MHill's request to designate Mario Lopez Ramos as the Authorized Representative is hereby granted. He is now recognized as the Authorized Representative for the permit and is eligible to sign the required reports.

CH2MHill is proposing to use two new iron sequestering agents in its treatment system, Oil Safe AR and VOA manufactured by Heartland Energy Group LTD. Both products in their undiluted form have pH reading of less than 1 standard unit. Bench testing at a 50:1 dilution ratio on both products indicate a pH of 1.3 to 1.5 standard units. Since the approved treatment system does not provide for pH treatment ES does not approve the use of either product in the Lilyblad Petroleum treatment system. For ES to approve the use of either product, CH2MHill must provide an engineering report pursuant to WAC 173-240 that evaluates the addition of pH neutralization to the current treatment system.

Should you have any questions regarding the renewed permit or fact sheet, please feel free to contact Mark Stafford at (253) 502-2110.

Sincerely.

Michael L. Kennedy

Assistant Division Manager

Environmental Compliance Support

MLK:MS:cfp

CC:

Ha Tran, WSDOE,

Mario Lopez Ramos, CH2MHill

Sent by First Class and Certified Mail: 7011 2000 0000 7256 6427

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INDUSTRIAL WASTEWATER **PERMIT**

Permit Holder:

Washington State Department of Ecology

Mailing Address:

PO Box 47706, Olympia, WA 98504-7600

Authorized Representative: CH2M Hill, Inc.

Mailing Address:

1100 112th Ave. S. Suite 400

Discharge Location:

2244 Port of Tacoma Road Suite 400

Tacoma WA 98421

Industry Type:

Groundwater remediation

Contact Person:

Mario Lopez Ramos

Phone: 425-233-3120

2.

1.

Ha Tran

Phone: 360-407-6064

Storm Drainage Basin:

Tideflats

The above Industrial User, (Permittee), is authorized by the Director of the Department of Environmental Services (Director), of the City of Tacoma (City), to discharge only industrial wastewater into the City's municipal sanitary sewer system. The Permittee shall maintain compliance with City Municipal Code Chapter 12.08 and any or all applicable provisions of federal and state laws or regulations, as amended, in accordance with specific provisions of this permit.

This permit is granted based upon the information filed on March 12, 2014, with the Environmental Services Business Operations Division, an authorized representative of the Director, and with plans, specifications, and/or other data submitted in support of the above application.

Dan C. Thompson, Ph.D.

Business Operations Division Manager City of Tacoma / Environmental Services

The 24-hour emergency telephone number to report spills is (253) 591-5595. During regular business hours (8:00 A.M. to 4:30 P.M.) contact the Director at (253) 591-5588.

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 Effective:
 August 17, 2014

 Expiration
 August 16, 2019

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T.1 WASTEWATER DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the date of the permit and remaining in effect until the expiration date, the Permittee is hereby authorized to discharge domestic sewage, boiler blowdown and cooling tower blowdown and industrial wastewater into the City's municipal sanitary sewer system subject to the following limitations.

A. WASTEWATER DISCHARGE LIMITATIONS

Discharge Point 001—Industrial wastewater may be discharged into the sanitary sewer through Discharge Point 001 under the terms and conditions of this permit including treated wastewater from the following processes: Discharge Point 001 is the sanitary side sewer running from 2244 Port of Tacoma Road to the municipal main located in Port of Tacoma Road. The Permittee may discharge treated industrial wastewater from the groundwater extraction treatment system through Discharge Point 001.

Wastewater Discharge Limitations for Connection 001

Parameters	Units	Daily Maximum
Arsenic, Total	mg/L	0.1
BETX ¹	mg/L	10 mg/L
Cadmium, Total	mg/L	0.25
Chromium, Total	mg/L	1.0
Chromium, Hexavalent ²	mg/L	0.25
Copper, Total	mg/L	1.0
Flow, Total and Rate	gpd/gpm	6500/40
Lead, Total	mg/L	0.4
Mercury, Total	mg/L	0.05
Nickel, Total	mg/L	1.0
pH within the range of	units	5.5-11.0
Volatile and Semi-Volatile Organics	mg/L	2.13 ³
Total Petroleum Hydrocarbons ⁴ (TPH)	mg/L	50 ⁵
Zinc, Total	mg/L	2.0

B. SPECIFIC PROHIBITIONS:

In addition to the above limitations, it is unlawful to discharge, cause to discharge, or allow to be discharged directly or indirectly the following pollutants into the City's Municipal Sewer System:

Free-floating oil or visible sheen.

Benzene, ethylbenzene, toluene, total xylenes. Benzene may not exceed 0.5 ppm.

² Chromium ⁺⁶ shall be analyzed when the total chromium concentration is > 0.25.

³ Total of all concentrations detected greater than 10 ug/L as determined by US EPA methods 624 and 625 except BETX.

⁴ Analyzed using EPA Method 1664A and reported as Silica Gel Treated Hexane Extractable Material (SGT-HEM).

⁵ No free floating oil or visible sheen is allowed.

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 Flammable solvents or pollutants which may create a fire or explosion hazard in the municipal sewer system including, but not limited to, wastewater with a closed cup flashpoint of less than 140 °F or 60 °C using test methods prescribed in 40 CFR 261.21.

- Potentially toxic or harmful materials, other than those listed in T1.A, unless specifically approved by the Director. Specific limitations may be placed on other parameters, if determined appropriate by the Director.
- Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the POTW is specifically designed to accommodate such discharges.
- Any pollutant released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW.
- Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW.

C. WASTEWATER MONITORING REQUIREMENTS

Samples for the parameters listed below shall be taken from the sampling spigot just after treatment unless otherwise noted below.

Parameter	Sampling Frequency	Type of Sample	EPA Analysis Method
BETX	Semi Annual	Grab	624
Chromium ⁺⁶	Semi Annual	Grab	SM 3500-CR-B
Flow	Continuously	Metered	
Metals, Total ⁶	Semi Annual	Composite	200.7
pH	Semi Annual	Metered/Grab	150.1
Semi-Volatile Organics ⁷	Semi Annual	Composite	625
Total Petroleum Hydrocarbons	Semi Annual	Grab	1664A
Volatile Organic Aromatics ⁸	Semi Annual	Grab	624

The Director may establish by administrative order or permit modification specific monitoring requirements in addition to those contained in this permit.

The Permittee shall analyze samples for all listed parameters and is responsible for continuous compliance with all of the above limitations.

If sampling and analysis of the discharge are performed over and above the requirements of this permit, they shall be done in accordance with the methods described in this permit and the results submitted to the Director within the time frames specified for required reports.

Note: If no discharge occurred during the reporting period, the Permittee shall submit a report affirming no discharge occurred.

⁸ Analytes are those determined by US EPA Method 624.

⁶ Total metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

⁷ Analytes are those determined by US EPA Method 625.

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All samples taken for parameters listed in Section T1.A from the sample location described in Section T2.D, shall be collected and analyzed in accordance with 40 CFR Part 136 Guidelines Establishing Test Procedures For The Analysis Of Pollutants. Results of those analyses shall be submitted to the Director within the time frame specified for required reports.

D. DEFINITIONS

1. AUTHORIZED REPRESENTATIVE

The Authorized Representative shall be:

a. A responsible corporate officer, if the Industrial User submitting the reports is a corporation.

For the purpose of this paragraph, a responsible corporate officer means:

- i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
- ii. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. A general partner or proprietor if the Industrial User submitting the reports is a partnership, or sole proprietorship respectively.
- c. A duly authorized representative of the individual designated in paragraph a. or b. of this section if:
 - The authorization is made in writing by the individual described in paragraph i. a. or b.;
 - The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - iii. The written authorization is submitted to Environmental Services Business Operations.

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d. If an authorization under paragraph c. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph c. of this section must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative.

2. COMPOSITE SAMPLE

A composite sample is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be either of the following types:

- A "time-composite" sample, which is composed of discrete sample aliquots collected in one container at constant time intervals, irrespective of stream flow; or
- b. A "flow-proportional" sample, which is collected either at constant sample volume at time intervals proportional to stream flow, or by sample volumes proportional to flow while maintaining a constant time interval between aliquots.

3. DAILY MAXIMUM

Daily maximum is the greatest allowable value for any calendar day.

4. DAILY MAXIMUM FLOW

Daily maximum flow is defined as the highest flow during any day of the reporting period.

5. DAY (CALENDAR)

A calendar day begins and ends at midnight.

6. GRAB SAMPLE

A grab sample is an individual sample, collected in less than 15 minutes without regard to flow or time.

7. MAXIMUM CONCENTRATION

Maximum concentration is the highest allowable concentration on any given day.

8. PARAMETER

A parameter is a contaminant in industrial wastewater for which a discharge limit or condition has been established.

9. SAMPLE FREQUENCY

Sample frequency is the periodicity of compliance monitoring for a particular wastewater discharge as shown in Section T1.C of this permit.

10. SAMPLE LOCATION

The sample location for the Permittee shall be the spigot located directly down stream of treatment.

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11. INDUSTRIAL PROCESS WASTEWATER

Industrial process wastewater is any non-domestic wastewater for which either numerical or narrative limits have been established.

12. BYPASS

A "bypass" is the intentional diversion of a wastestream from any portion of a Permittee's pretreatment facility.

13. SEVERE PROPERTY DAMAGE

Severe property damage is defined as substantial physical damage to property or pretreatment facilities which could cause them to become inoperable or a substantial and permanent loss of natural resources which one may reasonably expect to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

14. PERSON

The term "person" means an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.

E. SAMPLING REQUIREMENTS

1. REPRESENTATIVE SAMPLING

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge and shall be collected, preserved, and analyzed in accordance with 40 CFR Part 136, *Guidelines Establishing Test Procedures For The Analysis of Pollutants*, as amended.

Samples shall be taken at a time that is representative of a normal workday when typical operations are in progress and when the usual process wastewaters are generated.

2. RECORDING RESULTS

For each measurement or sample taken pursuant to the requirements of this permit the Permittee shall record the following information:

- a. Place, date and time of sampling;
- b. Dates the analyses were performed;
- c. Person(s) performing the sampling and analyses;
- d. Analytical techniques or methods used;
- e. Method detection or practical quantitation limit as described in 40 CFR Part 136 Appendix B for any parameter the result of which is reported as non-detect; and
- f. Results of all analyses.

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3. TEST PROCEDURES

Monitoring activities to meet the requirements specified in this permit, including sampling and analysis, shall be performed by a laboratory accredited by the Department of Ecology for such analyses.

Unless approved otherwise in writing by the City, sampling protocols and analytical methods shall conform to 40 CFR Part 136, as amended, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*.

Specific analytical techniques shall be selected to ensure that method detection limits are equal to or less than the discharge limitations of this permit.

T2. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. ACCIDENTAL SPILL PREVENTION PLAN

The Permittee shall have on file an Accidental Spill Prevention Plan (ASPP) to eliminate or minimize the potential for accidental, excessive or slug discharge of pollutants into the municipal sewer system. The ASPP shall include at a minimum the elements listed in 40 CFR Part 403.8(f)(2)(vi)(A-D) and Tacoma Municipal Code Chapter 12.08.

On an annual basis or whenever changes occur that affect the accuracy of the ASPP, the Permittee shall review the Plan, make any necessary modifications, and submit the revisions to the Director for approval.

If no changes to the Plan are necessary, then the following statement certifying that the current ASPP on file is up to date shall be submitted to the Director no later than January 15th of each year.

"I certify that the current Accidental Spill Prevention Plan approved by the Environmental Services Department is up to date and that I have the financial resources and authority to implement the plan."

The Plan and any subsequent revisions shall be submitted to the Director for approval. Once the Plan is approved, its implementation by the Permittee will be enforceable as a permit condition.

B. FLOW METER

The Permittee shall operate, calibrate, and maintain the flow meter in accordance with the manufacturer's recommendations and the Director's "Submeter Installation and Testing Guidelines" (see Appendix A).

If the meter fails the accuracy test, it shall be replaced with a certified meter prior to any subsequent batch discharge requests.

All maintenance and calibrations shall be recorded in a log and made available for inspection by the Director.

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C. OFF-SITE DISPOSAL OF LIQUIDS AND SLUDGES

For liquid wastes and sludges removed from the Permittee's facility the Permittee shall record and retain for a period of at least three (3) years the:

- 1. Constituents of the substance(s) or, if its constituents are not known, the trade name;
- 2. Volume of each substance;
- 3. Date(s) each waste was transported and the licensed facility to which it was sent;
- 4. Identity and identification number(s) of the licensed waste transporter(s); and
- 5. Copy of the signed waste manifest(s).

D. SAMPLE LOCATION

The Permittee shall maintain an approved sampling point to allow inspection, sampling and flow measurement of each industrial wastewater stream discharged. The sampling point shall be in accordance with the requirements specified by the Director. Samples for permit compliance shall be taken from sample spigot after treatment and before discharge to the sanitary sewer.

E. CEASE DISCHARGE

By order of the Director or his designated representative(s), the Permittee shall cease discharge when ANY of the following conditions occur:

- 1. Director or his/her designee determines such action is necessary to implement Section T4.N of this Permit; and/or
- 2. Director or his/her designee determines such action is necessary to protect capacity within the municipal sanitary sewer system, including the City's Publicly Owned Treatment Works.

F. WASTEWATER DISCHARGE LINE REMOVAL

When the site remediation project is complete, the wastewater pipe installed for this discharge shall be removed and the connection to the sanitary sewer that serves 2244 Port of Tacoma Road must be properly abandoned.

T3. REPORTING REQUIREMENTS

A. ROUTINE REPORTING

The Permittee shall submit **semi-annual** reports to the Director listing the sampling results for the parameters specified in section T1.A.

Results obtained during the previous reporting period shall be submitted to the Director no later than the **15**th calendar day of the month after the completed reporting period.

Discharge monitoring shall begin on the effective date of this permit and future reports shall be due **January 15**th, and **July 15**th.

All reports and document shall include the certification statement in Section T4.J accompanied by the Authorized Representative's original signature.

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A report must be submitted whether or not a discharge has occurred during the reporting period.

Any reason(s) for not complying with this section and any steps taken by the Permittee to comply shall be part of the report.

If the Permittee monitors any pollutant more frequently than required by Section T1.C of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's monitoring report.

B. ACCIDENTAL, SLUG, AND EXCESSIVE DISCHARGE REPORTING

Immediately upon becoming aware of any accidental, excessive or slug discharge to the sanitary sewer, the Permittee shall notify the Director.

Within five (5) calendar days of the occurrence, written notification describing the circumstances of the discharge or spill and the disposition of the spilled materials shall be submitted to the Director.

On a case-by-case basis the Director may waive the written report if verbal notification was received immediately and the incident was considered minor.

C. NON-COMPLIANCE REPORTING

Within 24 hours of discovery, any event or circumstance that places the Permittee in a temporary state of non-compliance with the terms and conditions of this Permit or Tacoma Municipal Code Chapter 12.08 shall be reported to the Director.

Within five (5) calendar days, a written report explaining the circumstances surrounding the event and any corrective action(s) taken shall be submitted to the Director (See Section T4.T General Conditions).

Within 24 hours of discovery, any failure to meet the discharge limits or sampling frequencies specified in Section T1 of this permit shall be reported to the Director.

Within 30 calendar days after discovery, the Permittee shall repeat the analysis of each parameter that exceeded its discharge limitation and submit the results to the Director.

D. REPORTING ADDRESS

All reports shall be submitted to the following address:

Pretreatment Coordinator Environmental Services Department **Business Operations Division** 326 East D Street Tacoma, WA 98421-1801

Business Hours: (253) 591-5588.

Afterhours:

(253) 591-5595.

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T4. GENERAL CONDITIONS

A. PROHIBITED MATERIALS

The Permittee shall comply with the general prohibited discharge standards in Tacoma Municipal Code Chapter 12.08.020 **Prohibitions on Discharges—Sanitary** and 12.08.030 **Prohibitions on Storm drainage, Ground Water and Unpolluted Water-Sanitary**.

B. RIGHT OF ENTRY

At all reasonable times the Permittee shall allow authorized designees/representatives of the Director bearing proper credentials and identification to:

- 1. Enter upon the Permittee's premises to inspect and investigate conditions relating to compliance with any of the terms and conditions of this permit;
- 2. Access and copy any records required under this permit;
- 3. Inspect any pretreatment or monitoring equipment required by this permit; and
- 4. Sample any regulated wastestreams generated by the facility.

Failure to allow inspection, sampling, monitoring, metering or copying as authorized by this section shall be grounds for termination of wastewater treatment services, or other enforcement action authorized and deemed appropriate by the Director under this permit.

Where a Permittee has security measures in force which require proper identification and clearance before entry into its premises, the Permittee shall make necessary arrangements with its security team so that, upon presentation of suitable identification, personnel from the City of Tacoma will be permitted to enter without delay for the purposes of performing their specific responsibilities.

C. RECORDS RETENTION

For not less than **three** (3) **years** the Permittee shall retain and preserve any records, log books, documents, memoranda, reports, correspondence and any summaries thereof, relating to monitoring, sampling and chemical analyses made by or on behalf of the Permittee in connection with its wastewater discharge or off-site transportation and/or disposal of its wastewaters and sludges.

All records pertaining to matters subject to administrative relief or any other enforcement or litigation activities brought by the Director shall be retained and preserved by the Permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

All records required by the permit shall be available for review at reasonable times by authorized representatives of the Director.

D. CONFIDENTIAL INFORMATION

In accordance with Tacoma Municipal Code Section 12.08.170 **Confidential Information**, information and data furnished to the Director with respect to the nature and frequency of discharge shall be available to the public or other governmental agency without restriction, in accordance with Washington State Public Disclosure laws.

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E. DILUTION

To achieve compliance with the limitations contained in this permit the Permittee shall not increase the use of potable or process water, or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment.

F. HAZARDOUS WASTE NOTIFICATION

Federal regulation 40 CFR Part 403.12(p) Industrial User Hazardous Waste Notification Requirements, requires the Permittee to notify the Director, the EPA Regional Waste Management Division Director, and the Department of Ecology in writing if the Permittee discharges into the City's municipal sanitary sewer system any substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.

G. DISCHARGE TO STORM SEWERS OR PUBLIC WATERS

The Permittee is hereby notified that discharges to public waters and City storm sewer systems are regulated by the federal Clean Water Act, as amended, Washington State RCW 90.48, as amended, and Tacoma Municipal Code, Chapter 12.08.

H. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS Sludges, solid waste, and spent chemicals shall not be discharged into the sanitary sewer.

The Permittee is hereby advised that other state and federal regulations govern the disposition of these materials, namely Section 405 of the Clean Water Act, as amended, Subtitles C and D of the Resource Conservation and Recovery Act, as amended, and Washington Administrative Code Chapter 173-303, Dangerous Waste Regulations.

I. SIGNATORY REQUIREMENTS

All reports, documents and industrial wastewater permit applications shall be signed by an Authorized Representative of the Permittee as defined in Section T1.D 1. All reports and documents shall bear the original signature of the Authorized Representative.

Documents submitted by email shall not be accepted by the Director for compliance purposes.

If the Authorized Representative changes during the effective term of this Permit, a new authorization satisfying the requirements of Section T1.D.1 shall be submitted to the Director prior to or together with, any reports to be signed by an Authorized Representative.

Unless waived by the Director building plans, engineering reports, and construction drawings for modifications of existing pretreatment equipment or installation of new or additional equipment shall be prepared and signed by a professional engineer registered in the state of Washington.

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J. CERTIFICATION STATEMENT

Any person signing a document required by this permit shall include the following certification statement:

"I certify, under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. Furthermore, I certify this facility is implementing the Accidental Spill Prevention Plan most recently approved by the Environmental Services Department. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

K. FALSIFICATION OF REPORTS

If the Permittee makes any false statement, misrepresentation, or certification whether verbally or in any application, record, plan, data, or document filed or required to be maintained pursuant to this Permit, the Director may suspend, revoke, or terminate sewer service to the permitted facility.

L. EMERGENCY SUSPENSION OF SERVICE AND REVOCATION OF PERMIT

The Director may without advance notice, order the suspension of wastewater treatment service to the permitted facility. The Director may revoke this Wastewater Permit when it appears to the Director that an actual or threatened discharge:

- 1. Threatens or presents an imminent or substantial danger to the health or welfare of personnel or to the environment;
- 2. Threatens to interfere with the operation of the municipal sanitary sewer system or causes the City to violate its NPDES permit; or
- 3. Causes the Permittee to violate any pretreatment limitation imposed by this permit or any other regulation contained in Tacoma Municipal Code Chapter 12.08.

When notified of the Director's suspension order, the Permittee shall immediately cease all discharges to the sanitary sewer.

If the Permittee fails to comply with the suspension order, the Director may utilize any judicial remedies to compel the Permittee to specifically comply with such an order.

The Director may reinstate the Wastewater Permit, wastewater treatment service, or both, upon proof by the Permittee that the non-complying discharge or conditions creating the threat as set forth above, have been eliminated.

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M. LIMITATION ON PERMIT TRANSFER

Wastewater discharge permits are issued to a particular industrial user, for specific operations at a particular site and are not assignable or transferable to another legal entity or person without the prior written approval of the Director.

The sale of a business shall obligate the purchaser within thirty calendar days of closing to obtain written approval from the Director to continue discharging into the sanitary sewer system.

N. MODIFICATION OR REVISION OF THE PERMIT

The terms and conditions of the Permittee's Industrial Wastewater permit may be subject to modification or revision by the Director:

- 1. Whenever limitations or requirements identified in the Tacoma Municipal Code are changed, modified, or revised, or any other just cause exists;
- 2. To incorporate special conditions resulting from a compliance order;
- 3. As a result of the EPA or state promulgating new, or revising existing pretreatment regulations;
- 4. When there has been a change in the condition of the POTW's receiving waters or any other condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- 5. By request from the Permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws, rules or regulations;
- 6. Upon a violation of any terms or conditions of this permit;
- 7. Upon falsification, misrepresentation or failure to disclose fully all relevant facts in the permit application or any required report; or
- 8. To reflect the transfer to a new owner or operator of the facility's ownership, operation, or both.

Substantial permit modifications shall be processed with public notice for review and comment, including an opportunity for a public hearing in accordance with requirements of 40 CFR 403.8.

Minor permit modifications may be implemented after the Permittee has had the opportunity to comment on the proposed modification.

Any permit modification that results in a revision of existing permit limitations or requirements shall include a reasonable compliance schedule.

O. NEW OR INCREASED DISCHARGE

At least **90 calendar days** prior to making changes, including but not limited to those listed below, a new application and the appropriate engineering plans shall be submitted to the Director for approval unless waived in writing by the Director.

- 1. A new process wastewater discharge;
- 2. A change in a process wastestream's volume or frequency that has a potential to affect the pretreatment system's design flow or efficiency; or
- 3. A change in the process wastewater discharge's pollutant concentration.

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No modifications or alterations to pretreatment equipment shall be made by the Permittee or its contractor until such application and plans have been completed and approved and a new or modified permit has been issued.

P. DUTY TO PROVIDE INFORMATION

The Permittee must submit to the Director within a reasonable time, all information which her/she may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to the Director upon request, copies of records required to be kept by this permit.

Q. MODIFICATION OF PRETREATMENT EQUIPMENT

Prior to installing, modifying or adding pretreatment equipment, or changing wastewater treatment chemicals, the Permittee shall submit to the Director for review and approval the appropriate plans, specifications, engineering reports, Material Safety Data Sheets, or other pertinent information as requested by the Director.

No person may construct or install pretreatment equipment until the Permittee has obtained written approval from the Director.

No person, by virtue of such approval, shall be relieved from compliance with other local, state, or federal laws relating to the construction and approval of such facilities or equipment.

Each pretreatment facility shall be constructed, installed, and maintained at the sole expense of the Permittee.

R. UNABLE TO COMPLY

In the event the Permittee is unable to comply with any condition of this permit due to any cause, the Permittee shall:

- 1. **Immediately** take action to stop, contain, and clean up any unauthorized discharge(s) and correct the problem;
- 2. Within 24 hours notify the Director of the Permittee's failure to comply; and
- 3. **Within 5 calendar days** of the violation, submit a detailed written report describing the nature of the violation, any corrective action taken or planned to prevent a recurrence, or any other pertinent information.

Following these requirements does not relieve the Permittee from its responsibility to maintain continuous compliance with the conditions of this permit or from any subsequent liability for failure to comply.

S. UPSETS

If the Permittee experiences an upset as defined in Tacoma Municipal Code Chapter 12.08.010, immediately upon its discovery the Permittee shall inform the Director and within **5 calendar days** submit a report specifying the following information.

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1. Description of the upset, its cause, and the impact on the Permittee's compliance status;

2. Duration, dates, and times of non-compliance. If non-compliance is expected to continue, the Permittee shall state when it expects to return to compliance status; and

3. Steps taken to reduce, eliminate and prevent recurrence of the upset or other non-compliance condition. The steps shall include, but not be limited to, **reducing or controlling production**, providing alternate treatment or power supply, temporary storage, off-site wastewater disposal or any combination thereof.

Responses by the Permittee to the above reporting requirements will be used to determine what enforcement action will be taken by the Director, if any, in accordance with Section T.4.AC of this Permit.

T. BYPASSES

A "bypass" is the intentional diversion of a wastestream from any portion of a Permittee's pretreatment facility.

Severe property damage is substantial physical damage to property or pretreatment facilities, which could cause them to become inoperable, or a substantial and permanent loss of natural resources which one may reasonably expect to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

If the Permittee knows in advance that a bypass is necessary, it shall request and receive permission in writing from the Director prior to implementing the bypass. At a minimum the written request shall contain, the information specified below.

After considering the information provided and the effects of the proposed bypass, the Director may approve or deny the request for a bypass. An approved bypass may require the Permittee to conduct special monitoring.

If the Permittee experiences an unanticipated bypass, the Permittee shall

- 1. Submit verbal notice immediately upon becoming aware of the bypass;
- 2. Provide a report within 5 calendar days from becoming aware of the bypass. The report shall contain a description of the bypass, its cause; duration, including dates and times, and the steps taken to reduce, eliminate, and prevent a reoccurrence. On a case-by-case basis the Director may waive the report if verbal notification was received immediately and the incident was minor.

Any bypass is prohibited unless:

- The Permittee submitted notices as required above;
- 2. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; or

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3. There were no feasible alternatives to the bypass, such as use of auxiliary treatment facilities, retention of untreated wastewater, or planned maintenance. This condition is not satisfied if:

- a. Adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass during normal periods of equipment downtime or preventative maintenance; or
- b. Back-up equipment failed to operate during primary/lead equipment failure.

U. PROPER OPERATION

At all times, the Permittee shall maintain in good working order and efficiently operate:

- 1. Any monitoring equipment required by this permit, including discharge flow meters; and
- 2. Any pretreatment or control equipment or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this permit.

In order to maintain compliance when a reduction, loss, failure, or bypass of the pretreatment facility has occurred, the Permittee shall control production or its wastewater discharge until the facility is restored or an alternative method of pretreatment is provided. This requirement applies even when the primary source of power for the pretreatment facility is reduced, lost, or fails.

V. DUTY TO REAPPLY

At least **180 calendar days** prior to the permit's expiration the Permittee shall reapply for permit renewal. At the Director's discretion an expired permit may be administratively extended until a new permit is issued.

W. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision or other circumstances and the remainder of this permit shall not be affected.

X. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights either real or personal, or convey any exclusive privileges, nor does it authorize any invasion of personal rights.

Y. COMPLIANCE WITH OTHER REGULATIONS

Nothing in this permit shall be construed to excuse the Permittee from complying with any applicable federal, state, or local statutes, ordinances, or regulations.

Z. VIOLATION OF TERMS AND CONDITIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant at a rate more frequent or at a concentration in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

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AA. **ENFORCEMENT PROVISION**

As provided by Tacoma Municipal Code Chapter 12.08, in response to the following violations the City may seek any or all remedies and penalties, both civil and criminal, and recover all costs incurred.

- 1. Any violation of the provisions of this permit;
- 2. Any violation of the provisions of Tacoma Municipal Code Chapter 12.08; or
- 3. Any violation of any Order from the City with respect to provisions set forth in this permit or in Tacoma Municipal Code Chapter 12.08.

The range and severity of any remedy or penalty taken by the City against the Permittee will be determined by, but not limited to, the nature, duration, frequency, and consequences of the violation and any economic benefit gained from non-compliance.

Lilyblad Petroleum Remediation Site Permit No. TAC-039-2014 August 2014

INDUSTRY FACT SHEET

1. APPLICANT INFORMATION

A. Name and Address of Applicant

Lilyblad Petroleum Remediation Site
Washington State Dept. of Ecology and CH2M Hill

Mailing Address:

1100 112th Ave. S. Suite 400 Bellevue, WA 98004

Facility Address:

2244 Port of Tacoma Road Tacoma WA 98421

Primary Contact Person:

Mario Lopez Ramos

Title:

CH2M - Hill Project Manager

Phone: Office – 425-233-3120

Cell 206-380-3056

Secondary Permit Contact:

Ha Tran

Title:

Dept. of Ecology Permit Manager

Phone

360-407-6064

B. Description of Applicants Operation

Dual phase extraction (DPE) will be used to remove volatile and semi-volatile organic compounds in both soil and groundwater at a site now occupied by Pacific Functional Fluids and PW Eagle (PW Pipe). Air stripping, bag filtration, and carbon adsorption will be used to remove contaminants from the extracted groundwater before it is discharged to the sanitary sewer. As groundwater treatment operations continue, it is expected that pollutant concentrations will decline to levels where air stripping will no longer be needed, and water will be treated with particulate filters and granulated activated carbon. After groundwater is pumped down, soils will be treated by vapor extraction.

This project is located at the former site of Lilyblad Petroleum, Inc. where Washington State Dept. of Ecology (DOE) has determined that soil and groundwater are contaminated with 23 constituents of concern, consisting mainly of petroleum hydrocarbons and toxic organic compounds from past industrial activity on the site. Lilyblad Petroleum is no longer in business, and the property is owned by M & G Holdings.

Facilities that occupy part of the site include JM Eagle (PW Pipe) and Pacific Functional Fluids, LLC. In 2000, Lilyblad was ordered by DOE to keep the plume of contamination from flowing off the property. Trenches and extraction wells were installed to help contain the plume. In 2003, DOE approved a pilot test to treat some areas. The pilot project was shut down in 2006.

Now, under an Enforcement Order, DOE has assumed responsibility for soil and groundwater remediation and issued an intent to incur a lien to secure their interest in the property. CH2M Hill has been contracted by DOE to operate a dual phase (vacuum) extraction soil and groundwater remediation system. Treatment equipment owned by DOE will be located next to Port of Tacoma Road on property now occupied by Pacific Functional Fluids, LLC (PFF). However, PFF is not responsible for the equipment or any part of the groundwater treatment system. Treated groundwater will discharge below grade, into the existing side sewer serving the Pacific Functional Fluids office building, that connects to the municipal sanitary main in Port of Tacoma Road.

PFF has no responsibility for the remediation system. They have been issued a separate NPDES permit to discharge treated boiler blowdown and contact storm water from their facility (including the tank farm) to the storm drain. The adjacent contaminated property, now occupied by PW Eagle, is covered by buildings and impervious pavement. Untreated stormwater runoff from that property is conveyed through the municipal storm sewer.

C. Waste Treatment Data

Wastewater treatment data is on file with Environmental Services

D. Name of Wastewater Treatment Plant Receiving Wastewater

City of Tacoma Central Treatment Plant #1 2201 Portland Ave. Tacoma 98421

E. Description of Existing Pretreatment Equipment

The treatment system is designed to treat up to 40 gallons per minute (gpm). It consists of:

- 300 gallon polyethylene holding tank with high level switch;
 - Air Stripper, Model QED 40 gpm Induced Draft, to remove volatile organic compounds from the liquid waste stream;
 - (2) 100 gpm capacity bag filters for solids removal; and
 - Liquid Phase Carbon Treatment consisting of (2), 500 lb carbon vessels arranged in series with 40 gpm capacity in each vessel.

Groundwater will be extracted from a total of 72 wells located throughout the site. The extraction wells are organized into nine separate manifold systems that employ (2) 300 cubic feet per minute (cfm) vacuum blowers to extract subsurface vapors and enhance groundwater recovery, a 650 cfm air/water separator, and a 40 gallon per minute (gpm) groundwater transfer pump.

F. Description of Discharge

The groundwater flow from each well is 0.1 gallons per minute (gpm). Two manifold systems (approximately 24 wells) will be under vacuum for extraction at any given time, on a rotating basis. The system is expected to generate an average volume of approximately 2 gpm, with a maximum potential flow of 40 gpm.

2. RATIONALE FOR WASTEWATER DISCHARGE LIMITATIONS

A. Categorical Standards

Not applicable

B. Combined Waste Steam Formula

Not applicable

C. Local Limits

Discharge limits for this permit will be those listed in Tacoma Municipal Code Chapter 12.08.

D. Categorical Standard/Local Limit Comparison

Not applicable

E. Best Professional Judgment

Although the City of Tacoma has not codified a TTO limit, Best Professional Judgment leads us to employ the TTO limit of 2.13 mg/l (calculated by adding the concentrations of all pollutants present at, or with a PQL of 10 ug/l or greater) imposed for industries subject to federal categorical regulations.

Wastewater Discharge Limitations

Parameters	Units	Daily Maximum
Arsenic	mg/L	0.1
BETX	mg/L	10 1
Cadmium	mg/L	0.25
Chromium, Total	mg/L	1.0
Chromium ⁺⁶	mg/L	0.25 ²
Copper	mg/L	1.0
Lead	mg/L	0.4
Mercury	mg/L	0.05
Nickel	mg/L	1.0
pH within the range of	units	5.5-11.0
Total Petroleum Hydrocarbons ³	mg/L	50 ⁴
Volatile and	mg/L	2.13 ⁵
Semi-Volatile Organics		Elimid Nood
Zinc	mg/L	2.0
Flow	gpm	40

No discharge of flammable solvents or pollutants which may create a fire or explosion hazard in the municipal sewer system shall be allowed including, but not limited to, wastewater with a closed cup flashpoint of less than 140 °F or 60 °C using test methods prescribed in 40 CFR 261.21.

No discharge of potentially toxic or harmful materials, other than those listed above, is permitted unless specifically approved by TACOMA. Specific limitations may be placed on other parameters, if determined appropriate by TACOMA.

Benzene may not exceed 0.5 mg/L.

² Analysis for Chromium +6 is only required if total chromium exceeds 0.25 mg/L.

³ As Silica Gel Treated Hexane Extractable Material (SGT-HEM).

No free floating oil or visible sheen is allowed.

⁵ Total of all concentrations (or method reporting limits if not detected) greater than 10 ug/L (except benzene, ethylbenzene, toluene, and xylene).

3. MONITORING REQUIREMENTS

Parameter	Sampling Frequency	Type of Sample	EPA Analysis Method
BETX	Semi Annual	Grab	624
Chromium	Semi Annual	Grab	SM 3500-CR-B
Flow	Continuously	Metered	
Metals, Total ⁶	Semi Annual	Composite	200.7
pH	Semi Annual	Metered/Grab	150.1
Semi-Volatile Organics ⁷	Semi Annual	Composite	625
Total Petroleum Hydrocarbons	Semi Annual	Grab	1664A ·
Volatile Organic Aromatics ⁸	Semi Annual	Grab	624

A. Frequency and Type

The discharge from the treatment system will be sampled for all parameters listed above to confirm that the discharge is in compliance with discharge limits. Sampling and analysis shall be done semi-annually, with analysis results submitted to Environmental Services on or before the 15th day of the month following the end of each reporting period (i.e., the 15th day of January and July.)

1. Composite Samples

For metals and semi-volatile organics, flow proportional samples should be composited for a period of 24 hours. If flow proportional sampling is not practical, equal aliquots of no less than 100 ml should be taken at evenly spaced time intervals of no more than 15 minutes, over one 24 hour period each quarter.

2. Grab Samples

One grab sample shall be taken semi-annually during normal operation for pH, petroleum hydrocarbons (as silica gel treated-hexane extractable materials), and volatile organics.

4. MONITORING LOCATIONS

All parameters shall be sampled at the end of the treatment system, before the water enters the sanitary sewer.

⁶ Total metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

⁷ Analytes are those determined by US EPA Method 625.

⁸ Analytes are those determined by US EPA Method 624.

5. REPORTING REQUIREMENTS

A. Routine Reporting

Sampling and analysis for all parameters listed in Section T1.A of the permit shall be submitted to ES semi-annually.

B. Signatory Requirements

CH2M Hill Project Manager, Mario Ramos Lopez has been delegated signatory authority for all permit related reports and documents.

6. SPECIAL REQUIREMENTS

A. Side sewer must be properly abandoned

The wastewater pipe installed for this project must be removed and the connection to the existing side sewer that serves the building at 2244 Port of Tacoma Road must be properly abandoned when the groundwater treatment system is taken out of service.

B. Accidental Spill Prevention Plan

There is no risk of slug discharge or accidental spill to the sanitary sewer at this site. However, storage of liquid wastes requires a plan to address potential spills to the storm drain. A Liquid Spill Prevention Plan was approved March 9, 2011. Certification that this plan is current and being implemented shall be submitted on January 15th of each year.

C. Waste Characterization

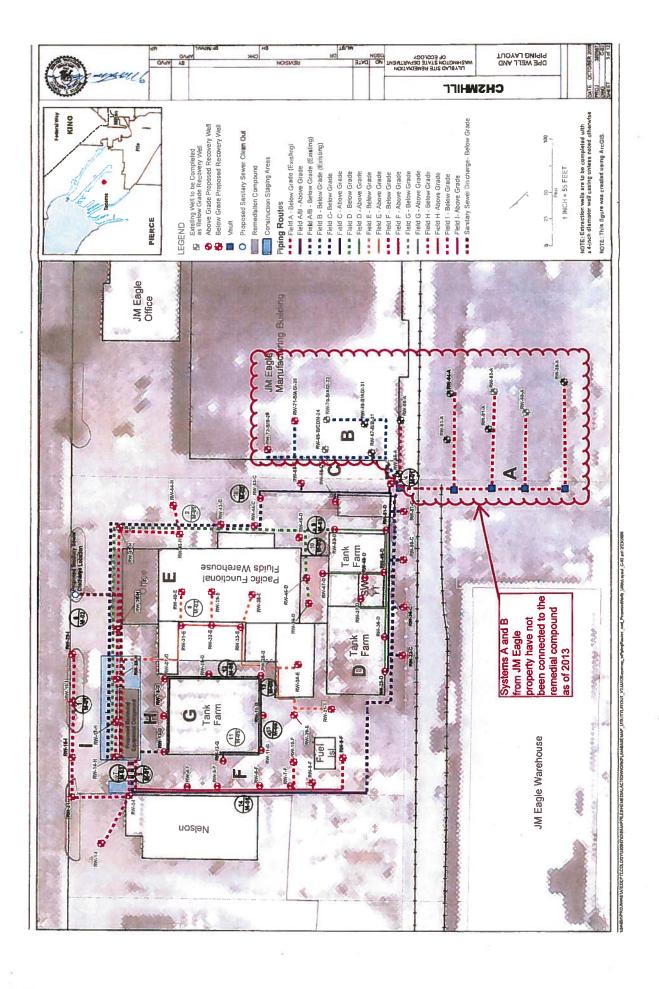
A similar treatment system was used to treat contaminated groundwater at this site in 2006. Analysis results were submitted with the permit application, showing that contaminates were almost entirely removed by the proposed technology.

Appendix

- A. Plant Layout Diagram
- B. Process Schematic

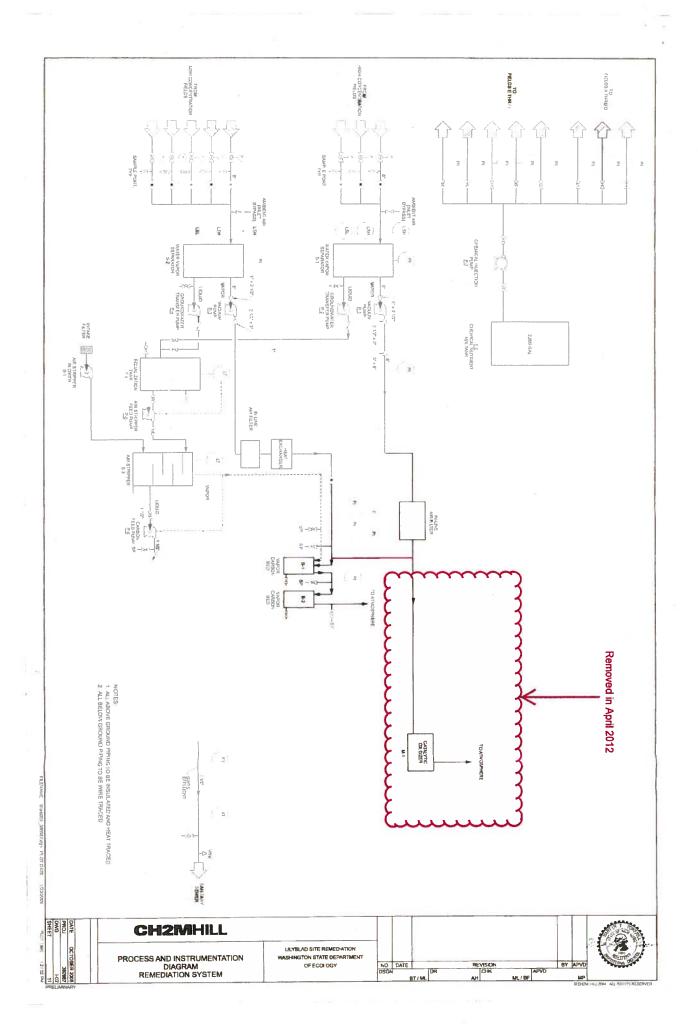
Appendix A

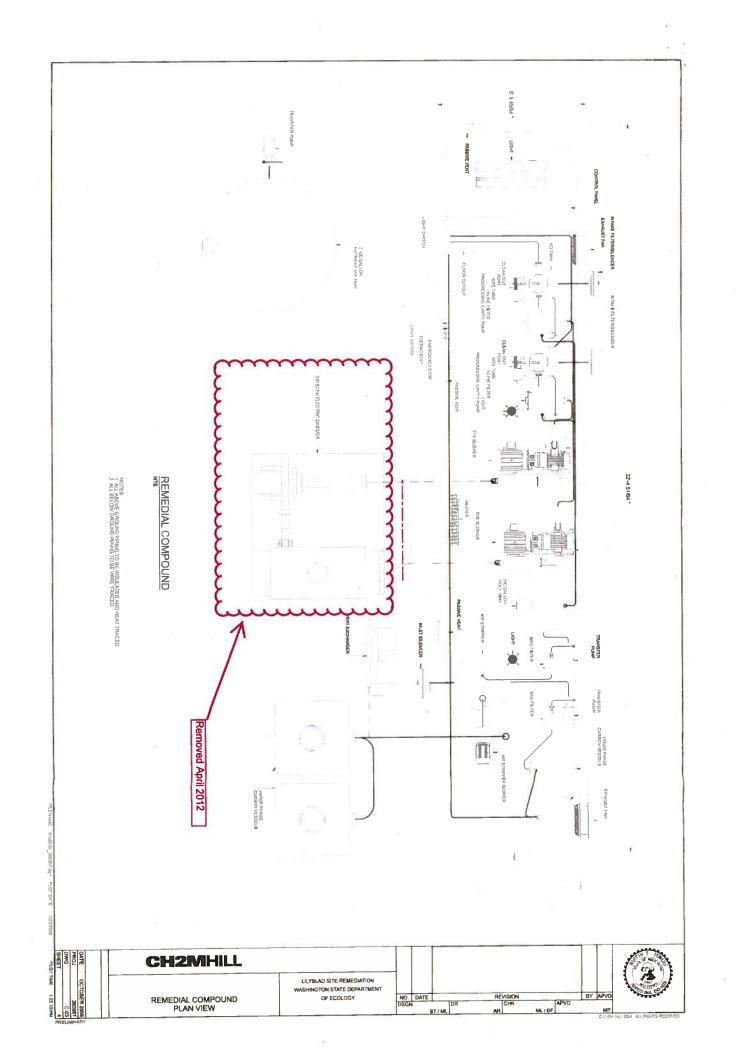
Plant Layout Diagram



Appendix B

Process Schematic





Lilyblad Petroleum Remediation Site

Permit No.:

TAC-039-2014

Effective: Permit Expires:

August 17, 2014 August 16, 2019

Submittal	Applicable Section	Deadline	Date Received/Submitted
2 nd Semi-Annual	T3.A	01/15/2015	
Report 2014			
ASPP Update	T2.A	01/15/2015	
1 st Semi-Annual	T3.A	07/15/2015	
Report 2015			
2 nd Semi-Annual	T3.A	01/15/2016	
Report 2015			
ASPP Update	T2.A	01/15/2016	왕
1 st Semi-Annual	T3.A	07/15/2016	
Report 2016			
2 nd Semi-Annual	T3.A	01/15/2017	
Report 2016			
ASPP Update	T2.A	01/15/2017	
1 st Semi-Annual	T3.A	07/15/2017	
Report 2017			
2 nd Semi-Annual	T3.A	01/15/2018	
Report 2017			
ASPP Update	T2.A	01/15/2018	
1 st Semi-Annual	T3.A	07/15/2018	
Report 2018			
2 nd Semi-Annual	T3.A	01/15/2019	" " " " " " " " " " " " " " " " " " " "
Report 2018			
ASPP Update	T2.A	01/15/2019	
Permit Renewal	T4.S	02/17/2019	
Application Due			
1 st Semi-Annual	T3.A	07/15/2019	
Report 2019			
Permit Expires		08/16/2019	

NOTE: The Permittee is responsible for compliance with all conditions of the Industrial Wastewater Permit whether or not those conditions are shown on this list.