



STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL
PO Box 43172 • Olympia, Washington 98504-3172

FACT SHEET

BP CHERRY POINT COGENERATION PROJECT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-004103-3

July 2, 2004

**BP CHERRY POINT COGENERATION PROJECT
 NPDES PERMIT WA-004103-3
 Fact Sheet**

TABLE OF CONTENTS

INTRODUCTION 3

BACKGROUND INFORMATION 5

 DESCRIPTION OF THE FACILITY 5

 Project Site 5

 Industrial Process 5

PROPOSED PROCESS WATER MANAGEMENT 7

PROPOSED SANITARY WASTEWATER MANAGEMENT 7

PROPOSED STORMWATER MANAGEMENT 7

PROPOSED WATER POLLUTION CONTROL MEASURES 8

 STORMWATER DISCHARGE..... 8

 POLLUTION PREVENTION MEASURES 8

PROPOSED PERMIT LIMITATIONS..... 9

 DESIGN CRITERIA 10

 TECHNOLOGY-BASED EFFLUENT LIMITATIONS..... 10

 Oil/Water Separator Discharge 10

 SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS..... 10

 Numerical Criteria for the Protection of Aquatic Life 10

 Numerical Criteria for the Protection of Human Health..... 11

 Narrative Criteria 11

 Antidegradation..... 11

 Description of the Receiving Water..... 11

 Surface Water Quality Criteria..... 11

 Stormwater Discharge 12

 GROUND WATER QUALITY LIMITATIONS..... 12

 SEDIMENT QUALITY..... 12

OTHER PERMIT CONDITIONS..... 13

 MONITORING REQUIREMENTS 13

 LAB ACCREDITATION..... 13

 NON-ROUTINE AND UNANTICIPATED DISCHARGES 13

 REPORTING AND RECORDKEEPING 13

 TREATMENT SYSTEM OPERATING PLAN..... 13

 GENERAL CONDITIONS 14

PERMIT ISSUANCE PROCEDURES 14

 MODIFICATIONS 14

 RECOMMENDATION FOR PERMIT ISSUANCE 14

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

REFERENCES 15

EXHIBIT 1..... 16

 APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-1 16

 Cherry Point Cogeneration Project Location Map 16

EXHIBIT 2..... 17

 APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-3 17

 Comprehensive Planning Landuse Map of Western Whatcom County..... 17

EXHIBIT 3..... 18

 APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-4..... 18

 Zoning Map 18

EXHIBIT 4A..... 19

 APPLICATION FOR SITE CERTIFICATION, APPENDIX F, ATTACHMENT A FIGURE 1-A..... 19

 Construction Stormwater Control System..... 19

EXHIBIT 4B..... 20

 APPLICATION FOR SITE CERTIFICATION, APPENDIX F, ATTACHMENT A FIGURE 1-B 20

 Operational Stormwater Control System 20

Appendices

- Appendix A: Public Involvement Information
- Appendix B: Glossary

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

INTRODUCTION

The federal Clean Water Act establishes water quality goals for navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) permitting process, which is administered by the Environmental Protection Agency (EPA). The EPA has authorized the Energy Facility Site Evaluation Council (EFSEC or Council), on the basis of Washington Administrative Code (WAC) Chapters 80.50 and Revised Code of Washington (RCW) Chapter 90.48, to administer NPDES permits for energy facilities greater than 350 megawatts.

The regulations adopted by the state include procedures for issuing permits (Chapter 463-38 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 173-200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before water can be discharged into waters of the state.

One of the requirements (WAC 463-38-033 and 034) for issuing a permit or permit amendment under the NPDES permit program is the preparation of a tentative determination or draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least 30 days before the permit is issued (WAC 463-38-034). This fact sheet and the draft permit are available for review (see Appendix A, Public Involvement, for more detail on the public notice procedures).

This fact sheet is a companion document to draft NPDES Permit No. WA-004103-3. The Energy Facility Site Evaluation Council (EFSEC or Council) is proposing to issue this permit, which will allow the discharge of treated stormwater to wetlands and Terrell Creek, a tributary of the Strait of Georgia.

The fact sheet and draft permit have been reviewed by the Applicant. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the substantive comments will be summarized and a response will be prepared for each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of this response. The fact sheet will not be revised. Comments and the resultant changes to the permit will be summarized in a Response to Comments to be issued at a later date, after all comments have been considered.

The BP Cherry Point Cogeneration Project is a proposed 720-megawatt (MW) cogeneration power and steam facility. BP West Coast Products, LLC, the Applicant, is proposing to build and operate a power plant and associated facilities for electrical power and steam production. The proposed project will be designed to provide electric energy to meet existing and future needs at the BP Cherry Point Refinery and in the Pacific Northwest as well as other areas where electrical energy is needed. The proposed project will also provide steam to the refinery, which is used in the production of a variety of petroleum products. The project site is located in the northwestern portion of Whatcom County, Washington, approximately fifteen (15) miles north of the City of Bellingham and seven (7) miles south of the City of Blaine, Washington. The project site and major facilities are depicted in Exhibits 1 and 2.

**BP CHERRY POINT COGENERATION PROJECT
 NPDES PERMIT WA-004103-3
 Fact Sheet**

An Application for Site Certification (ASC) was submitted to the EFSEC on June 3, 2002. On July 18, 2002, an independent consultant to the Council determined that this project required some additional information for the wastewater and stormwater discharges in order to make a complete review of the ASC. On July 30, 2002, the Council notified the Applicant of the additional information that was needed, including a State Waste Discharge Permit Application. The additional information was received on September 11, 2002 and supplemented the information contained in the ASC. On April 15, 2003, the Applicant submitted revisions to the ASC to reflect changes to the project to use water rather than air for cooling.

The Department of Ecology, as a contractor to EFSEC, prepared draft State Waste Discharge Permit WA-ST-7441 for the proposed project. On November 7, 2003, the Council made the draft permit and associated fact sheet available to the public for comment. A public hearing was held on December 9, 2003 and the public comment period ended on December 12, 2003. In preparing the Response to Comments on the draft State Waste Discharge Permit, it was determined that a NPDES permit was the more appropriate mechanism for regulating the stormwater discharge to wetlands and Terrell Creek. On June 30, 2004 the Applicant submitted a NPDES permit application.

<u>GENERAL INFORMATION</u>	
Applicant	BP West Coast Products, LLC
Facility Name and Address	BP Cherry Point Cogeneration Facility 4519 Grandview Road Blaine, WA 98230
Type of Facility:	Cogeneration – Steam and Electricity Production
SIC Code	4911
Water Body ID Number (001)	WA-01-0010
Stormwater Discharge Location	Discharges through wetlands into Terrell Creek, a tributary to the Strait of Georgia

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

PROJECT SITE

The proposed BP Cherry Point Cogeneration Project site is situated near Puget Sound in the northwestern portion of Whatcom County and within the Terrell Creek drainage basin. More specifically, the site is located approximately fifteen (15) miles north of the City of Bellingham and seven (7) miles south of the City of Blaine, Washington. (Exhibits 1 and 2)

The area of the project site and construction laydown areas is approximately 69 acres of land adjacent to and owned by the BP Cherry Point Refinery. This area represents less than 3 % of the approximately 2500 acre block owned by the refinery. Of the 69 acres, 33 acres are proposed to be used for power plant structures and related facilities. The project site is designated Heavy Impact Industrial. See Exhibit 3.

INDUSTRIAL PROCESS

The proposed power plant will be a 720 MW combined-cycle (steam and electricity) cogeneration facility consisting of three (3) natural gas-fired combustion turbines (CGTs), each driving one electric generator. Each of the gas turbines will be equipped with a heat recovery steam generator (HSRG) with supplemental duct-firing capability. Steam produced from the steam generators will be combined and sent to a single steam turbine electric generator (STG) with steam extraction and condensing capability. Exhaust steam exiting the steam turbine electric generator will be directed via pipe to the adjacent refinery for use in processing crude oil into petroleum products. The cogeneration facility will supply steam and electricity to the BP refinery, which will in turn recycle condensate back to the cogeneration project.

The power plant will employ an evaporative cooling system using water supplied by the Whatcom County public Utility District (PUD). The Whatcom County Public Utility District No. 1 (PUD) owns the water rights for water in this area and Alcoa and the refinery contract for the water through the PUD. The PUD withdraws water from the Nooksack River.

The PUD, BP, and Alcoa recently entered into a letter of agreement to develop a water reuse project. With the current agreement, Alcoa will assign its contract water right of about 4.0 million gallons per day (mgd) to the BP cogeneration facility. When the Alcoa smelter is in operation, the water re-use project would route non-contact, once-through cooling water from the nearby smelter to the BP Cogeneration Project using an existing PUD line that supplies the BP Refinery. If the aluminum smelter is not in operation, the Cogeneration Project would use a portion of Alcoa's PUD contract water. Alcoa will have the ability to start operations at any time and divert the non-contact, once-through cooling water to the cogeneration facility. The non-contact cooling water exiting the aluminum smelter is of the same quality as the PUD water entering the smelter, only slightly warmer (+ 5 °F).

The power plant will require an average of 2,244 to 2,316 gallons per minute (gpm) or about 3.3 mgd. The PUD is expected to provide an average of 2,780 gpm of recycled cooling water from

BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet

Alcoa. The 484 to 556 gpm of recycled water in excess of the cogeneration project requirements would be used at the refinery to reduce the water needed from the Nooksack River. The refinery's water use will also be reduced by 20 gpm as a result of steam provided by the cogeneration facility. The total water consumed by the refinery and the cogeneration project will average 6,414 to 6,486 gpm.

The natural gas supply will be piped to the facility from an existing pipeline on the refinery property. No backup fuel will be used for the combustion turbines, however diesel will be used to power an emergency generator and fire water pump to ensure the operation of critical emergency and safety systems during sudden total electrical power outage to the plant.

Chemicals used during operation and maintenance will also be stored on site. The chemicals that will be stored on site and their estimated quantities include:

- Anhydrous ammonia - 12,000 gallons in tank,
- caustic – 8,000 gallons in tank,
- sulfuric acid – 16,000 gallons in tanks,
- diesel fuel – in storage tanks with 1,960 gallon capacity,
- lubricating oil – in equipment or storage lockers and 25,800 gallons in three tanks,
- control oil – in STG equipment with 400 gallon capacity,
- bottled hydrogen gas - 605,000 cubic feet capacity,
- bottled carbon dioxide gas - 32,500 cubic feet capacity,
- transformer oil – in transformers with 76,500 gallon capacity,
- SCR catalyst – in HRSG with 4,800 cubic feet capacity,
- CO catalyst - in HRSG with 990 cubic feet capacity,
- propylene glycol – in closed loop cooling water system with 22,800 gallon capacity,
- nitrate/borate corrosion inhibitor - 55 gallons in drum,
- morpholine corrosion inhibitor – 500 gallons in tank,
- diethyl hydroxylamine oxygen scavenger - 500 gallons in tank,
- scale control agent - 200 pounds in tank or bags,
- cation resin - 950 cubic feet in tank or warehouse,
- anion resin - 900 cubic feet in tank or warehouse,
- powdered cellulose and activated carbon – 2000 lb in bags or drums,
- sodium hypochlorite (15% solution) – 16,000 gallons in tanks,
- zinc and phosphanate solution – 800 gallons in tanks,
- polyacrylamide polymer - 800 gallons in tanks, and
- polyquaternary amine polymer, 350 gallons in tank.

Each of the storage tanks and pieces of equipment will have adequate containment. The chemicals are stored in tanks or areas with a concrete curbed impoundment, which can be drained to the process wastewater collection system and allow for treatment or recovery in the event of a spill. The impoundment will be sized to contain the volume of the largest tank within the contained area plus an allowance for rainfall. All containment and impoundment structures will have an isolation feature to allow for evaluation of any rainwater collected in the structure.

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

Rainwater collected in secondary containment will be retained until it is determined that it is uncontaminated. This determination will be made following procedures outlined in the Certificate Holder's Stormwater Pollution Prevention Plan. If the rainwater is found to be uncontaminated, it will be discharged to the stormwater collection system.

When operational, the power plant will employ an estimated 30 people and operate 24 hours per day, seven days per week.

PROPOSED PROCESS WATER MANAGEMENT

As indicated above, process water discharges would be regulated through a State Waste Discharge permit. Process water management was described in detail in the draft State Waste Discharge permit issued for public Comment in November 2003. A summary of the process water management system is given below.

The cogeneration facility will produce 190 gpm on average of non-recyclable process wastewater which will be sent to the BP refinery's wastewater treatment system. This non-recyclable process wastewater is a combination of filtered raw water backwash solids and dissolved solids from the circulating water in the cooling water lines. Other wastewater streams that could be produced and introduced into the process wastewater include equipment water leaks and wash down waters, water from the compressor wash system, process area stormwater, and water from containment areas.

As noted above, draft conditions for process waste water discharge were developed by EFSEC and issued for public comment on November 7, 2003. A public hearing was held on the draft State Waste Discharge Permit on December 9, 2003 and the public comment period ended on December 12, 2003. The Council will address comments to the State Waste Discharge Permit in a separate Response to Comments.

PROPOSED SANITARY WASTEWATER MANAGEMENT

As indicated above, sanitary wastewater discharges would be regulated through a State Waste Discharge permit. Sanitary wastewater management was described in detail in the draft State Waste Discharge permit issued for public Comment in November 2003. Sanitary wastewater is proposed to be collected and directed to the refinery's sanitary wastewater system which is piped to the Birch Bay Water and Sewer District's treatment plant. The sanitary wastewater flow from the cogeneration facility will be approximately 1-5 gpm or approximately 1,400 to 7,200 gallons per day. The sanitary wastewater will be composed of personal wastewater only (i.e., toilets, hand washing, drinking fountains, showers, kitchen wastewater). No chemicals, paint, solvents, oils or other wastes would be disposed in the sanitary wastewater system.

PROPOSED STORMWATER MANAGEMENT

Stormwater is proposed to be collected, routed through oil/water separators, directed to detention ponds, and discharged to wetlands in the Terrell Creek drainage. The flow will be variable depending on rainfall. The stormwater detention ponds are shown in Exhibits 4A and 4B.

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

PROPOSED WATER POLLUTION CONTROL MEASURES

STORMWATER DISCHARGE

Stormwater that has the potential to collect process chemicals and lube oils will be routed to the process wastewater system. Stormwater that has a very low potential to be contaminated with oil or chemicals and that can be checked prior to discharge (such as secondary containment around electrical breakers) will be routed to the stormwater system.

Oil/water separators will be used to treat the stormwater runoff from the cogeneration facility that potentially may contain oil. The oil/water separators will be designed to produce an average effluent of less than 10 mg/l of oil and grease and a maximum effluent of 15 mg/l of oil and grease. Oil is not expected to be present in the stormwater discharge. The oil/water separators have been included in the proposal to make it easier to isolate any inadvertent contamination that could occur.

Any oil retained in the separators will be collected with spill pads or sucked out with a vacuum truck and taken to the refinery or another location for disposal.

POLLUTION PREVENTION MEASURES

Secondary Containment: Chemical storage tanks and equipment will have secondary containment to prevent spills to the stormwater system.

Solid Waste Control Plan: The draft NPDES permit requires that the Certificate Holder develop a solid waste plan to prevent solid waste from causing pollution of waters of the state. The plan must be consistent with Chapter 173-350 WAC and any approved local solid waste management plan.

Spill Control Plans: The Applicant plans to store a quantity of chemicals that have the potential to cause water pollution if accidentally released. The draft NPDES Permit requires the Certificate Holder to develop and implement a spill control plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs per section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080. The plan will be required for fuel, oil products, and hazardous chemicals or substances stored and used at the site. The plan will be developed and implemented in accordance with the requirements of Sections 311 and 402 of the Clean Water Act and the attendant regulation, 40 CFR 112.

Stormwater Pollution Prevention Plans: Prior to beginning site preparation and initiating commercial operation of the BP Cherry Point Cogeneration Project, the Certificate Holder will be required to develop, implement, and comply with construction and operations Stormwater Pollution Prevention Plans (SWPPP). The draft NPDES Permit will require the Certificate Holder to implement all elements of the SWPPPs including operational, treatment, and source control best management practices (BMPs), as well as erosion and sediment control BMPs as necessary. Specific BMPs have been proposed for the stormwater retention ponds and oil/water separators.

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3 and Chapter 463-38 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

WAC 173-201A establishes water quality standards for state surface waters. Discharge of pollutants are not allowed to cause or contribute to violations of these standards. The Water Quality Standards consist of three parts. The first part of the standards is a categorization system of water bodies based on the expected beneficial uses of those water bodies. Washington's highest classification is Class AA (extraordinary) and the lowest is Class C. The second part of the standards is the water quality criteria deemed necessary to support the uses described for each class. The criteria within a classification are numerical values or narrative statements. The third part of the Water Quality Standards is the anti-degradation policy statement.

The Washington Administrative Code (Chapter 173-200 WAC) establishes water quality standards for state ground waters. Discharge of pollutants are not allowed to cause or contribute to violations of these standards. The standards are the same for all state ground waters. Any facility which is determined to have a potential to contaminate ground water must take preventative measures to protect ground water quality. A facility is determined to have a potential to contaminate if a regulated substance is discharged and stored in an impoundment (whether lined or unlined).

Stormwater from the cogeneration facility will be discharged to mitigated wetlands in the Terrell Creek drainage. The stormwater discharge is regulated under Chapter 463-38 WAC, Regulations for Compliance with NPDES Permit Program, and is subject to state and federal water quality standards for surface water and groundwater, and the sediment management standards.

The limits in this permit are based in part on information provided in the ASC and supplemental information received from the Applicant. The effluent constituents in the application were evaluated on a technology- and water quality-basis. The limits necessary to meet the rules and regulations of the State of Washington were determined and are reflected in the recommended draft NPDES Permit, should the Council recommend approval to the Governor. The draft NPDES Permit would not be final until the Governor approves the project.

Limits or conditions are not developed for all pollutants that may be reported on the ASC as being present in the discharge. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation. Limits or conditions are not always developed for

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

pollutants that may be in the discharge but were not known and/or not reported in the ASC by the Applicant. In those circumstances, the permit does not authorize discharge of the non-reported pollutants.

The effluent which is ultimately discharged may be different from that reported or anticipated in the ASC. If other constituents or pollutants are introduced or found, or significant changes occur in the effluent from that known or anticipated at this time, the Certificate Holder is required to notify both the Council and the appropriate Department of Ecology staff providing compliance monitoring for the Council. The Certificate Holder may be in violation of the SCA until the NPDES permit is modified to reflect the discharge of such constituents or pollutants.

DESIGN CRITERIA

In accordance with WAC 463-38-55 (4), flows or waste loadings shall not exceed approved design criteria. The Certificate Holder is required to submit an engineering report and plans and specifications for the stormwater treatment system. These documents will be reviewed and approved by EFSEC to establish design criteria.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

The Washington Administrative Code (Chapter 463-38 WAC) implement the discharge permit requirements of RCW 90.48, establishing conditions on which a permit may be authorized. These include application of "all known available and reasonable methods of prevention, control and treatment" (AKART) and "any conditions necessary to meet applicable water quality standards for surface waters or to preserve or protect beneficial uses for ground waters".

Guidelines for the steam electric power generating point source category (40 CFR 423) were initially published November 19, 1982 and amended July 8, 1983 by the Environmental Protection Agency (EPA).

OIL/WATER SEPARATOR DISCHARGE

The discharge from the stormwater system's oil/water separators must comply with current technology-based limits for oil and grease. These limits are reflected in the draft NPDES Permit.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established Surface Water Quality Standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state.

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Numerical

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

criteria set forth in the Water Quality Standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington.

ANTIDegradation

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall be protected. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

DESCRIPTION OF THE RECEIVING WATER

The facility will discharge stormwater to wetlands in the Terrell Creek drainage. Terrell Creek is a tributary to the Strait of Georgia and is designated as a Class AA receiving water.

Characteristic uses include the following:

Water supply (domestic, industrial, agricultural); stock watering; fish migration; fish rearing, spawning, and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall markedly and uniformly exceed the requirements for all or substantially all uses.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA 1992). Criteria for this discharge are summarized below:

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

Fecal Coliform	50 organisms/100 mL maximum geometric mean
Dissolved Oxygen	9.5 mg/L minimum
Temperature	16 degrees Celsius maximum or incremental increases above background
pH	6.5 to 8.5 standard units
Turbidity	less than 5 NTU above background*
Toxics	No toxics in toxic amounts

* WAC 173-201A- 200 requires turbidity increases to be less than 5 NTU over background when the background is 50 NTU or less; or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

STORMWATER DISCHARGE

The stormwater discharge to Terrell Creek must meet Class AA Surface Water Quality Standards (SWQS). Stormwater not meeting Class AA SWQS must be treated to meet the standards or sent to the refinery's wastewater treatment system. It is anticipated that the stormwater discharge will contain oil and grease, suspended solids, dissolved solids, and possibly copper, iron, nickel and zinc (from the metal buildings and parking area). The stormwater discharge will be required to be monitored for oil and grease, TSS, and priority pollutant metals. Recommended limits are reflected in the draft NPDES Permit.

The draft NPDES permit also requires BP to perform a full characterization of their stormwater upon startup and ongoing priority pollutant metals testing. This data will be reviewed to determine compliance with water quality standards.

GROUND WATER QUALITY LIMITATIONS

Ground Water Quality Standards (Chapter 173-200 WAC) have been promulgated by the State of Washington to protect beneficial uses of ground water. Permits issued by the State of Washington shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100). The draft NPDES permit will require that the Certificate Holder develop and implement best management practices to prevent discharges to groundwater and violations of the groundwater quality standards.

SEDIMENT QUALITY

Aquatic sediment standards (Chapter 173-204 WAC) have been promulgated by the State of Washington to protect aquatic biota and human health. The Council has been unable to determine at this time the potential for this discharge to cause a violation of sediment quality standards. If the Council determines in the future that there is a potential for violation of the Sediment Quality Standards, an order will be issued to require the Certificate Holder to

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

demonstrate that either the point of discharge is not an area of deposition or, if the point of discharge is a depositional area, that there is not an accumulation of toxics in the sediments.

OTHER PERMIT CONDITIONS

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (Chapter 463-38 WAC and 40 CFR 122.41) to verify the treatment process is functioning correctly and the effluent limitations are being achieved. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring. A proposed monitoring schedule is outlined in the draft NPDES Permit.

LAB ACCREDITATION

The draft NPDES permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*.

NON-ROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which has not been characterized because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are usually clean waste waters but may be contaminated with pollutants. The draft NPDES Permit contains an authorization for non-routine and unanticipated discharges. This will require a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, the Council may authorize a direct discharge to the stormwater ponds for clean water. Alternatively, the Council may require that such discharges be routed to the refinery waste water system, or require the water to be reused.

REPORTING AND RECORDKEEPING

The draft NPDES Permit conditions are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (Chapter 463-38 WAC).

TREATMENT SYSTEM OPERATING PLAN

In accordance with state and federal regulations, the Certificate Holder will be required to take all reasonable steps to properly operate and maintain the stormwater treatment system (40 CFR 122.41(e), WAC 463-38-055). The draft NPDES permit requires that the Certificate Holder prepare Treatment System Operating Plans for the construction and operation phases to ensure compliance with the terms and limitations in the permit.

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

GENERAL CONDITIONS

General conditions are based directly on state and federal law and regulations that have been standardized for all individual industrial NPDES permits normally issued by the Department of Ecology for similar industries.

PERMIT ISSUANCE PROCEDURES

MODIFICATIONS

The Council may modify these conditions and impose numerical or other limitations or requirements to meet or protect Water Quality Standards based on new information obtained from sources such as inspections, effluent monitoring, effluent or hydrogeologic studies, or other analyses or studies. The Council may also modify these conditions as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a stormwater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. It is recommended that this proposed permit be issued for 5 years from the date of the Governor's approval of the project. The Certificate Holder must apply for a permit renewal at least 180 days prior to the expiration date of the permit. The renewal of the NPDES permit would not require a modification of the Site Certification Agreement (SCA) triggering possible requirements for further Governor approval.

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

REFERENCES

BP Cherry Point Cogeneration Project, Application for Site Certification, Volumes 1, 2 and 3, June 2002, and revisions April 2003.

BP Cherry Point Cogeneration Project, Draft Application for a State Waste Discharge Permit, September 11, 2002.

BP Cherry Point Cogeneration Project, Draft Application for a NPDES Permit, June 30 2004.

Water Quality Program Permit Writer's Manual, Department of Ecology, (Publication 92-109), January 2001.

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Permit and Wastewater Related Information, Department of Ecology, (www.ecy.gov/programs/wq/wastewater/index.html).

Stormwater Management Manual for Western Washington (Publication Numbers 99-11 through 99-15), August 2001.

The Industrial Stormwater General Permit, Draft, Department of Ecology, August 22, 2002 (Issuance Date).

Fact Sheet for Industrial Stormwater General Permit, Final Draft, Department of Ecology.

BP Cherry Point Cogeneration Project draft State Waste Discharge Permit and Fact Sheet, WA-ST-7441, Energy Facility Site Evaluation Council, November 7, 2003

**BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet**

EXHIBIT 1

APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-1
CHERRY POINT COGENERATION PROJECT LOCATION MAP

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Fact Sheet**

EXHIBIT 2

APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-3

COMPREHENSIVE PLANNING LANDUSE MAP OF WESTERN WHATCOM COUNTY

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Fact Sheet**

EXHIBIT 3

***APPLICATION FOR SITE CERTIFICATION, APPENDIX D, FIGURE 1.0-4
ZONING MAP***

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Fact Sheet**

EXHIBIT 4A

APPLICATION FOR SITE CERTIFICATION, APPENDIX F, ATTACHMENT A FIGURE 1-A
CONSTRUCTION STORMWATER CONTROL SYSTEM

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NPDES PERMIT WA-004103-3
Fact Sheet**

EXHIBIT 4B

APPLICATION FOR SITE CERTIFICATION, APPENDIX F, ATTACHMENT A FIGURE 1-B
OPERATIONAL STORMWATER CONTROL SYSTEM

**BP CHERRY POINT COGENERATION PROJECT
 NPDES PERMIT WA-004103-3
 Fact Sheet**

APPENDIX A: PUBLIC INVOLVEMENT INFORMATION

This draft NPDES Permit contains conditions and effluent limitations which would ensure that all applicable state and federal discharge requirements for storm water discharge are met should the Council recommend approval of this proposal to the Governor, and should the Governor approve this project. The draft NPODES Permit and associated Fact Sheet were prepared with the assistance of the Department of Ecology.

On July 6, 2004, the Council made this draft permit and associated fact sheet available to the public for comment. Interested persons are invited to submit written comments regarding this draft NPDES Permit.

Comments should reference specific text followed by proposed modifications or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this NPDES Permit.

To be considered, comments must be received in the EFSEC office no later than 5 p.m. August 6, 2004. Public comments on this document will also be taken during a public hearing, scheduled as follows:

**Thursday, August 5, 2004 – Starting at 6:00 PM
 Blaine Performing Arts Center
 975 H Street, Blaine, Washington, 98230**

Written comments should be mailed to: Allen Fiksdal, EFSEC Manager, P. O. Box 43172, Olympia, Washington 98504-3172, or by e-mail to efsec@ep.cted.wa.gov.

Additional information about this proposal (the application and the draft environmental impact statement) is available for public reference at the following locations:

Washington State Library Joel M. Pritchard Library Point Plaza East 6880 Capitol Blvd Tumwater, WA, 98504-2460 (360) 704-5200 Energy Facility Site Evaluation Council 925 Plum Street SE, Building 4 Olympia, WA, 98504-3172 (360) 956-2121	Whatcom County Library 610 Third Street Blaine, WA 98230 Whatcom County Library P.O. Box 1209 Ferndale, WA 98248 Bellingham Library 210 Central Avenue Bellingham, WA 98225-4421	Semiahmoo Library #200 1815 152 Street, Surrey, BC V4A 9Y9 Canada White Rock Public Library 15342 Buena Vista Avenue White Rock, BC V4B 1Y6 Canada
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NPDES PERMIT WA-004103-3
Fact Sheet**

APPENDIX B: GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART--An acronym for “all known, available, and reasonable methods of treatment”.

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Clean Water Act (CWA)--The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring--Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample--A single sample or measurement taken at a specific time or over a short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably

BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet

represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/state permits issued under both state and federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)--A calculated value five times the MDL (method detection level).

Responsible Corporate Officer--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 the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

BP CHERRY POINT COGENERATION PROJECT
NPDES PERMIT WA-004103-3
Fact Sheet

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.