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**POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON**

NATIONAL PARKS
CONSERVATION ASSOCIATION,

Appellant,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY; and
BP WEST COAST PRODUCTS, LLC,

Respondents.

PCHB No. 10-162

DEPARTMENT OF ECOLOGY'S
PREHEARING BRIEF

I. INTRODUCTION

The National Parks Conservation Association (NPCA), challenges the Department of Ecology's issuance of Permit PSD No. 16-01 (Permit) authorizing BP West Coast Products LLC (BP) to replace two coker heaters at its refinery in Cherry Point, Washington (Coker Heater Project). The evidence and testimony presented to the Pollution Control Hearings Board will show that Ecology appropriately followed federal guidance in determining the impacts of the Coker Heater Project on air quality related values (AQRVs). The evidence will also show that Ecology exercised appropriate professional engineering judgment and imposed appropriate Permit requirements for best available control technology (BACT) to control emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂) from the new coker heaters.

1 Finally, Ecology will explain how the information provided in BP's permit application shows
2 that the sulfur content of coker off-gas will not increase as a result of the Coker Heater Project.

3 Ecology will present two witnesses, Air Quality Engineer Alan Newman, and
4 Air Quality Engineer Gary Huitsing. Mr. Newman has been working with Ecology on air
5 permitting issues since 1975 and became a part of the Air Quality Program in 1992.
6 Mr. Newman will testify concerning Ecology's historical permitting practices and Ecology's
7 long-time understanding of federal guidance. Mr. Newman is also Ecology's lead for the federal
8 Regional Haze Program, and will testify concerning how that program interacts with the PSD
9 program. Mr. Huitsing was the permitting engineer on the BP Permit. Mr. Huitsing will testify
10 concerning specific questions related to that permit.

11 II. BACKGROUND FACTS

12 BP West Coast Products, LLC (BP) operates an oil refinery in Blaine, Washington that
13 produces petroleum based fuels. This case concerns a permit that will allow BP to replace the
14 two coker heaters at the facility, install a lean oil absorption system with a compressor in the
15 coker off-gas system, revise the main fractionator over head accumulator that separates water
16 from hydrocarbon vapor, and to install new isolation valves on ten existing heat exchangers and
17 to install new bypasses on four existing heat exchangers.

18 On March 27, 2014, Ecology met with federal land managers and BP at a
19 pre-application meeting to discuss BP's plan to submit a permit application for the new project.
20 As required by Ecology rules, BP also sent the permit application to federal land managers.
21 WAC 173-400-117(3)(b). Ecology determined the application was incomplete on
22 October 22, 2014. BP submitted a revised application to Ecology and the federal land managers
23 in March 2016, with supplementary materials after that date. The application was determined to
24 be complete on April 28, 2016. BP provided a consolidated application (including
25 supplementary materials) on June 23, 2016 and provided further supplemental information on
26 November 4, 2016.

1 The Coker Heater Project is a major modification of the BP Cherry Point refinery, which
2 is a major source of air contaminants. The BP Cherry Point facility is located in an area that is
3 in attainment of all the national ambient air quality standards (NAAQS). A major modification
4 of a major source in an attainment area must obtain a permit under EPA's prevention of
5 significant deterioration (PSD) program. 42 U.S.C. § 7475(a)(1); 40 C.F.R. § 52.21(a)(2).
6 Therefore, BP's Coker Heater Project required a PSD permit.

7 Ecology issues all PSD permits in Washington except those issued for facilities in Indian
8 Country and those issued by the Energy Facility Site Evaluation Council (EFSEC). Therefore,
9 even though the BP Cherry Point facility is located within the territory normally regulated by
10 the Northwest Clean Air Agency, Ecology issued the PSD permit for this project. Ecology's
11 PSD program has been approved by EPA. Ecology has adopted by reference most of EPA's
12 regulations governing PSD permitting (found at 40 C.F.R. § 52.21).
13 WAC 173-400-720(4)(a)(vi). For ease of reference, this brief will cite to the relevant federal
14 regulation rather than the Ecology regulation adopting the federal regulation by reference. The
15 final permit was issued May 23, 2017. Permit at 1. On June 21, 2017, the National Parks
16 Conservation Association (NPCA) timely appealed the permit. NPCA is a non-profit
17 organization. NPCA is not the National Park Service, is not formally affiliated with the National
18 Park Service, and does not represent the National Park Service.

19 III. LEGAL ISSUES AND BURDEN OF PROOF

20 A. Legal Issues

21 The Board has indicated that, after summary judgment, the Board is interested in hearing
22 evidence on five issues in this case. The issue numbers given below are the issue numbers
23 identified in the Board's Prehearing Order. Ecology will provide testimony and evidence on
24 Issues No. 1, 5, 6, and 7.

- 25 1. Will BP's Coker Heater Replacement Project have an adverse impact on AQRVs
26 at national parks?

- 1 5. Should Ecology have required selective catalytic reduction as best available
2 control technology for nitrogen oxides (NO_x)?
- 3 6. Should Ecology have required the use of a lean oil system with a compressor as
4 best available control technology for sulfur dioxide (SO₂)?
- 5 7. Should Ecology have required best available control technology for SO₂ for
6 emission units throughout the BP refinery as a result of the increased use of
7 coker off-gas resulting from the project?
- 8 9. Whether the Board has jurisdiction to review issues that are based on alleged
9 infirmities associated with the current EPA approved State Implementation Plan
10 provisions for Washington State?

11 **B. Burden of Proof**

12 In an appeal of an air permit, the appellant has the burden of proof.
13 WAC 371-08-485(3); *Sierra Club v. Sw. Wash. Clean Air Agency*, PCHB No. 09-108, Order
14 Granting Summary Judgment at 10 (Apr. 19, 2010). Thus, NPCA has the burden of proving that
15 Ecology's decisions regarding Permit No. PSD 16-01 do not conform to the law.

16 **IV. SUMMARY OF ECOLOGY'S CASE**

17 In its summary judgment order (SJ Decision) in this case, the Board recognized "[t]he
18 federal agencies are not parties to this case and there is no direct evidence in the Board record
19 on their current position." SJ Decision at 11 n.3. The Board also recognized that the "NPCA is
20 not the Park Service, and has not been authorized to represent the Park Service in this
21 proceeding. . . . Also, there is no evidence that NPCA represents EPA or the Department of the
22 Interior. Therefore, NPCA does not have standing to represent the interests of any of these
23 federal agencies." SJ Decision at 21. Therefore, the Board found there was no need to address
24 the question of deference to either EPA or the National Park Service. See SJ Decision at 11 n.3.

25 **A. Issue No. 1: AQRV analysis**

26 Ecology engineer Alan Newman will testify concerning his experience with analyses of
AQRVs, both in permitting and in relation to the federal Regional Haze Program. Mr. Newman
will discuss his understanding of the Federal Land Managers' Air Quality Related Values Work
Group (FLAG) 2010 guidance and his interpretation of the method that the guidance

1 recommends for determining the net emission increases that need to be modeled for a visibility
2 analysis and for a deposition analysis. Mr. Huitsing will testify about his review of the AQRV
3 analyses provided by BP and the National Park Service for the Coker Heater Project, and the
4 concerns that led him to ask BP to redo its analysis. He will also discuss the Q/D process
5 described in the FLAG guidance and why it is relevant to BP's PSD permit. He will discuss the
6 method for determining the net emissions increase due to a project that is used in a Q/D
7 evaluation. Finally, he will describe what the Q/D analysis shows about the BP project's
8 impacts on the National Parks.

9 Mr. Newman will present testimony concerning the federal Regional Haze program and
10 how it interacts with PSD permitting requirements. Mr. Newman will testify that the
11 National Park Service's finding of adverse impacts from the BP project in this case is an
12 integral part of the Regional Haze Program, and will be included as a component of the next
13 analysis of the state's progress toward better visibility required by the Regional Haze Program.
14 Both Mr. Newman and Mr. Huitsing will testify and provide evidence that the National Park
15 Service has recognized that the proper avenue for addressing the concerns identified in its
16 adverse impacts determination is the Regional Haze Program and not the PSD permitting
17 process for the Coker Heater Project.

18 **B. Issue No. 5: NO_x BACT**

19 In accordance with the Board's ruling on summary judgment, Mr. Newman and
20 Mr. Huitsing will testify concerning EPA guidance on how to evaluate the use of a particular
21 control technology at other facilities and the factors Ecology considered in making its
22 cost-effectiveness determination on selective catalytic reduction (SCR). Ecology testimony and
23 evidence will clarify that EPA guidance provides different levels of scrutiny for a control
24 technology applied at other facilities depending on whether or not that technology has been
25 required as BACT. If the technology has been required as BACT for similar emission units at
26 other facilities, the permitting authority must provide evidence that costs would be

1 disproportionately high at the current facility before rejecting the control technology as BACT.
2 By contrast, if the technology has not previously been required as BACT for similar emission
3 units at other facilities, or has rarely been required as BACT, but has been used at other
4 facilities for other reasons (e.g., to avoid PSD, as part of a settlement), EPA guidance specifies
5 that the permitting authority must show that the costs of applying the technology as BACT for
6 this project are higher than the costs of BACT at other facilities for the same pollutant.

7 Mr. Huitsing will explain how he evaluated the information BP submitted concerning
8 the use of SCR to control NO_x emissions from coker heaters at other refineries. He will also
9 testify concerning the costs of BACT for NO_x for the BP Coker Heater Project, and the costs of
10 BACT for NO_x at other facilities in Washington. Mr. Newman will address Ecology's historical
11 BACT cost thresholds and how these cost thresholds have evolved over time to the current
12 level. Finally, Mr. Newman will testify concerning EPA's recommendation that a seven percent
13 interest rate be used for BACT cost analyses. Mr. Huitsing will testify that EPA's latest
14 guidance, which changes that approach, became effective in November 2017, well after the BP
15 Permit for the Coker Heater Project had been issued.

16 **C. Issue No. 6: SO₂ BACT**

17 Mr. Huitsing will discuss why he did not include the compressor as part of the lean oil
18 absorption system required as BACT. He will testify concerning his conclusion that the use of a
19 compressor with the lean oil absorption system is not cost effective, and therefore cannot be
20 required as BACT. He will also testify that it is his understanding that BP's proposed use of the
21 compressor in connection with the lean oil adsorption system is a new and unproven concept,
22 and that it would therefore not be appropriate to set a BACT emission limit reflecting its use.
23 Finally, he will testify that it is his understanding that the compressor is being used to help BP
24 recover useful product.

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1 **D. Issue No. 7: The Amount of Sulfur in Coker Off-gas**

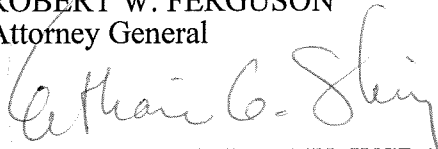
2 Mr. Huitsing will testify that the information provided in BP's permit application shows
3 that the amount of sulfur in the off-gas from BP's new coker heaters will not be higher than the
4 amount of sulfur in the off-gas from BP's current coker heaters. He will point out that according
5 to BP's permit application, any annual increase in sulfur emissions from the coker heater
6 off-gas will result from the fact that the coker heaters will be operating more days of the year
7 because they will not be required to go offline for maintenance as often as the current coker
8 heaters. He will also testify that, because there will be no change in the amount of sulfur in the
9 coker off-gas, there is no basis for requiring BACT for the downstream emission units that use
10 coker off-gas as part of their fuel mix.

11 **V. CONCLUSION**

12 The evidence and testimony will demonstrate that in issuing the permit for the BP Coker
13 Heater Project, Ecology appropriately evaluated the impacts of the project on federal Class I
14 areas, correctly determined BACT for NO_x and SO₂, and correctly determined that the sulfur
15 content of the coker off-gas would not increase as a result of the project. Ecology therefore
16 respectfully asks the Board to affirm Ecology's Permit No. PSD 16-01.

17 DATED this 12th day of April, 2018.

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1 **CERTIFICATE OF SERVICE**

2 Pursuant to RCW 9A.72.085, I certify that on the 12th day of April 2018, I caused to be
3 served the Department of Ecology's Prehearing Brief in the above-captioned matter upon the
4 parties herein as indicated below:

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17 the foregoing being the last known address.

18 I certify under penalty of perjury under the laws of the state of Washington that the
19 foregoing is true and correct.

20 DATED this 12th day of April 2018, in Olympia, Washington.

21 

22 MEAGHAN KOHLER, Legal Assistant