Pollution Control Hearings Board
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Hydraulic Appeals Board
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ATTORNEY GENERAL'S OFFICE
Ecology Division

August 7, 2008

TO ALL PARTIES IN PHASE I & II APPEALS:

RE: APPEALS OF PHASE I MUNICIPAL STORMWATER PERMIT
PCHB Nos. 07-021, 026, 027, 028, 029, 030 & 037
APPEALS OF PHASE II MUNICIPAL STORMWATER PERMIT
PCHB Nos. 07-022 & 023

Condition S4

Dear Counsel:

Enclosed is the Findings of Fact, Conclusions of Law, and Order on S4.

Sincerely yours,

Kay Brown
Administrative Appeals Judge, Presiding

Cc: Bill Moore, Ecology
Kathleen Emmett, Ecology

CERTIFICATION
On this day, I forwarded a true and accurate copy of the documents to which this certificate is affixed via United States Postal Service postage prepaid to the parties of record herein.
I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.
DATED August 7, 2008, at Lacey, WA

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Ecology Division

POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PUGET SOUNDKEEPER ALLIANCE; PEOPLE FOR PUGET SOUND; PIERCE COUNTY PUBLIC WORKS AND UTILITIES DEPARTMENT; CITY OF TACOMA; PORT OF SEATTLE; SNOHOMISH COUNTY; CLARK COUNTY; PACIFICORP; and PUGET SOUND ENERGY,

Appellants,

vs.

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,

Respondent,

and,

CITY OF SEATTLE; KING COUNTY; PORT OF TACOMA; PACIFICORP; PUGET SOUND ENERGY; STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION,

Intervenors.

PUGET SOUNDKEEPER ALLIANCE; PEOPLE FOR PUGET SOUND; AND COALITION OF GOVERNMENTAL ENTITIES,

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

CONDITION S4

PCHB NOS. 07-021, 07-026, 07-027
07-028, 07-029, 0-030,
07-037 (Phase I)

and

PCHB NOS. 07-022, 07-023 (Phase II)

Appellants,

vs.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

These consolidated appeals involve the regulation of stormwater discharges from municipal storm sewer systems under National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permits (State Waste Discharge Permit). These permits are issued pursuant to the Federal Water Pollution Control Act, commonly known as the "Clean Water Act" (CWA), 33 U.S.C. §1251 *et seq.* and the state Water Pollution Control Act, (WPCA), Chapter 90.48 RCW. In these appeals, multiple parties challenge the validity of the Department of Ecology's (Ecology) Phase I and Phase II Municipal Stormwater General Permits.

The Pollution Control Hearings Board (Board) conducted a hearing on one issue in the two consolidated appeals, known as the Special Condition S4 issue, on April 16, 17, 21, 22 and 23, 2008. Attorneys Todd True and Jan Hasselman represented Phase I and Phase II Appellants Puget Soundkeeper Alliance and People for Puget Sound (PSA). Attorney Tad H. Shimazu represented Phase I Appellant Pierce County. Assistant City Attorney Doug Mosich represented Phase I Appellant City of Tacoma. Attorneys Susan Ridgley and Tanya Barnett represented Phase I Appellant Port of Seattle. Catherine A. Drews and Elizabeth E. Anderson, Deputy Prosecuting Attorneys, represented Phase I Appellant Snohomish County. E. Bronson Potter,

Senior Deputy Prosecuting Attorney and Rodney Swanson, Clark County Department of Public Works represented Appellant Clark County. Attorneys Loren R. Dunn and Blake Mark-Dias represented Phase I Appellants Pacificorp and Puget Sound Energy (Utilities). Attorneys Lori A. Terry and John Ray Nelson represented Phase II Appellant Coalition of Governmental Entities (Coalition).[1] Ronald L. Lavigne, Senior Counsel, and Thomas J. Young, Assistant Attorney General, represented Phase I and II Respondent Ecology. Assistant City Attorney Theresa R. Wagner represented Phase I Intervenor City of Seattle. Senior Deputy Prosecuting Attorney Joseph B. Rochelle represented Phase I Intervenor King County. Attorney Carolyn Lake represented Phase I Intervenor Port of Tacoma. Stephen Klasinski, Assistant Attorney General, represented Phase I and II Intervernor Washington State Department of Transportation (WSDOT).

Chair Kathleen D. Mix,[2] William H. Lynch, and Andrea McNamara Doyle comprised the Board. Administrative Appeals Judge Kay M. Brown, presided for the Board. Randi Hamilton and Kim L. Otis of Gene Barker and Associates of Olympia, Washington provided court reporting services.

[1] The Coalition includes the following cities: Anacortes, Auburn, Bellevue, Bothell, Bremerton, Buckley, Burien, Burlington, Camas, Des Moines, Ellensburg, Everett, Federal Way, Fircrest, Kennewick, Kent, Longview, Marysville, Mount Vernon, Normandy Park, Port Angeles, Pullman, Puyallup, Renton, Richland, Sammamish, SeaTac, Sumner, University Place, and Vancouver.

[2] Chair Mix was unable to attend the hearing due to an emergency medical procedure, but reviewed the record and participated in the Board's decision making process.

PROCEDURAL BACKGROUND

On January 17, 2007, Ecology issued three NPDES and State Waste Discharge general permits for discharges from municipal separate storm sewer systems (called MS4s). Ecology issued the Phase I Permit to authorize discharges from large and medium MS4s state wide. Ecology issued two additional permits, called the Phase II Permits, to authorize discharges from small MS4s. The two Phase II Permits are divided geographically into the Eastern Washington Phase II Permit (EW Phase II) and the Western Washington Phase II Permit (WW Phase II). All three permits took effect on February 16, 2007.

PSA, Pierce County, City of Tacoma, Port of Seattle, Snohomish County, Clark County, and the Utilities appealed the Phase I Permit.[3] PSA and the Coalition appealed the WW Phase II Permit. The Coalition appealed the EW Phase II Permit.[4] The Board consolidated the appeals of the WW Phase II and EW Phase II Permits for purposes of hearing only.

The Board conducted pre-hearing conferences, and entered separate pre-hearing orders for the Phase I and Phase II Appeals. The parties raised seven overlapping issues related to both the Phase I and Phase II Permits' Special Condition S4 (Condition S4 or S4), which is an identical condition in all three permits. The seven S4 issues initially identified were:

1. Did Ecology act unreasonably, unjustly, or unlawfully in imposing Special Condition S4 in the Permits to the extent it imposes requirements beyond Maximum Extent

[3] The City of Pacific (PCHB No. 07-031), Whatcom County (PCHB No. 07-032), and Sammamish Plateau Water & Sewer District (PCHB No. 07-024) also filed appeals, but they are not part of this consolidated action.

[4] Washington State University filed two appeals of the EW Phase II Permit (PCHB No. 07-025, PCHB No. 07-058) which are not part of these consolidated appeals.

Practicable (MEP) and/or requires permittees to comply with standards that are not legally required, or are otherwise unreasonable unjust, or invalid?

2. Whether Special Condition S4.F. and conditions that refer to it, are unlawful, unreasonable, unjust, or invalid in a municipal stormwater discharge permit, (a) by characterizing a violation of water quality standards as permit noncompliance and as a permit violation, and (b) by failing to clarify that the management process stated in S4.F.2 is a means to comply with the permit rather than action taken in response to a permit violation, and, (c) by imposing timeframes that do not allow sufficient time within which to accomplish required actions?
3. Whether Special Condition S4 is unlawful, unreasonable, unjust, or invalid because it fails to state specifically that compliance with the terms and conditions of this permit constitutes compliance with all applicable legal standards?
4. Does the permit unlawfully exempt permittees that comply with the process established in Permit Condition S4.F from the requirement to ensure that discharges do not cause or contribute to violations of water quality standards?
5. Does the process established in Permit Condition S4.F unlawfully fail to include standards and/or timelines necessary to ensure that discharges will comply with water quality standards?
6. Does the prohibition on violations of water quality standards contained in Permit Condition S4 unlawfully or unreasonably conflict with the other provisions of the permit?
7. Does Permit Condition S4 unlawfully fail to prohibit violations of water quality standards?

The parties filed motions on all seven issues. In an Order on Dispositive Motions: Condition S4, issued on April 2, 2008, the Board concluded that only Issue 1 was amenable to summary judgment, and awarded summary judgment to Ecology.[5] On Issues 2 through 5, and

[5] The City of Seattle suggests that there is a piece of Issue 1 that was not fully ruled upon in the Board's summary judgment order. City of Seattle's pre-hearing brief, p. 3. The City misreads the Board's order. The Board concluded that state law requires municipalities to comply with state water quality standards, and therefore Ecology has no discretion in deciding whether or not to impose the requirements of S4.A and B. This fully resolves Issue 1. Ecology has discretion in defining the manner, method, and timing for requiring compliance, as reflected in S4.F. S4.F is the subject of the remaining issues (Issues 2 through 5, and 7).

Issue 7,[6] the Board denied summary judgment to any party, and concluded that prior to ruling on these issues it needed more factual context as to the scope, interpretation, and expected application of S4.F. This decision addresses these issues following a full evidentiary hearing.

Prior to the hearing, Ecology and the permittees reached a stipulation regarding amending the language of S4.F. Ecology offered the proposed amended language of S4.F as an exhibit at the hearing. *Ex. ECY 14.* These amendments resolve Issues 2 and 3 of this appeal. PSA and the Utilities do not oppose the amended language; however, it does not resolve their issues (Issues 4, 5, and 7). At the conclusion of the hearing, counsel for PSA and the Utilities argued for further modifications to the language of S4.F, but their amendments were not stipulated or agreed to by the other parties.

Based on pre-filed testimony, five days of sworn testimony of witnesses, extensive exhibits submitted into the record, and argument from counsel representing the numerous parties that participated in these consolidated appeals, and having fully considered the record, the Board enters the following decision:

SUMMARY OF THE DECISION

The Board concludes that the permit's adaptive management approach to address site-specific water quality violations caused by discharges from MS4s, once the violations are identified, is a valid regulatory approach. However, the Board determines that S4.F, as drafted,

[6] The Board concluded that Issue 6 required a factual review of other permit provisions contained in both the Phase I and Phase II permits, and should therefore be addressed in the Phase I and Phase II specific cases.

fails to achieve its intended purpose in that it does not adequately address the circumstances under which permittees must give notice to Ecology of possible violations of water quality standards, the standards by which Ecology will direct adaptive management measures to correct identified violations, and the effect of compliance with the S4.F process. We find a pronounced lack of shared understanding as to the intended meaning, operation, and effect of Condition S4.F, which is counterproductive to the goal of achieving compliance with water quality standards, and remand the permit for modification consistent with this opinion to correct these deficiencies.

FINDINGS OF FACT

A. The Phase I and Phase II Permits

1.

The Phase I and Phase II Permits are NPDES permits, as required by the Federal CWA, 33 U.S.C. §§1251 et.seq. and State Waste Permits issued pursuant to the WPCA, Chapter 90.48 RCW. The Permits are "general permits," which provide an alternative to individual NPDES discharge permits. General permits allow regulators to efficiently administer a permit process covering multiple discharges of a point source category within a designated geographical area. *Ex. Muni-0001, p. 61; Ex. Muni-0002, p. 20-22; Ex. Muni-0126, p. 45; Ex. Muni-0127, p. 21-25; Ex. Muni-0128, p. 49; Ex. Muni-0129 p. 16-19. WAC Ch. 173-226.*

2.

The purpose of the Phase I Permit is to authorize the discharge of stormwater into waters of the State of Washington from large and medium sized MS4s. *Ex. Muni-0002, p. 4.* The

purpose of the two Phase II Permits is the same, but the permits apply to small MS4s, and are divided geographical into eastern and western Washington permits. *Ex. Muni-0127, p. 3, 21-23; Ex. Muni-0129, p. 1, 16.* The permittees under all three permits are the municipalities that own or operate the storm sewer systems. The Phase I permittees have been subject to the requirements of an NPDES/State Waste Discharge Permit since 1995. This is the first permit for the Phase II permittees. *Testimony of Moore; Ex. Muni-0001, p. 1; Ex. Muni-0002, p. 6-8, p. 19-20; Ex. Muni-0126, p. 1; Ex. Muni-0127, p.20; Ex. Muni-0128, p. 1; Ex. Muni-0129, p. 14.*

3.

Stormwater is runoff that occurs during and following precipitation events and snowmelt events, including surface runoff, drainage, and interflow. Municipal separate storm sewers are the conveyances, or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, owned or operated by municipalities, that are designed or used for collecting or conveying stormwater. Municipal separate storm sewers cannot, by definition, include sewers that collect and convey sewage as well as stormwater. *Testimony of Fendt, Wisdom, Ex. Muni-0001, p. 63, 64; Ex. Muni-0126, p. 46, 47, 49; Ex. Muni-0128, p. 51, 54.*

4.

With some limited exceptions, the Phase I and Phase II Permits regulate discharges of stormwater into surface waters and ground waters of the state from MS4s owned or operated by the permittees. The permits do not regulate stormwater that discharges directly to a water body

without passing through a regulated MS4. *Ex. Muni-0001, p. 2, 61; Ex Muni-0002, p. 22; Ex. Muni-0126, p. 6, 45; Ex. Muni-0127, p. 25; Ex. Muni-0128, p. 6, 48; Ex. Muni-0129, p. 19.*

5.

Ecology considers the permits "programmatic permits" because the core provision of all three permits is the requirement to adopt and implement a stormwater management program (SWMP). The SWMP requirements differ for primary and secondary permittees and are set out in detail in Special Condition S5 (S5) and Special Condition S6 (S6), respectively. *See Muni-0001, p. 6-25 and p. 25-39; Ex. Muni-0126, p. 9-23 and p. 23-30; Ex. Muni-0128, p. 9-26 and p. 26-33.* Conditions S5 and S6, in all of the permits, establish explicit requirements that constitute the minimum acceptable elements of a SWMP. *Ex. Muni-0002, p. 28-47; Ex. Muni-0127, p. 20-21, 32-46; Ex. Muni-0129, p. 25-37.* A programmatic approach provides the flexibility to address water quality issues within the context of a general permit and accounts for the numerous differing conditions faced by the many different Phase I and Phase II permittees. *Testimony of Fendt.*

6.

The S5 and S6 requirements and timelines applicable to the Phase I permittees differ from those for the Phase II permittees, primarily to reflect the differing level of experience with discharge permits and the differing development of and resources for their MS4 systems. The Phase II permits, for example, allow Phase II permittees up to four years to develop and

implement their SWMPs.[7] There are also differences between the requirements for the WW Phase II Permit and the EW Phase II Permit. This is because the WW Phase II permittees, in general, have had more experience addressing stormwater issues due to the higher amount of rainfall in western Washington, and therefore have more developed MS4s. *Testimony of Moore, Ex. Muni-0001; Ex. Muni-0126; Ex. Muni-0128.*

7.

The SWMP requirements in S5 and S6 for all of the permits are intended to reduce the discharge of pollutants to the maximum extent practicable (MEP) as required under the federal CWA, and to protect water quality. The SWMP requirements in S5 for all of the permits direct primary permittees to apply all known, available and reasonable methods of prevention, control and treatment to discharges (AKART) as required under the state WPCA, for the term of these permits. *Testimony of Moore; Ex. ECY 14; Ex. Muni- 0001, S5.B, p. 6; Ex. Muni- 0126, S5.B, p. 10; Muni- 0128, S5.A.1, p. 9; Exs. Muni-0001, S6.A.2, p. 25; Muni-0126, S6.A.2, p. 23; Muni-01-0128, S6. A.2, p. 26.* In addition, Condition S4.C requires all permittees to reduce the discharge of pollutants to the MEP, and Condition S4.D requires all permittees to use AKART to prevent and control pollution of waters of the state. *Ex. Muni-0001, p. 4; Ex Muni-0126, p. 8; Ex. Muni-0128, p. 7.*

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[7] Phase II primary permittees must fully develop and implement their SWMPs no later than 180 days before the expiration date of the permits. Phase II secondary permittees must also fully develop and implement their SWMPS no later than 180 days before the expiration date of the permits unless an alternate implementation date is set by Ecology as a condition of permit coverage. *Ex. Muni-0126, S5.A.2, p.9, S6.A.3, p. 23; Ex. Muni-0128, S5.A.2, p. 9; S6.A.3, p.26.*

8.

Condition S4 is entitled "Compliance with standards," and is identical in the Phase I and Phase II Permits. Parts A through E of S4 establish the legal standards applicable to the management of stormwater.[8] Part F establishes an adaptive management response process that is required for violations of water quality standards identified pursuant to parts A and B. The parties refer to this as the "compliance pathway." The Board has already concluded on summary judgment[9] that Part A, which prohibits the discharge of toxicants to state waters, and Part B, which does not authorize discharges that violate state water quality standards, ground water standards, sediment management standards, or human health based criteria in the national Toxics Rule, are required by state law. The question for this appeal is the validity and adequacy of the S4.F compliance pathway.

B. Condition S4.F

9.

Condition S4.F states:

> Required response to violations of Water Quality Standards pursuant to S4.A. and/or S4.B:
>
> 1. Pursuant to G20 *Non-Compliance Notification*, the Permittee shall notify Ecology in writing within 30 days of becoming aware that a discharge from the municipal separate storm sewer is causing or contributing to a violation of Water Quality Standards. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

[8] Special Conditions S4.A and .B were addressed on summary judgment, and Special Conditions S4.C, D and E have not been challenged in the S4 appeal.

[9] Order on Dispositive Motions: Condition S.4, issued on April 2, 2008.

2. In the event that Ecology determines that a discharge from a municipal separate storm sewer is causing or contributing to a violation of Water Quality Standards in a receiving water, and the violation is not already being addressed by a Total Maximum Daily Load or other water quality cleanup plan, Ecology will notify the Permittee in writing that:

a. Within 60 days of receiving the notification, or by an alternative date established by Ecology, the Permittee shall review their Stormwater Management Program and submit a report to Ecology. The report shall include:

i. A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each BMP.

ii. A description of additional operational and/or structural BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.

iii. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

b. Ecology will, in writing, either approve the additional BMPs and implementation schedule or require the Permittee to modify the report. If modifications are required, the Permittee shall submit a revised report to Ecology.

c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval.

d. The Permittee shall include with each subsequent annual report a summary of the status of implementation, and any information from assessment and evaluation procedures collected during the reporting period.

e. Provided the Permittee is implementing the approved BMPs, pursuant to the approved schedule, the Permittee is not required to further modify the BMPs or implementation schedule unless directed to do so by Ecology.

Ex. Muni-0001, p. 4-5; Ex. Muni-0126, p.8-9; Ex. Muni-0128, p. 8.

10.

The compliance pathway concept contained in Condition S4.F was not part of the draft permits circulated for public comment. The adaptive management process and specific language of Condition S4.F appeared for the first time in the final version of the permits as a result of public comments Ecology had received in response to the draft permits. Ecology added S4.F because it viewed writing a permit where compliance is impossible, despite the best efforts by the permittees, to be counterproductive, and concluded there had to be a feasible way for permittees to comply with the permit and its applicable legal requirements. Condition S4.F represented Ecology's best professional judgment to "reconcile the irreconcilable;" that is, to balance the state law requirement to comply with water quality standards against the practical and technical realities that permittees will not, in the foreseeable future, be able to ensure that every discharge from their MS4s will not cause or contribute to violations of water quality standards. In crafting Condition S4.F, Ecology intended to protect municipalities from CWA citizen suits, through a permit condition which allowed them an opportunity to comply with the permit despite these ongoing water quality violations at specific sites or with specific discharges. Condition S4.F was also Ecology's attempt to allow for individualized responses to site-specific problems that could not otherwise be adequately addressed through general permit terms. Revised Condition S4 also eliminated the distinction between compliance requirements for new

and existing discharges based upon comments that such distinctions would often be difficult to make and beneficial projects would be impossible to implement. *Testimony of Moore; Ex. ECY 2, p. 25; Ex. ECY 13; Ex. Muni-0002, p. 27; Ex. Muni-0127, p.31; Ex. Muni-0129, p. 24.* Despite this goal, the testimony and evidence presented at hearing demonstrate a pronounced lack of shared understanding between Ecology, the regulated community, and environmental interests as to the intended meaning, operation, and effect of the S4.F process.

11.

Bill Moore was the Ecology staff person with management responsibility for overseeing the development of the municipal stormwater permits and is the agency's designated speaking agent for this appeal. Mr. Moore is a licensed professional engineer and has worked at Ecology for more than 20 years. He is currently the Stormwater Technical and Policy Lead for Ecology's Water Quality Program and also a member of the Water Quality Management Team. In that capacity, he provides policy support for other general permits such as the Industrial and Sand & Gravel general permits. Mr. Moore previously oversaw the development of Ecology's stormwater management manuals and was responsible for preparing the agency's report to the Legislature regarding stormwater in 2003-2004. *Testimony of Moore; Ex. Muni-0015.*

12.

According to Mr. Moore, Ecology anticipated that the S4.F process would operate as follows: If a permittee becomes aware of a discharge from a MS4 that is causing or contributing to a violation of water quality standards, the permittee must notify Ecology in writing within 30

days. (*S4.F.1*) Ecology selected the 30 day timeframe for notification because it determined that was a reasonable amount of time for permittees to gather necessary information about the problem and obtain signatures from authorized representatives who are required by the permit (*Condition G19*) to sign non-compliance notifications. *Testimony of Moore.*

13.

Upon receipt of a notification, Ecology will then evaluate whether the discharge is, in fact, causing or contributing to a violation of water quality standards in the receiving water; whether Ecology was already aware of the problem; and whether the permittee is addressing the discharge through its SWMP process or another clean-up plan. The permits do not specify how long Ecology's evaluation may take after a notice is submitted, but Ecology expects that 30 to 60 days will be needed in most cases. *Testimony of Moore.*

14.

If Ecology determines the MS4 discharge is causing or contributing to a violation of water quality standards, and the permittee is not addressing the discharge through its SWMP or other clean-up obligations, Ecology will then require the permittee to submit a report within 60 days, or by an alternate date established by Ecology. (*S4.F.2.a*). Ecology selected the 60 day timeframe as a default because it determined that was short enough to instill a sense of urgency but sufficient in most cases to prepare the required report information, which includes a qualitative assessment of the effectiveness of current BMPs, a description of possible additional operational or structural BMPs, and a proposed schedule for implementing necessary additional

BMPs. (*S4.F.2.a.i-iii*). Ecology may also require a S4.F.2 report and invoke the adaptive management process based on its determination of a violation using information other than notifications from permittees. *Testimony of Moore.*

15.

Once the permittee submits the report, Ecology will review it and approve it, or require the permittee to revise it. (*S4.F.2.b.)*. Although the permit does not specify a timeframe in which Ecology will conduct its review of a report, Ecology expects to be able to do so within less than 60 days in most cases. Ecology envisions the development and approval of an S4.F.2 adaptive management plan will involve some communication and collaboration between Ecology and a permittee, but Ecology retains the final authority to direct the measures and implementation timeframes a permittee must meet. Ecology needs flexibility to customize the required response based on the highly variable situations that may arise, and S4.F was drafted to provide that authority and flexibility. Ecology will use its discretion in judging the level of effort or outcome required from an adaptive management plan, but S4.F identifies no standards or guidance against which Ecology will measure the response. *Testimony of Moore; Ex. ECY 13.*

16.

Once a plan is approved, the permittee must immediately begin implementing additional BMPs as specified in the report and provide a status report on the implementation with each subsequent annual report required under Condition S9 of the permits. (*S4.F.2.c-d)*. However, even if there are ongoing water quality violations, the permit does not require permittees to take

further action to modify their BMPs or to revise their implementation schedule unless directed to do so by Ecology. (*S4.F.2.e).* Whether or not Ecology will require further additional BMPs if the initial measures fail to achieve compliance with water quality standards will depend on the individual situation and the complexity of the options. The permit does not define, nor give notice to permittees of what further actions Ecology might take in response to ongoing water quality violations. *Testimony of Moore; Ex. ECY 13; Ex. Muni-0001, p. 4-5; Ex. Muni-0126, p.8-9; Ex. Muni-0128, p. 8.*

17.

Even where an on-going violation of water quality standards persists during or after implementation of the additional BMPs, Ecology will consider compliance with the S4.F process to be compliance with Conditions S4.A and .B, beginning at the time notice of the violation is given to Ecology. *Testimony of Moore.*

18.

Ecology did not specify what type of violations or possible violations would trigger a permittee's duty to notify Ecology under S4.F, because the agency concluded that, given the complexity of MS4 systems and the diversity of and multiple inputs into receiving waters, it was too difficult at the outset to categorize all of the types of discharges or exceedances that must be reported. Instead, Ecology intended to set a "low bar" and require broad initial notification so that Ecology could review initial notices of possible violations and make individualized decisions as to which ones required responsive actions by the municipality. Ecology would

make such a decision based on whether there was, in fact, a violation of water quality standards in the receiving water, the degree to which the MS4 caused or contributed to an identified violation, and whether the problem was being addressed adequately through other means. *Testimony of Moore.*

19.

Condition S4.F, as it is currently written, does not clearly identify what types of situations trigger the notice requirement under S4.F or what information must be contained within the notice provided to Ecology. Ecology only requires that the information be "site specific." *Testimony of Moore.* Representatives from several permittees testified about their confusion as to what it meant to "become aware" of a violation, whether to report generalized examples of problems caused by urbanization, whether to report exceedances of turbidity standards caused by significant storm events, and whether permitteees should notify Ecology of problems already known to Ecology and subject to enforceable clean-up programs such as the Thea Foss and Lower Duwamish Waterways. *Testimony of DeLeon, Rhay, Maurman, Crawford, Kibbey.*

C. S4.F.1 Notices from Tacoma and Seattle

20.

Two permittees had filed S4.F.1 notices as of the date of the hearing. On August 16, 2007, the City of Tacoma sent an "NPDES Stormwater Reporting S4F" letter to Ecology, documenting that Ecology has data indicating that discharges from Tacoma's MS4 contribute to

exceedances of standards in marine sediments at the head of the Thea Foss Waterway. The letter further indicated that Tacoma would continue to work with Ecology under EPA's Thea Foss Post-Remediation Source Control Strategy. *Ex. Muni-0032.* On September 24, 2007, Tacoma sent a supplemental letter informing Ecology that it had responded to a discovery request in the Phase I Municipal Stormwater Permit appeal and had admitted that discharges within the Thea Foss Basin have been identified as causing exceedances of state sediment quality standards for bis (2-ethylhexyl) phthalate. *Ex. Muni-0033.* On February 12, 2008, Ecology responded to these notices. Its response indicated that the Thea Foss information was not new information, that there is an ongoing Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) clean-up response plan addressing the recontamination of sediments in the Thea Foss, and that the interagency Sediment Phthalate Workgroup was also investigating the phthalates problem. *Ex. Muni-0034.* Therefore, Ecology concluded that it was not necessary for the City of Tacoma to provide an S4.F.2 report.

21.

On December 20, 2007, the City of Seattle sent two S4.F notification letters to Ecology. One of the letters provided notification of potential water quality and/or sediment problems in the Lower Duwamish River that may be related to discharges from the City's MS4. *Ex. Muni-0027.* The other was a general notification that waters of the state associated with the City of Seattle do not meet all water quality objectives, and stated that it is not clear whether discharges from the City's MS4 are contributing to these problems. *Ex. Muni-0028.* On February 11, 2008,

Ecology responded back to the City of Seattle. *Ex. Muni- 0029.* With regard to the Lower Duwamish River notice, Ecology concluded that a S4.F.2 report was not required because this was not new information, and that conditions of the Lower Duwamish River were being adequately addressed under the CERCLA clean-up plan and the required illicit discharge detection and elimination and source control components of Seattle's SWMP under the Phase I Permit. As to the general notification, Ecology responded that when the City received site-specific information that the City's MS4 was causing or contributing to a violation of water quality standards, the City must send Ecology a new S4.F notification. *Id.* Ecology intended its response to be a rejection of the City's general notification regarding waters of the state associated with the City of Seattle, in that the agency did not consider the notice sufficiently detailed to trigger the compliance pathway or broadly protect Seattle from liability for undetermined water quality standards violations. *Testimony of Moore.*

22.

Ecology's response to Tacoma's two notices took approximately 6 months. The length of time was due to the fact that these were the first S4.F.1 notices the agency had received, they were not immediately identified by the regional office as a high priority, there were no protocols in place for an agency response process, and Ecology had to consult with both EPA and its own attorneys prior to responding. Based on its experience with the Tacoma notices, Ecology was able to respond to Seattle's S4.F.1 notices in approximately two months. In the future, Ecology's goal is to respond to notification letters within 60 days or less. *Testimony of Moore.*

23.

Ecology is still determining what kind of information it will require in an S4.F notice and has not yet provided any specific guidance to permittees. The agency will be able to communicate future guidance through its website as it becomes available, and can also post copies on its website of notices, reports and adaptive management plans required under S4.F as examples for other permittees and to facilitate citizen oversight. *Testimony of Moore; Ex. Muni-0001, p. 4-5; Ex. Muni-0126, p.8-9; Ex. Muni-0128, p. 8.*

24.

Ecology did not intend its responses to the S4.F.1 notices from the cities of Tacoma and Seattle to create a shield for the permittees from liability under CERCLA, nor did it want to compromise Ecology's enforcement authority under the State Model Toxics Control Act (MTCA). *Testimony of Moore.*

D. Effect of Compliance with S4.F Process

25.

Ecology intended the programmatic elements in Condition S5 (and S6 for secondary permittees) to be the primary vehicle for driving jurisdiction-wide improvements in stormwater management. Ecology intended S4.F to augment the operation of S5 and S6 for situations where site-specific action is required to address newly discovered or newly occurring discharges that cause or contribute to violations of water quality standards in the receiving waters. The purpose

of S4.F is to address situations where the pollutants are discovered at levels above what would normally be expected, while S5 and S6 are designed to address the typical pollutant-loading from municipal stormwater. In drafting S4.F, Ecology did not intend it to be a compliance schedule that delayed programmatic compliance with water quality standards or broadly excused non-compliance with water quality standards on a system-wide basis. Permittees are expected to achieve compliance with water quality standards on a programmatic basis over the long term through the creation and implementation of the SWMPs. *Testimony of Moore; Ex. ECY 3, p. 62; Ex. ECY 13; Ex. PSA-036.*

26.

Ecology does not view permittees as being in violation of Condition S4.A or .B if they are unaware that their discharge is causing or contributing to a violation of water quality standards or if they are diligently implementing an approved response to an identified violation. But the agency also does not want to create an incentive for permittees to remain unaware of problems or to discourage additional proactive efforts to identify water quality problems associated with municipal stormwater. Although the permits do not utilize benchmarks or require systematic monitoring for compliance with water quality standards, the SWMPs' minimum requirements are designed to increase permittees' awareness of potential violations through such elements as illicit discharge and detection, source control, and maintenance requirements, and Ecology views the S4.F compliance pathway as a way to encourage additional proactive monitoring and investigative efforts. *Testimony of Moore, Ex. ECY 3, Ex. 13.*

E. The Municipal Stormwater Problem

27.

Stormwater in general is difficult to manage because discharges are intermittent and weather-dependent (*i.e.* from rainfall and snowmelt). Municipal stormwater is even more difficult to manage than other types of stormwater because it is collected and discharged from such a vast diversity of inputs and outfalls, and involves such a large volume of water. Most existing MS4s were not built with water quality protection in mind, but instead were built for the purpose of draining water as efficiently as possible, managing peak flows, and protecting the public from flooding and disease. *Testimony of Fendt, Wisdom, Moore; Ex. Muni-0002, p. 13; Ex. Muni-0127, p. 14; Ex. Muni-0129, p. 9, 10.*

28.

Municipalities have some similarities to, and some differences from, other types of stormwater dischargers. Municipalities own and operate buildings, large operations such as transfer stations, road construction and maintenance operations, municipal railroads, utilities and transportation systems, and large fleets of vehicles, all of which generate pollution. Most of the activities that cause pollution to enter an MS4s, however, are not the governmental activities of the municipalities, but instead are the lawful activities of citizens and businesses engaged in a wide variety of residential, commercial, and other types of activities on public and private lands that also generate pollutants. This differs from a construction site or an industrial site, where the owner of the on-site stormwater system also conducts the activities causing the pollution that is

received by the system, and where the owner has control over the site itself. *Testimony of Horner, Fendt, Wisdom, Moore.*

29.

Because the primary purpose of MS4s is to collect and discharge stormwater to prevent flooding, the option to stop accepting stormwater, or to stop discharging it, which can be available for other stormwater dischargers, is not generally an option for municipalities. In some situations, municipalities have some regulatory control over the entities generating the pollutants that enter their MS4s, such as developers operating pursuant to zoning and building ordinances. There are many situations, however, where the pollution is generated from activities occurring outside the municipalities' jurisdiction, such as on tribal lands, federal lands, and other nearby land physically outside of a municipality's boundary but interconnected to its MS4 system. For example, in several areas, irrigation water return flows and municipal stormwater share the same ditches or pipes, but the irrigation water is exempt from NPDES regulation as a non-point source activity. In other areas, stormwater runoff is conveyed from one city, town or county to another by way of interconnected streets, ditches, or streams. For some stormwater pollutants, the pollutant-generating activity may even occur great distances away from a municipality and be transported into the jurisdiction via the air. Given the diverse and dispersed nature of municipal stormwater pollutant sources, and the commingling of water from many sources in an MS4, tracing the source of particular pollutants in a site-specific MS4 discharge or identifying the cause of a water quality violation can be an extremely complex and sometimes impossible task.

Testimony of Moore, Fendt, Wisdom, Dalton, Crawford, Sidie, Kibbey, Rogalsky, Rhey, Tucker; Ex. Muni-0020-0023, 0036, 0155-0162, 0179-0230.

30.

Stormwater is the leading contributor to water quality pollution in the state's urban waterways, and is considered to be the state's fastest growing water quality problem as urbanization continues to spread throughout the state. *Ex. Muni-0015, p. 32.* Common pollutants in stormwater include lead, zinc, cadmium, copper, chromium, arsenic, bacterial/viral agents, oil & grease, organic toxins, sediments, nutrients, heat, and oxygen-demanding organics. Municipal stormwater also causes hydrologic impacts, because the quantity and peak flows of runoff are increased by the large impervious surfaces in urban areas. Stormwater discharges degrade water bodies and, consequently, impact human health, salmon habitat, drinking water, and the shellfish industry. This typical mixture of pollutants and hydrologic impacts contained in municipal stormwater is what Ecology targeted with the SWMP requirements contained in S5 and S6 of the permits. *Testimony of Horner, Fendt, Schaffner, Moore; Ex Muni-0002, p. 8-13; Ex. Muni-0127, p. 8-14; Ex. Muni-0129, p. 5-9.*

31.

Whether or not a single discharge from an MS4 will cause a violation of water quality standards in the receiving water it is discharged into varies from location to location depending on the volume and concentration of the pollutant in the discharge and the nature and quality of the receiving water. Many witnesses testified that municipalities could not ensure that

discharges from their MS4s could meet water quality standards at all times, for all storms, for all outfalls, at all places. Many witnesses, including Ecology spokesperson Bill Moore, opined that it would be many years, and more than one more municipal permit cycle, before the problem of the general pollutant levels in municipal stormwater discharges could be fully addressed. The fact sheets for all three permits state:

> In developing this permit, Ecology recognizes that permits alone cannot prevent all stormwater impacts and preserve natural resources and their associated beneficial uses. For multiple reasons, the cumulative impact of unregulated stormwater will continue to contribute to water quality degradation. . . . The permit does not address all urban stormwater management needs and will not prevent all stormwater impacts.

Testimony of Moore, Fendt, Schaffner, DeLeon, Wisdom; Ex Muni-0002, p. 14; Ex. Muni-0127, p.16; Ex. Muni-0129, p. 10.

32.

Even the most optimistic predictions of water quality improvements that could be expected from the significantly more stringent permit requirements advocated by the environmental appellants acknowledge the enormity of the challenge of full compliance with all aspects of state water quality standards. While opining that compliance with the beneficial use and anti-degradation elements of state water quality standards is achievable, PSA's expert testified that the probabilities of exceeding numeric water quality limits for such parameters as temperature and copper could be reduced but not eliminated during this permit cycle and beyond. *Testimony of Horner.*

33.

Ecology has a number of water quality implementation, enforcement, and exceptions tools, based in current water quality regulations, available to help ensure that water quality standards are being met in a variety of different circumstances. For example, Ecology's regulatory tools include such options as compliance schedules, enforcement orders, mixing zones, short-term modifications, variances, site-specific criteria, use attainability analysis, and water quality offsets.[10] Each of these tools is appropriate in different situations, and many of them require a great deal of site-specific information and can take considerable time and expense to employ. The permit's "compliance pathway" is not based on any of these existing regulatory provisions. *Testimony of Wisdom, Moore.*

34.

The only credible, site-specific evidence that Ecology currently has linking discharges from MS4s to water quality violations is from the Thea Foss Waterway and the Lower Duwamish Waterway, which are CERCLA and MTCA clean-up sites, and other sites documented by Ecology TMDL[11] studies. Special Condition 7 and Appendix 2 of the permits contain specific requirements applicable to TMDLs linked to discharges from MS4s. These provisions of the permits have not been appealed to the Board. *Testimony of Moore; Ex. Muni-*

[10] *See e.g.,* WAC 173-201A-400 through 450, and WAC 173-201A-510 and 530.

[11] TMDL, which stands for Total maximum daily load, is an acronym which refers to a water clean-up plan established pursuant to the CWA, 33 U.S.C. § 1313.

0001, p. 39 and Appendix 2; Ex. Muni-0126, p. 30-31, and Appendix 2; Ex. Muni-0128, p. 33-34 and Appendix 2; Ex. ECY 13.

F. Phthalates and the Thea Foss

35.

A chemical called "phthalates," which is used as a plasticizer in many common products such as vinyl, shower curtains, plastic automobile parts, and wiring, provides an example of the difficulty municipalities face in controlling the discharge of all pollutants from their MS4s. Phthalates are off-gassed from the plastic into the air through ordinary use of the products over time. The phthalates then attach to fine particles in the air and are deposited on soils and other surfaces. Rains wash the particles off surfaces, especially impervious surfaces, into storm drains. From the storm drains, the phthalate-laden particles enter waters of the state, where they do not dissolve, but instead accumulate in sediments. It is very difficult to remove fine particles containing phthalates from sediments. Also, treatment options such as routing the stormwater through a vault, is difficult because fine particles only fall out of suspension if a chemical is added to the water to make the particles precipitate. Phthalates are toxic to the benthic organisms that live in the sediments but are not considered a particular human health concern at this time. *Testimony of Moore, O'Loughlin, DeLeon; Exs. Muni-0037, 0038.*

36.

In 2005, clean up of the sediment surfaces at the head of the Thea Foss Waterway was completed, through a costly CERCLA cleanup. Within two years of the completion of the clean

up, the sediments were recontaminated with phthalates. The City of Tacoma admits that discharges from the City's MS4 have contributed to the recontamination of these sediments. *Testimony of Dalton, DeLeon; Ex. Muni -0032, 0033.*

37.

In response to the phthalate recontamination problem, a Sediment Phthalates Work Group was formed in 2006 by the Cities of Tacoma and Seattle, King County, Ecology, and the Environmental Protection Agency. The group published a Summary of Findings and Recommendations in 2006 to study the phthalate sediment contamination problem. While the Group had many recommendations for ways to decrease the phthalate problem in the future, it could not identify any technology that permittees could employ presently to control or eliminate sources of phthalate contamination in MS4s. *Testimony of O'Loughlin; Ex. Muni-0038.*

38.

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such.

CONCLUSIONS OF LAW

1.

The Board has jurisdiction over the parties and the issues in the case pursuant to RCW 43.21B.110(1)(c). The burden of proof is on the appealing party(s) as to each of the legal issues, and the Board considers the matter *de novo*, giving deference to Ecology's expertise in administering water quality laws and on technical judgments, especially where they involve

complex scientific issues. *Port of Seattle v. Pollution Control Hearings Board*, 151 Wn.2d 568, 593-594, 90 P.3d 659 (2004). Pursuant to WAC 371-08-540(2), "In those cases where the board determines that the department issued a permit that is invalid in any respect, the board shall order the department to reissue the permit as directed by the board and consistent with all applicable statutes and guidelines of the state and federal governments."

2.

The Board concluded on summary judgment that while federal law requires permittees to reduce pollutants in municipal discharges to the maximum extent possible (the "MEP Standard"), state law requires more. It requires that municipal discharges must comply with state water quality standards, which in turn are comprised of narrative standards related to beneficial uses and anti-degradation requirements, as well as numeric criteria.[12] The Board also concluded that Ecology has the discretion to define the "manner, method, and timing for requiring compliance with these standards." Ecology's discretion includes "considerable leeway in defining permit terms that will effect compliance over the short and long-term, discretion to fashion enforcement methods, ability to define the manner in which compliance schedules should be utilized, and powers to define, through permit terms, the ongoing iterative process necessary to achieve ultimate compliance with water quality standards." Order on Dispositive Motions: Condition S.4, p. 30-31.

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[12] State law also requires that dischargers use all known, available, and reasonable methods of prevention, control, and treatment (the "AKART" standard). RCW 90.48.010 and .520. The permit recognizes this applicable state law requirement in Condition S4.D.

3.

Ecology crafted the Stormwater Management Program requirements as the core of the permit (S5 for primary permittees and S6 for secondary permittees), to set out actions the permittees must take on a programmatic level to achieve the MEP and AKART standards. The actions required by these provisions should result, across the breadth of the permittees' various jurisdictions, in reduction and elimination, over time, of violations of water quality standards caused by discharges from MS4s. However, all of the stormwater experts before the Board, and all other interested parties, including the municipalities, the environmental interests, and Ecology, acknowledge that there will continue to be some violations of state water quality standards resulting from discharges from MS4s, at least during this iteration of the Phase I and II permits.

4.

Ecology and interested parties wanted a way to address these violations. The municipalities were especially concerned about the possibility of exposure to liability from citizen suits under the Clean Water Act, given the fact that S4.A and .B of the permit require compliance with state water quality standards.[13] The environmental interests were concerned that the permits did not go far enough to address water quality issues in the short term and argue that the S4.F process waters down the legal requirement to comply with water quality standards

[13] 33 U.S.C. § 1365(a) allows citizens to commence civil action for violations of "an effluent standard or limitation" or "an order issued by the Administrator or a State with respect to such standard or limitation."

into a mere aspirational goal. They wanted a way to immediately address identified water quality problems and seek modifications to the S4.F process to assure it will result in compliance with applicable water quality standards. The Utilities were concerned that the permit failed to prevent polluted discharges into waterbodies for which the utilities share clean up responsibilities under CERCLA and MTCA, particularly in the Thea Foss waterway. Specifically, they are concerned that Condition S4.F will operate to shield municipalities from liability under CERCLA.

5.

The S4.F "compliance pathway" concept is simple and two-fold: First, create an adaptive management approach to immediately address site-specific water quality violations that are caused by discharges from MS4s, when the permittees or Ecology become aware of the violations. Second, once the violation is known and reported, and as long as the permittee is timely complying with the prescribed process under S4.F, consider the permittee to be in compliance with the permit and the state law driven water quality requirements set out in Conditions S4.A and B. No party directly challenges Ecology's conceptual approach.[14] The Board concludes, given the complexity of the problem facing municipalities in managing their MS4s, that S4.F, coupled with S4.A and .B, is a valid approach to incorporating state law requirements to comply with water quality standards into the Phase I and Phase II permits.

[14] PSA and PSE's challenge to S4.F as an invalid compliance schedule could be considered a challenge to the concept of using S4.F as a compliance pathway. This argument is addressed in section B below.

While the conceptual approach of S4.F is valid, the S4.F provision as drafted fails to adequately address the circumstances under which permittees must give notice to Ecology, the standards by which Ecology will direct adaptive management measures to correct identified violations, the manner in which Ecology will address on-going violations of water quality standards, and the effect of compliance with the S4.F process.

A. S4.F: Deficiencies in Provisions for Notice and Scope of Violations Covered

6.

Consistent with Ecology's intent, known, complex, long-term water quality problems that the permittees address through existing clean-up plans and/or the permits' SWMP requirements are not properly the subject of an S4.F adaptive management response. S4.F was not designed to address these types of problems. However, if existing violations are newly discovered, or if new violations occur, permitttees are properly required to take action to address the violations by the permit's S4.F process. That action is best specified in site specific BMPs that apply AKART to the discharge and alleviate any resulting water quality violation in the receiving water.

7.

In determining the breadth of circumstances covered by S4.F, Ecology ultimately crafted a permit term that simply required notice of all situations where an MS4 discharge could be causing or contributing to a violation of water quality standards. Ecology planned to filter out problems that were not violations in the first instance, violations caused by sources other than the MS4s, or situations that were already known to Ecology and being addressed through the permit

or other clean-up plan. However, this approach, reflected in the current language in S4.F.1, fails to provide the permittees clear direction as to which discharges or violations of water quality standards they should report under the terms of the permit, and S4.F specifically. Similarly, interested third parties are not provided with a clear understanding of the permittees' obligations to report specific water quality violations under the permit. The Board concludes that this failing renders the notice provision of S4.F invalid.

8.

S4.F, as drafted, and operating in concert with S4.A and .B, also fails to inform the permittee or others under what circumstances a discharge that violates water quality standards is considered to be a violation of the permit, and reportable under S4.F. Contrary to Ecology's stated intent, the language as drafted, appears to cover every water quality violation (including those long-term, ongoing violations addressed by the permit's other substantive terms), and require or allow the S4.F adaptive management response. S4.A prohibits the discharge of toxicant to waters of the state that violate standards, and then states that the required response to "such violations is defined in S4.F., below." S4.B "does not authorize" violations of various standards contained in state law, and then states that "the required response to such violations is defined in section S4.F., below." S4.F then begins with "Required response to violations" pursuant to S4.A and .B, and sets out a prescribed protocol for response. Again, both the permittees and interested third parties are left without clear direction as to what must be reported,

what response will be necessary under the permit, and under what circumstances they will receive the protection offered by this so-called "compliance pathway."

9.

The one clear aspect of S4.F.1 is that giving notice is an essential step onto the compliance pathway. Therefore, permittees were left with a strong incentive to report everything. This resulted in the notices sent in by City of Seattle reporting discharges to the lower Duwamish waterway and other "possible" discharges or violations in undefined areas, and the City of Tacoma's similar notice regarding water quality violations in the Thea Foss Waterway. *Exs. Muni-0027, Muni-0028, Muni-0032, and Muni 0033.* The problem with this type of general reporting is that it does nothing to further Ecology's site-specific knowledge of either new violations, or newly discovered existing water quality violations, and it has the potential to overwhelm Ecology's resources, thereby slowing the agency's ability to respond to the more site-specific or definitive notices quickly.

10.

Prior to hearing, Ecology and the permittees agreed to modified S4.F language that resolved, to their mutual satisfaction, the appropriate trigger language for the notice process and the scope of protection afforded by compliance with the S4.F provisions.[15] *Ex. ECY 14.* The Board concurs that the new language is an improvement over the original S4.F language.

[15] Thereby resolving the permittees' concerns expressed in issues 2 and 3 in the Special Condition S4 list of legal issues.

However, the negotiated modification does not resolve the concerns raised by PSA and the Utilities, and does not adequately remedy other deficiencies in the language of this section of the permit.

B. S4.F: A Permissible Adaptive Management Approach

11.

PSA and the Utilities contend that the S4.F process is, in effect, an invalid compliance schedule. They argue it is unlawful for several reasons, most notably because it sets no outer time limit for compliance with its provisions and it applies to both new and existing discharges without distinction, in violation of the compliance schedule regulations contained in the state's water quality standards (WAC 173-201A-510). Additionally, the environmental appellants argue the S4.F process does not set a time frame for response from Ecology to either the notice of violation or the S4.F.2.a report; it allows Ecology to require only a reduction of the pollutants in a discharge causing a water quality violation, and not a complete prevention of the discharge or elimination of the violation; it does not address what should happen if Ecology rejects a permittee's report; and it fails to ensure Ecology will follow up after approving a report by requiring additional actions until the permittee eliminates violations of the water quality standards.

12.

PSA is correct that the S4.F process does not meet the requirements for a compliance schedule contained in the state water quality standards regulations. Ecology created the S4.F

process as an adaptive management approach, not a regulatory compliance schedule. Through this adaptive management approach, permittees would bring newly discovered or newly occurring discharges that contain pollutants into compliance as quickly as possible through the use of best management practices (BMPs). While Ecology is authorized to use compliance schedules in its waste discharge general permits to address violations of water quality standards, compliance schedules are not mandatory. The waste discharge general permit program compliance schedule regulations provide as follows:

> (1) The department may establish schedules and permit conditions to achieve compliance with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements contained in a general permit in any or all of the following ways:
> (a) As a condition or schedule in a general permit;
> (b) In an administrative order issued pursuant to chapter 90.48 RCW; and
> (c) By any other method deemed appropriate by the department.

WAC 173-226-180(1)(emphasis added). *See also* the compliance schedule regulation in the state water quality standards, which provides: "Permits, orders and directives of the department of existing discharges may include a schedule for achieving compliance with water quality criteria." WAC 173-201A-510(4)(a) (emphasis added).

13.

These compliance schedule regulations allow initial responsive actions prior to establishing a formal compliance schedule. *See* WAC 173-201A-510(4)(c)("Prior to establishing a schedule of compliance, the department shall require the discharger to evaluate the possibility

of achieving water quality criteria via nonconstruction changes (e.g., facility operation, pollution prevention).") Additionally, state water quality standards address the means of implementing the standards for nonpoint source and stormwater pollution. WAC 173-201A-510. The regulations specifically direct the adaptive use of best management practices as the primary means of achieving compliance in waste discharge permits directed at control of pollutants in stormwater. WAC 173-201A-510(3).[16]

14.

The Board has affirmed the use of similar adaptive management approaches in other stormwater general permits. *See Associated General Contractors of Washington v. Ecology*,

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[16] WAC 173-201A-510(3) provides as follows:

> (3) Nonpoint source and storm water pollution.
> ...
> (b) Best management practices shall be applied so that when all appropriate combinations of individual best management practices are utilized, violation of water quality criteria shall be prevented. If a discharger is applying all best management practices appropriate or required by the department and a violation of water quality criteria occurs, the discharger shall modify existing practices or apply further water pollution control measures, selected or approved by the department, to achieve compliance with water quality criteria. Best management practices established in permits, orders, rules, or directives of the department shall be reviewed and modified, as appropriate, so as to achieve compliance with water quality criteria.
> (c) Activities which contribute to nonpoint source pollution shall be conducted utilizing best management practices to prevent violation of water quality criteria. When applicable best management practices are not being implemented, the department may conclude individual activities are causing pollution in violation of RCW 90.48.080. In these situations, the department may pursue orders, directives, permits, or civil or criminal sanctions to gain compliance with the standards.
> (d) Activities which cause pollution of storm water shall be conducted so as to comply with the water quality standards. The primary means to be used for requiring compliance with the standards shall be through best management practices required in waste discharge permits, rules, order, and directives issued by the department for activities which generate storm water pollution. The consideration and control procedures in (b) and (c) of this subsection apply to the control of pollutants in storm water.

WAC 173-201A-510(3)(Emphasis added).

PCHB Nos. 05-157, 158 and 159, Order Granting Ecology's Motion for Partial Summary Judgment (Jan. 30, 2007); *Puget Soundkeeper Alliance v. Ecology*, PCHB Nos. 05-150, 05-151, 06-034, & 06-040 (January 26, 2007).[17] In approving such an adaptive management approach, the Board has also cautioned that a permit should address potential on-going noncompliance with water quality standards, despite the implementation of adaptive management measures, by specifying that Ecology will require further actions, such as compliance schedules, to assure compliance is achieved at specific sites or facilities. *See, Puget Soundkeeper Alliance v. Ecology,* PCHB Nos. 05-150, 05-151, 06-034, 06-040 (Jan. 2007) at CL 27.

15.

Use of an adaptive management approach to achieve compliance with water quality requirements in a municipal stormwater permit is not unique to Washington. The California Court of Appeals reviewed and commented with approval on the use of a very similar adaptive management approach in a municipal stormwater permit issued to multiple public entities in San Diego County in a 2004 decision, *Building Industry Association of San Diego Co. v. State Water Resources Control Board*, 124 Cal. App. 4th 866 (2004). In that case, the Building Industry challenged restrictions in the permit that prohibited the discharge of pollutants that would cause exceedances of water quality standards in receiving water, contending that strict adherence with water quality standards was prohibited by the federal MEP standard. The Court, while rejecting

[17] Both of these decisions have been appealed.

this argument, commented on the adaptive management approach utilized in the California permit. The Court stated:

> The Permit makes clear the Municipalities are required to adhere to numerous specific controls (none of which are challenged in this case) and to comply with water quality standards through "timely implementation of control measures" by engaging in a cooperative iterative process where the Regional Water Board and Municipality work together to identify violations of water quality standards in a written report and then incorporate approved modified best management practices. Although the Permit allows the regulatory agencies to enforce the water quality standards during this process, the Water Boards have made clear in this litigation that they envision the ongoing iterative process as the centerpiece to achieving water quality standards.
>
> *Id.*, at p. 890.

16.

Likewise here, the S4.F process utilizes an iterative approach to correct site-specific violations of water quality standards, while relying overall on a programmatic MEP and AKART driven process to achieve jurisdiction-wide compliance with water quality standards over time. We conclude Condition S4.F is not an invalid compliance schedule but rather a valid exercise of Ecology's discretion to define the manner, method, and timing for requiring compliance with state water quality standards.

C. S4.F: Deficiencies in Responsive Process

17.

While S4.F's adaptive management process is a valid approach, the Board concludes that the language of S4.F, even as modified by agreement of Ecology and permittees in Ex. ECY 14, remains deficient in several respects. We conclude that, without further modification, it fails to

provide reasonable assurance that permittees will use AKART to prevent and control pollution of waters of the state and comply with state water quality standards. As PSA has argued, S4.F fails to assure compliance with water quality standards because it lacks adequate timelines, standards, and accountability.

18.

Condition S4.F.1 is deficient in that it fails to clearly identify when permittees must notify Ecology and gives no direction as to the minimum information Ecology will need to evaluate the notice in a timely manner. Despite the clarifications proposed in Ex. ECY 14, S4.F.1 remains unclear as to whether a permittee must report a possible, but unconfirmed, violation in a receiving waterbody to which it discharges. Without some direction for the minimum content of a notice, there is no assurance it will provide enough information for Ecology to determine in a timely manner whether or not to require a S4.F.2 report. Given that permittees have thirty days to investigate and prepare a notice, the notice should facilitate Ecology's timely review by, at a minimum, identifying the source of the site-specific information, describing the nature and extent of the known or likely violation in the receiving water, and explaining the reasons why the MS4 discharge is believed to be causing or contributing to the problem.

19.

Condition S4.F.2 (Ecology determination of violation of water quality standard and notice to permittee) is deficient in that even if Ecology never responds to a notice of a water

quality violation from the permittee, a permittee is considered to be in compliance with Condition S4 without taking any additional steps to correct an identified water quality standards violation for which it is responsible. This lack of response may be acceptable if Ecology reviews the situation and determines that no violation, in fact, exists in the receiving water, that the permittee is not causing or contributing to the problem, or that the permittee is adequately addressing the situation through its SWMP or another enforceable clean-up plan. However if Ecology simply fails to respond to a notice of a water quality violation for an indefinite period of time, due to lack of resources or for other reasons, the permittees are not held to any requirement to address the ongoing violation. At the same time, merely providing notice has offered the permittees the protection of being considered in compliance with the permit, and insulated them from third party actions. We accept Ecology's anticipated 30-60 day turn-around time to respond to such notices as reasonable, and have no basis for imposing a different deadline on Ecology. But we also emphasize that the validity of the adaptive management approach assumes a timely response by Ecology, and we encourage Ecology to adhere to this timeframe or, if individual circumstances require more time, to keep all interested parties apprised of the reasons for the delay and the anticipated completion date.

20.

We also conclude that the report requirements in Condition S4.F.2.a.(permittee submission of initial report after notice) is deficient in two respects: first, permittees are given no standard to target when proposing potential additional BMPs (other than to "prevent or reduce

any pollutants that are causing or contributing to the violation of Water Quality Standards"); and second, permittees are not required to include any measures to monitor, assess, or evaluate the effectiveness of their additional BMPs. We conclude that the language in S4.F.2.a.iii (addressing the schedule, possible training, monitoring and the like) is wholly permissive, leaving it to a permittee's discretion whether to include any monitoring or other assessment and evaluation component as part of an implementation plan. The absence of any plan to evaluate the effectiveness of the additional BMPs leaves Ecology no basis on which to determine whether adequate progress is being made towards compliance with water quality standards. Condition S4.F.2 must also be modified to clarify an adaptive management response report is required when Ecology receives information from sources other than a permittee and to clarify the circumstances under which Ecology will *not* require a report, as the permit is impermissibly vague on this topic.

21.

Condition S4.F.2.b (Ecology approval of BMPs or permittee modification of submitted report) suffers from similar deficiencies as previously described, in that it lacks any assurance of timely action either by Ecology in reviewing a report, or by a permittee in revising a report when directed to do so by Ecology. Just as there is no clear standard identified for permittees when preparing the report, there is no standard identified by which Ecology will judge the adequacy of a proposed plan or implementation schedule. We conclude that, while it is not appropriate to establish fixed timetables in the permit due to the range of circumstances that must be addressed

on a case-by-case basis, Ecology must establish an appropriate schedule for this step of the iterative process in order to assure it continues to move forward as expeditiously as possible. We further conclude that the permit must articulate the standard for addressing site-specific water quality standards violations that are subject to the S4.F adaptive management process. The appropriate standard is through application of AKART. The AKART standard is required by state law, and has been incorporated generally into the permit through Condition S4.D. Application of AKART by the permittee assures a rigorous yet reasonable response, allowing permittees and Ecology the necessary flexibility to evaluate all known and available options to address the site-specific discharge and tailor the response depending on the reasonableness of those options under the circumstances. Permit condition S4.F will accordingly be modified to reflect this standard.

22.

Condition S4.F.2.d and .e (annual report submission and further modification of BMPs) must incorporate the use of monitoring, assessment, or evaluation information as the basis on which Ecology will determine whether further modification of the BMPs or implementation schedule is necessary to meet AKART on a site-specific basis, or whether a permittee will be deemed to remain in compliance with Condition S4 despite on-going violations of water quality standards. Adaptive management requires, as necessary components, some collection of information through monitoring as well as some form of assessment or evaluation. If no information is collected, or there is no assessment or evaluation of the results, there is no ability

to make changes in response to the results. Ecology cannot properly characterize S4.F as an adaptive management approach unless there is some ability to take informed actions following the permittee's initial response. *See Confederated Tribes of the Umatilla Indian Reservation v. Ecology,* PCHB No. 03-075, Order on Summary Judgment (February 13, 2004)(quoting Washington's Independent Science Panel discussion of adaptive management as a direct feedback loop between science and management at p.6-7) and PCHB No. 03-075, Findings of Fact, Conclusions of Law and Order (April 21, 2004).

23.

Finally, S4.F.2.e. (no further modification of BMPs required if permittee implements those approved by Ecology) must also be modified to reflect that the permittee is subject to possible enforcement action by Ecology, including enforcement orders and compliance schedules, should the adaptive management approach authorized by the permit fail to achieve compliance with water quality standards within a reasonable period of time. Such a term is necessary to ensure that there is an ongoing iterative process between Ecology and permittees that continues to apply AKART to reach ultimate compliance with water quality standards. Only in this manner can compliance with those standards be the goal line, rather than a mere aspirational goal. While we leave it to Ecology's discretion during this permit cycle, as to when and whether such enforcement actions should be taken, a permittee must be on notice, and Ecology held to the task, of further steps necessary to achieve compliance with water quality standards. *Puget Soundkeeper Alliance v. Ecology*, PCHB Nos. 05-150, 05-151, 06-034, & 06-

040 (Jan. 26, 2007). Because we leave imposition of compliance schedules or enforcement orders, or consideration of other water quality implementation, enforcement, or exceptions tools to Ecology's discretion at this time, we reject PSA's suggested language that would require the use of a compliance schedule or enforcement order in order for the permittee to be considered in compliance with permit condition S4.

24.

The Board concludes that Ecology must modify the S4.F permit language to correct the deficiencies identified above in order to provide a valid and effective adaptive management process to address site-specific violations of water quality standards caused by discharges from MS4s. The Board directs specific modifications to S4 in its Order to correct the deficiencies.

D. Remaining Challenges

25.

PSA and the Utilities' final challenge to the S4.F process is that it allows permittees to remain in technical compliance with the permit while continuing to discharge in violation of water quality standards.[18] In particular, the Utilities argue that RCW 90.48.520 precludes the approach taken by Ecology to condition and respond to the discharge of stormwater from MS4s

[18] The Utilities also contends that the S4.F process was intended to create immunity from liability under CERCLA. CERCLA imposes liability for the costs of cleaning up contaminated sites on those who have contributed to the contamination. 42 U.S.C. 9607(a). One of the few exceptions to liability under CERCLA is provided for a party that releases hazardous substances under the authority of a Federal Permit. 42 U.S.C. 9607(j). While we have already found it was not Ecology's *intention* to confer immunity from liability under CERCLA, the question of whether or not a permittee under the Phase I or II permits that complied with the S4.F process would be shielded from liability under CERCLA is beyond the scope of this hearing and outside this Board's jurisdiction to determine.

through these permits.[19] If S4.F were the only provision of the permits designed to achieve compliance with water quality standards, the Board might agree with PSA and the Utilities that the permits were inadequate to comply with state law. However, S4.F targets only site-specific violations and does not offer a broader, programmatic approach to eliminating water quality problems associated with municipal stormwater. Ecology did not intend S4.F to be the primary permit term that would move the permittees toward eventual compliance with water quality standards on a programmatic or jurisdiction-wide basis. The permits require compliance with water quality standards, and the manner in which permittees will achieve this is set out in the remainder of the permit, primarily the SWMP requirements of S5 (S6 for secondary permittees) and also the monitoring provisions of S8 of the permit.

26.

RCW 90.48.520 imposes a duty on Ecology to ensure that wastewater discharge permits issued under the CWA and WPCA include conditions requiring the permit holder to use AKART to control toxicants in that wastewater. *Puget Soundkeeper Alliance v. Department of Ecology*, 102 Wn. App. 783, 9 P.3d 892 (2000). In this context, the Board believes it requires Ecology to ensure that each permittee expends the proper amount of effort to reduce pollutant loading until water quality standards are achieved in the most timely manner possible. Ecology has taken a reasonable approach in these permits by recognizing compliance with all aspects of state water

[19]The Utilities point to the portion of RCW 90.48.520 that provides: "In no event shall the discharge of toxicants be allowed that would violate any water quality standard..."

quality standards, at every site or outfall at all times, cannot be met at this time, but also by not providing a categorical exemption from complying with water quality standards. Ecology recognizes that it will take time for permittees to come into compliance with water quality standards, and states that "The focus of this permit is to prevent further water quality impairment due to new stormwater discharges and make reasonable progress in addressing existing sources of water quality impairment." *Ex. ECY 6, p. 31.* As previously discussed in the Board's Order on Dispositive Motions; Condition S4, Ecology has considerable discretion to define the manner, method, and timing for requiring compliance with water quality standards, including fashioning enforcement methods, the use of compliance schedules, and the ongoing iterative process necessary to achieve ultimate compliance with water quality standards. *Order at p. 30-31.* As technology and scientific knowledge advance, Ecology must require further reductions in pollutant levels.

27.

The Board concludes that S4.F, as modified herein and as fully supported by the remainder of the permits,[20] constitutes a valid exercise of Ecology's discretion in defining permit

[20] The Board has completed its review of all of the challenged provisions of the Phase I Permit and has required modifications in these conditions that will result in a more comprehensive use of LID techniques. *See* Findings of Fact, Conclusions of Law, and Order, Phase I issued on August 7, 2008. The Board concludes that the directed modifications of S4, along with the directed modifications to other provisions of the Phase I Permit are adequate to effect compliance over the short and long term with water quality standards. The hearing on the Phase II Permits, Remaining Issues, is scheduled for October, 2008. Following that hearing, the Board will issue a decision on the adequacy of challenged provisions of the Phase II Permits.

terms and conditions that require the use of MEP and AKART and effect compliance with water quality standards over the short and long-term.

Based on the foregoing analysis, the Board enters the following:

ORDER

Having concluded that S4.F as written is invalid, the Board remands the Phase I and Phase II Permits[21] to Ecology to make the following modifications to Special Condition S4 consistent with this opinion:

S4. COMPLIANCE WITH STANDARDS

A. In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such ~~violations~~ discharges is defined in section S4.F., below.

B. This permit does not authorize a discharge which would be a violation of Washington State surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), or human health-based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22, 1992, pages 60848-60923). The required response to such ~~violations~~ discharges is defined in section S4.F, below.

C. The Permittee shall reduce the discharge of pollutants to the *maximum extent practicable* (MEP).

D. The Permittee shall use all known, available, and reasonable methods of prevention, control and treatment (*AKART*) to prevent and control pollution of waters of the State of Washington.

[21] A summary judgment decision on other issues in the Phase II appeal is currently pending before the Board. A decision will also be issued following the full evidentiary hearing on the Phase II appeal. These upcoming decisions may result in additional remands or changes to the Phase II permit.

E. In order to meet the goals of the Clean Water Act, and comply with S4.A., S4.B., S4.C. and S4.D., each Permittee shall comply with all of the applicable requirements of this permit as defined in S3 Responsibilities of Permittees.

F. ~~Required response to violations of Water Quality Standards pursuant to S4.A. and/or S4.B~~ A Permittee remains in compliance with S4 despite any discharges prohibited by S4.A or S4.B, when the Permittee undertakes the following response toward long-term water quality improvement:

1. ~~Pursuant to G20 *Non-Compliance Notification*, the Permittee shall notify Ecology in writing within 30 days of becoming aware that a discharge from the municipal separate storm sewer is causing or contributing to a violation of Water Quality Standards.~~ A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information, that a discharge from the municipal separate storm sewer owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site-specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

2. In the event that Ecology determines, based on a notification provided under S4.F.1 or through any other means, that a discharge from a municipal separate storm sewer owned or operated by the Permittee is causing or contributing to a violation of Water Quality Standards in a receiving water, ~~and the violation is not already being addressed by a Total Maximum Daily Load or other water quality cleanup plan,~~ Ecology will notify the Permittee in writing that an adaptive management response outlined in S4.F.3 below is required, unless Ecology also determines that (a) the violation of Water Quality Standards is already being addressed by a Total Maximum Daily Load or other enforceable water quality cleanup plan; or (b) Ecology concludes the violation will be eliminated through implementation of other permit requirements.~~:~~

3. Adaptive Management Response.

   a. Within 60 days of receiving ~~the~~ a notification under S4.F.2, or by an alternative date established by Ecology, the Permittee shall review their

Stormwater Management Program and submit a report to Ecology. The report shall include:

i. A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each BMP.

ii. A description of potential additional operational and/or structural BMPs that will or may be implemented in order to apply AKART on a site-specific basis to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.

iii. A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.

~~iii.~~ iv. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

b. Ecology will, in writing, acknowledge receipt of the report within a reasonable time and notify the Permittee when it expects to complete its review of the report. Ecology will either approve the additional BMPs and implementation schedule or require the Permittee to modify the report as needed to meet AKART on a site-specific basis. If modifications are required, Ecology will specify a reasonable time frame in which the Permittee shall submit and Ecology will review a the revised report ~~to Ecology~~.

c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval.

d. The Permittee shall include with each subsequent annual report a summary of the status of implementation, and the results of any monitoring, assessment or evaluation efforts conducted ~~any information from assessment and evaluation procedures collected~~ during the reporting period. If, based on the information provided under this subsection, Ecology determines that modification of the BMPs or implementation schedule is necessary to meet AKART on a site-

specific basis, the Permittee shall make such modifications as Ecology directs. In the event there are ongoing violations of water quality standards despite the implementation of the BMP approach of this section, the Permittee may be subject to compliance schedules to eliminate the violation under WAC 173-201A-510(4) and WAC 173-226-180 or other enforcement orders as Ecology deems appropriate during the term of this permit.

e. Provided the Permittee is implementing the approved ~~BMPs, pursuant to the approved schedule, the Permittee is not required to further modify the BMPs or implementation schedule unless directed to do so by Ecology~~ adaptive management response under this section, the Permittee remains in compliance with Condition S4., despite any on-going violations of Water Quality Standards identified under S4.F.A or .B above.

G. Ecology may modify or revoke and reissue this General Permit in accordance with G14 *General Permit Modification and Revocation* if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this permit, that are necessary to:

1. Reduce the discharge of pollutants to the MEP;

2. Comply with the state AKART requirements; or

3. Control the discharge of toxicants to waters of the State of Washington.

SO ORDERED this 7th day of August, 2008.

POLLUTION CONTROL HEARINGS BOARD

Kathleen D. Mix, Chair

William H. Lynch, Member

Andrea McNamara Doyle, Member

Kay M. Brown, Presiding
Administrative Appeals Judge