Response to Public Comments

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's responses to comments received on the draft NPDES Permit, #MA0004871. The responses to comments explain and support the EPA determinations that form the basis of the final permit. From May 3, 2011 to June 18, 2011, the United States Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("MassDEP") (together, the "Agencies") solicited public comments on a draft NPDES permit, #MA0004871, developed pursuant to a permit application from Weaver's Cove Energy, LLC ("WCE" or "the permittee") for the reissuance of a National Pollutant Discharge Elimination System ("NPDES") permit to discharge stormwater runoff from outfall serial numbers 001 and 004 to the Taunton River in Fall River, Massachusetts. The public comment period was reopened on April 24, 2012 and there was a public hearing conducted regarding the issuance of this permit on May 23, 2012. During this hearing, the public comment period was extended through June 27, 2012.

After a review of the comments received, EPA and MassDEP have made a final decision to issue this permit authorizing these discharges. Although EPA's decision-making process has benefitted from the various comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit. EPA did, however, make certain clarifications and changes in the final permit. These changes were a result of the comments received during the public comment period and during the public hearing testimony. The analyses underlying these changes are explained in the responses to individual comments that follow and are reflected in the final permit. A summary of the changes made in the final permit are listed below. Where applicable, relevant sections of the response document where these changes have been discussed have been included in parentheses at the end of each change.

On February 6, 2012, after the issuance of this draft permit, the National Marine Fisheries Service (NMFS) listed the Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) as an endangered species under the Endangered Species Act (ESA). Under the ESA, EPA is required to consult with the NMFS or United States Fish & Wildlife Service to ensure that any federal action is not likely to adversely impact such species or their habitat. EPA-issued NPDES permits are federal actions that must undergo this consultation. In a letter to NMFS dated August 17, 2012, EPA determined that the discharges authorized by this permit are not likely to adversely affect this species. In a letter dated September 21, 2012 to EPA, NMFS concurred with EPA's determination, stating that any effects to this species would be insignificant. Therefore, no further consultation was required for the Atlantic Sturgeon regarding the reissuance of this permit.

MA0004871

Copies of the final permit may be obtained by writing or calling EPA's NPDES Industrial Permits Section (OEP 06-1), Office of Ecosystem Protection, 5 Post Office Square, Suite 100, Boston, MA 02109-3912; Telephone: (617) 918-1579.

Changes made to the draft permit:

- 1. A new requirement has been added to the final permit at Part I.C.9 to require the permittee to conduct an investigation to determine whether, and if so, to what extent, contaminated groundwater is infiltrating into the stormwater drainage system discharging to Outfalls 001 and 004. (**B1, B3, B5**)
- 2. Part I.A.12 has added the words "associated with Outfall 001" to make it clear where the dry weather screening needs to be conducted.
- 3. Once per year monitoring for total arsenic has been added to the final permit for Outfalls 001 and 004. (B8).

List of commenters for comments submitted during public comment period commencing on May 3, 2011 and ending on June 18, 2011.

A. Benjamin R. Frothingham - WCE, LLC

B. Dianne R. Phillips - Holland & Knight, LLP, on behalf of the City of Fall River

- C. Cecile Scofield
- D. Ronald M. Thomas
- E. Elaine Rousseau, Normand Rousseau, and Helena F. Rocha

F. David M. Franco-Rocha

G. Marian R. and Robert W. LeComte

H. Gabrielle LeComte

I. Marilyn Sokole

List of commenters for comments submitted during the public hearing and up to the extended public comment closing date of June 27, 2012.

J. Dianne R. Phillips - Holland & Knight, LLP, on behalf of the City of Fall River

K. Pauline Rodrigues and Joyce Mello

L. Cecile Scofield

M. Ann Morrill, Kickemuit River Council

N. Priscilla Chapman

O. Frank Perry

P. Sarah Guilmette

Q. Kathleen C. Medeiros

R. Gail Welch

Comments submitted during public comment period commencing on May 3, 2011 and ending on June 18, 2011.

A. Comments submitted by Benjamin R. Frothingham of WCE, LLC:

Comments A1 and A2:

As with the original NPDES permit from 1978, the draft NPDES permit accurately identifies the facility address as One New Street in Fall River, MA. However, the Fact Sheet attached to the draft permit incorrectly identifies the site as approximately 73 acres. WCE in fact owns multiple parcels in the area, but the One New Street site that is the subject of this permit comprises approximately 50 acres.

The One New Street site is identified as Lot 1 on the Fall River Tax Map T-2 and matches the area of coverage correctly depicted on Figure 2 Outfall Drainage Areas. Figure 1 attached to the draft permit shows the One New Street property plus other lots that are owned by WCE but are not subject to the NPDES permit. The correct approximate outline of the property subject to the NPDES permit is provided on the attached revised Figure 1.

3

MA0004871

Response to Comments A1 and A2:

EPA acknowledges WCE's suggested clarification to the fact sheet, which is now part of the administrative record for the permit. However, because the fact sheet only serves to support the draft permit, and is not required as a part of the final permit decision, an updated fact sheet has not been prepared.

Comment A3:

Additional comments on Figure 1 and the text of Sections I and II of the Fact Sheet can be seen annotated in red (see document attached to this letter).

Response to Comment A3:

EPA acknowledges these comments, which are mainly related to the comments above and reiterates that an updated fact sheet has not been prepared. A copy of the permittee's comments are attached to this document, with specific comments provided by the permittee in text boxes.

B. Comments submitted by Dianne R. Phillips of Holland & Knight, LLP, on behalf of the City of Fall River: [In an e-mail of June 25, 2012 to George Papadopoulos of EPA, Ted Gehrig of WCE submitted a marked up copy of Dianne Phillips' comment letter, with WCE's own comments. The City's comments and WCE's corresponding comments (when made) have been included below and have been considered by EPA and responded to as appropriate.]

General Comment from Diane Phillips on behalf of the City of Fall River:

Fall River urges the EPA and the MassDEP to retract the Draft Permit and reissue a more comprehensive Draft Permit which adequately addresses the significant site history and site contamination which threatens the water quality of the receiving waters, the Taunton River, a river designated under the National Wild and Scenic Rivers System under 16 U.S. C. § 1271 *et seq.* and listed as impaired on the Commonwealth of Massachusetts' Clean Water Act § 303(d) list. Moreover, with Weaver's Cove's recent announcement abandoning plans to pursue its LNG terminal development project, it is more important than ever that the next NPDES Permit issued jointly by EPA and MassDEP adequately protect the Taunton River upon issuance and not wait for upgraded stormwater management systems Weaver's Cove promised with its proposed LNG terminal development.

Response to the City's General Comment:

EPA has considered the City's general comment and has determined that the final permit being issued properly addresses from both technical and legal standpoints all of the relevant circumstances at the permitted facility, including, but not limited to, the nature of and circumstances associated with the site, and the water quality of the receiving water, the Taunton River. EPA's responses below, to more specific individual comments, also contain additional information relevant to this general comment.

Comment B1 from the City of Fall River:

The current NPDES permit for the site was issued in 1978, over three decades ago, and has been administratively continued since then. However, this Draft Permit retains the identical single effluent limit for oil & grease and does not impose any additional effluent limits despite strong evidence that contaminated groundwater is infiltrating the storm drain system and may be discharging to the impaired Taunton River. Indeed, several known site contaminants are completely absent from the list of pollutants to be monitored under the Draft Permit. EPA must examine the complete record, and describe that site history in greater detail in the Fact Sheet before issuing a final permit. Given the long delay since the site was transferred to Weaver's Cove in 2007, during which it has only been required to comply with the antiquated 1978 permit, Fall River urges EPA and MassDEP to promptly evaluate existing groundwater data, and require additional data from Weaver's Cove, if warranted, to protect the public and the Taunton River.

Comment related to Comment B1 from WCE:

For clarity there are four discharges from the "Weaver's Cove" site to the Taunton River. This permit addresses two outfalls, outfall 001 and 004, both outfall operated by Weaver's Cove Energy. This permit does not address outfall 001A (Shell's permitted groundwater discharge). This permit also does not address discharges from the combined sewer outfall (CSO) which regularly discharges raw untreated sewage into the river under a permit issued to the City of Fall River. The following comments will show that there is no evidence that groundwater is infiltrating the stormwater system as that system is configured today.

This statement - this Draft Permit retains the identical single effluent limit for oil & grease and does not impose any additional effluent limits - is not true. The new permit mandates the monitoring of additional parameters.

Response to the City's Comment B1 and WCE's related comment:

In considering the submitted comments, EPA notes that it has reviewed and considered the entire record relating to the permitted facility in developing the final permit's terms and conditions.

MA0004871

EPA believes that it will be helpful here to describe certain aspects of the permitted facility's historical and present conditions because relevant changes have taken place at the facility since it was first permitted in 1978. The current owner of record is Weaver's Cove Energy, LLC, a subsidiary of Hess Energy, which has owned the site since 2007. The storage and distribution of petroleum products at the permitted facility was discontinued in the early 1990's. Due to the historical release of petroleum products on the site, Shell Oil, the former permittee, began pumping and treating contaminated groundwater on site in 1975. In 1994, this site was classified as a Tier 1B site under the Commonwealth of Massachusetts Contingency Plan (MCP), which is the program that sets out the requirements for reporting, assessing and cleaning up contaminated sites. Although Shell no longer owns any portion of this site, it remains responsible for continuing to pump and treat the contaminated groundwater. Therefore, licensed site professionals (LSPs) working on behalf of Shell retain a presence on this site to operate the groundwater remediation system.

Up until 2002, the combined flows of groundwater and stormwater were discharged to Outfall 001 after passing through an oil/water (O/W) separator. In 2002, Shell separated the flow of pumped groundwater from the stormwater drainage system. After separating these flows, Shell discharged the treated groundwater through a new Outfall, designated #001A, which is now authorized by a separate NPDES permit which regulates Shell's discharge. Outfall 001 continues to be authorized by this final permit issued to WCE and is comprised of stormwater runoff which still passes through an O/W separator prior to discharge to the Taunton River. The other outfall authorized by WCE's final permit, Outfall 004, continues to be active and discharges untreated stormwater runoff to the Taunton River.

Up until June 2011, Shell had been treating groundwater in a multi-phase treatment system as authorized by EPA's Remediation General Permit (RGP), #MAG910474. Beginning in July of 2011, Shell received authorization from the MassDEP to discharge its treated groundwater to an infiltration gallery, essentially back into the ground and upgradient of the recovery wells, per standard remediation procedures. Thus, there has been no treated groundwater discharged through Outfall 001A since that time, with the exception of a brief period in August or September of 2011 when Shell had to reconfigure this system of galleries. The RGP remains active should Shell determine that a surface water discharge of treated groundwater at Outfall 001A is necessary in the future.

Since 2002, WCE has asserted that only stormwater (i.e., not infiltrated contaminated groundwater) drainage from a certain portion of this site (as shown in Figure 2 in the Fact Sheet to the Draft Permit) has been discharged to the Taunton River through Outfalls 001 and 004. To EPA's knowledge, based on a review of all relevant information in the Agency's possession, neither Shell nor WCE has ever demonstrated by means of any type of dye study, video inspection of drain lines, or any other method, that only stormwater and no contaminated infiltrated groundwater is discharged through Outfall 001, or Outfall 004. It is true that some portions of the storm drainage system are very old and it appears that portions of it may be close to the groundwater table. There are still occasional detectable levels of oil & grease and other

MA0004871

parameters, including lead, zinc, and methyl tertiary butyl ether (MTBE), discharged from WCE's two stormwater outfalls (001 and 004), but the available data are limited. EPA has determined that these facts and all of the other relevant information in the record do not constitute a sufficient basis to conclude that contaminated groundwater is infiltrating the facility's stormwater drainage system and being discharged through the permittee's two outfalls into the Taunton River such that EPA can determine that there is a reasonable potential for the discharges in question to cause or contribute to exceedances of water quality standards.

During a site visit conducted by EPA and MassDEP on September 22, 2011, the Agencies observed a small but steady amount of flow being discharged from Outfalls 001 and 004. Although it had rained lightly during the previous night, there was no relevant information available or explanation offered by WCE as to why these outfalls were discharging flow several hours after precipitation had ceased. Accordingly, while EPA has determined that there is insufficient evidence at this time from which to conclude that contaminated groundwater is infiltrating the stormwater drainage system, there is some evidence that such infiltration *may* be occurring.

The Draft Permit established an annual screening for many parameters which would be associated with the past use of petroleum products on site, in order to determine whether any of those parameters are present in the discharges through Outfalls 001 and 004, and whether they are being discharged at levels which would cause or have the reasonable potential to cause or contribute to water quality standards violations. There has also been a monthly dry weather screening requirement for Outfalls 001 and 004 to try to determine whether there is any flow that would indicate groundwater infiltration of the storm drainage system, also referred to as "dry weather flow." These requirements have been retained in the final permit.

In addition, a new requirement has been added to the final permit at Part I.C.9 to require the permittee to conduct an investigation designed to demonstrate whether or not, and, if so, to what extent, contaminated groundwater is infiltrating the stormwater drainage system discharging to the Taunton River through Outfalls 001 and 004. This added requirement has been included in the final permit due to numerous public comments which raised the issue regarding whether or not there currently is contaminated groundwater infiltrating the facility's stormwater drainage system. The limited data available relating to the presence of metals and VOCs in the discharges through Outfalls 001 and 004 indicate the presence of these pollutants in some amounts, but EPA has determined that such information is insufficient to demonstrate whether these pollutants are originating from groundwater infiltration, surface runoff, or from residual contamination (associated with historical practices at the site) in the stormwater drainage system itself. The goal of the final permit's investigative study requirement is to demonstrate whether or not contaminated groundwater is infiltrating the stormwater drainage system on the site. EPA believes this requirement addresses the public comments provided on this issue by the City and by the permittee, and EPA specifically considered those comments in deciding to impose the requirement in question.

MA0004871

Comment B2 from the City of Fall River:

The Fact Sheet which accompanies the Draft Permit is woefully inadequate in describing the existing conditions. Although EPA acknowledges the April 21, 1983 re-application by Shell Oil where groundwater infiltration into the storm sewer system was identified (Fact Sheet, p. 9), it fails to mention the fact that Shell estimated the annual volume of infiltrated groundwater at 100 million gallons in that same re-application. That is a tremendous volume of contaminated groundwater discharging into the Taunton River. In addition, the February 28, 1992 renewal application also documented effluent being discharged through outfall 001 and 004 containing detectable, and sometimes significant, levels of contaminants including gasoline constituents like benzene and toluene, and metals like lead, arsenic, and copper. Groundwater contamination cannot be ruled out as contributing to these discharges based upon the commingled flow from the facility at the time.

Comment related to Comment B2 from WCE:

In 1983, Shell was pumping groundwater from under the site, treating it, and discharging it through a common outfall with stormwater through outfall 001. At the time, the discharge had a high in iron content and stained the rocks at the outfall over a period of many decades. These two water streams are no longer co-mingled. Stormwater continues to flow through outfall 001 under a permit issued to WCE. Today groundwater is discharged through outfall 001A under a separate permit issued to Shell.

Again, these measurements were taken when groundwater and stormwater were discharged through a common outfall. A practice discontinued over a decade ago. The site was distributing petroleum products at the time this data was collected, a practice that ceased in 1995 or 1996. The site was an active oil terminal with product stored, pumped and trucked offsite at the time this data was collected. These operations ceased a decade ago.

Response to the City's Comment B2 and WCE's related comment:

As noted in the response to Comment B1, there have been many changes on the site since the 1978 permit was issued. Although there have been low levels of metals and oil & grease detected in Outfalls 001 and 004 over the last 10 years as detailed in the Fact Sheet, EPA has determined (as indicated in EPA's responses to Comment B1) that these facts and the other available information do not constitute a sufficient basis to conclude that contaminated groundwater is infiltrating the facility's stormwater drainage system and being discharged through the permittee's two outfalls into the Taunton River. Again, it is not clear whether the detected pollutant levels in these two outfalls originate in the stormwater runoff from the site, residual contamination (associated with historical site practices) in the storm drain lines, or from ongoing infiltration of the stormwater drainage system by contaminated groundwater. In addition, as noted earlier in response to Comment B1, sampling for metals and other pollutants associated with past operations at the site is very limited. Therefore, the additional effluent

MA0004871

monitoring requirements contained in the final permit should serve to determine the levels of these pollutants that are being discharged through Outfalls 001 and 004. In addition, dry weather screening and the groundwater infiltration study requirements of the final permit should also provide evidence as to the sources of any pollutants discharging through the outfalls. Depending on what these findings show, WCE's final permit may be reopened to include additional effluent limitations and/or other conditions to address any pollutants detected in the discharge from Outfalls 001 and 004. (As noted in the response to Comment B1, Outfall 001A is currently inactive as Shell is discharging treated groundwater to a series of infiltration galleries.)

Additionally, there is another factor contributing to the earlier referenced uncertainties surrounding whether and to what extent contaminated groundwater is infiltrating the site's stormwater drainage system. The lowering of the local groundwater level due to site remediation activities being conducted by Shell *may* be contributing to the reduction or elimination of groundwater infiltration (to the extent it may exist) into the stormwater drainage system that discharges into the Taunton River through Outfalls 001 and 004 at the site. Shell has several extraction wells, including many near the shoreline, which serve to depress the water table and limit the migration of this contaminated groundwater from these wells as described in the response to Comment B1.

Comment B3 from the City of Fall River:

There is no doubt that the groundwater is heavily contaminated with petroleum contaminants and metals. Shell Oil has been undertaking remediation since 1975 when a recovery well was installed in response to a mixture of kerosene, heating oil, and gasoline. MassDEP issued a Notice of Responsibility (NOR) on November 15, 1989 under the MCP 310 C.M.R. 40.0000 et seq. in RTN 4-0749. The site was classified as a Tier 1B site in 1994, where it remains currently in Remedy Operation Status since 2003. There is an extensive light non-aqueous phase liquid (LNAPL) plume covering substantial portions of the site on the water table, which is subject to tidal influence, creating a smear zone of approximately three feet thick. Despite recovering in excess of one million gallons of LNAPL since operations began, the problem persists and LNAPL is measured in feet in certain monitoring wells and has consistently been higher than the 2000 baseline level in several areas. Weaver's Cove analyzed the data in its October 18, 2005 Draft Phase IV Remedy Implementation Plan, submitted as Appendix 5-1 to the Second Supplemental Draft Environmental Impact ("SSDEIR") report filed with MEPA (EOEA No. 13061) and concluded that the LNAPL plume covered an area of approximately 30 acres. Moreover, Weaver's Cove calculated the "total estimated volume of petroleum in the subsurface at the site ... [at] 703,000 gallons" (SSDEIR, App. 5-1, p. 14).

MA0004871

Response to Comment B3:

EPA acknowledges that there is considerable LNAPL present in varying amounts in the groundwater and again points out that this contaminated groundwater continues to be pumped and treated by Shell and discharged in accordance with the MCP, currently to an on-site infiltration gallery. But this fact does not form the basis for a change to the terms and conditions of WCE's final permit as it is now written.

A valid EPA Remediation General Permit (RGP) for Outfall 001A exists for discharge of treated groundwater, but that outfall is no longer in use because of the infiltration gallery. This site cleanup is currently under the purview of the MCP, and the responsible party, Shell, has to meet certain clean up goals and timelines consistent with the MCP. WCE is considered a responsible party because it owns this site, where contamination has come to be located. But since Shell has assumed full responsibility for clean up of historic petroleum releases at the site, WCE is not currently involved with the ongoing MCP clean up.

In any event, and as discussed in EPA's responses to Comments B1 and B2, WCE's final NPDES permit contains conditions established to determine whether and to what extent any of the contaminated groundwater is infiltrating the stormwater drainage system and is being discharged to the Taunton River through Outfalls 001 and/or 004.

Comment B4 from the City of Fall River:

Periodically sheens are observed on the river. Most recently in April 2010 a substantial release of LNAPL to the river was discovered (RTN 4-22552) as a result of a high groundwater table from recent rains (increase in groundwater elevation averaging over 2 feet) causing LNAPL to infiltrate the existing, historic brick drain line in places where it lacked integrity. Although this release to the river was more extreme than the usual situation it demonstrates the reasonable potential for a discharge to cause or contribute to water quality standards violations in the receiving water which should be addressed now by EPA and MassDEP. Furthermore, EPA observed "a slight sheen ... in two of the oil water separators at outfall 001" during its November 27, 2007 site visit further confirming that site contamination (LNAPL) was entering the storm sewer system. There is no need to wait for additional data from monitoring as suggested in the Draft Permit.

Comment related to Comment B4 from WCE:

No sheens on the river have been attributed to flows from the stormwater system being permitted here. No sheens from stormwater discharges. Oil water separators associated with stormwater systems are designed to handle sheens. The system functioned. Sheens have been attributed to City owned and operated CSO discharge - not related to Weaver's Cove.

MA0004871

There is no evidence to show that the sheen was LNAPL from the water table. It is not at all unusual for a stormwater treatment system (such as the separator installed at this site) to show a sheen from stormwater runnoff associated with paved parking areas and paved roadways. The separator handled the situation as designed without any adverse impact on the river.

Response to the City's Comment B4 and WCE's related comment:

A meeting was held with MassDEP, the US Coast Guard, WCE, Shell and other parties on March 4, 2011 to address a visible oil sheen that appeared near the City of Fall River's Combined Sewer Overflow (CSO) outfall beginning in April of 2010. This outfall discharges near the dock structure of the property and is authorized by a separate NPDES permit, #MA0100382, issued to the City of Fall River. The Agencies understand that the US Coast Guard took samples of this sheen at the CSO and also at the on-site recovery tank associated with the ongoing remediation being conducted by Shell. These samples were analyzed, and found to match by fingerprint analysis. The sampling was conducted following the appearance of the sheen near the CSO outfall pipe. Based upon a consideration of the facts and the discussion between the various parties referenced above, it was determined that this sheen, which did not fully dissipate until October of 2010, was caused by rising levels of contaminated groundwater following a series of heavy rain storms in February and March of 2010 that likely infiltrated the City's CSO outfall pipe, or the trench surrounding this pipe, and that the pollutants in question were discharged through the City's outfall (not WCE's outfalls) into the Taunton River. (MassDEP Release Amendment Form - Allen Hemberger - March 7, 2011). MassDEP issued Notices of Responsibility (NORs) to WCE and Shell Oil on May 18, 2010 regarding this release. WCE received the NOR as owner of the site. Shell received the NOR as the responsible party overseeing the site remediation. The sheen was attributed to unusually high groundwater which infiltrated the CSO. The high groundwater was assumed to entrain residual petroleum contamination from smear zones in the soils underlying the site, and/or from staining within the CSO itself. It is EPA's understanding that Shell assumed responsibility for all follow up work required by the NOR.

Contrary to WCE's assertion, EPA believes that the amount and persistence of this sheen over a period of several months would not be attributable to "stormwater runoff associated with paved parking areas and roadways," especially because there is limited activity on the site.

While Shell is currently in compliance with the MCP regarding cleanup of the historic petroleum releases, according to the MassDEP, Shell scheduled a significantly enhanced groundwater remediation program that began in Autumn 2012. This work has included the lining of about 500 feet of the CSO pipe which was completed in December of 2012. This installation is referred to as "cured-in-place pipe" and is meant to minimize the infiltration of this CSO pipe by contaminated groundwater. It is important to note that these MCP cleanup activities related to the discharge from the CSO are independent of and not related to Outfalls 001 and 004 regulated under WCE's final NPDES permit for stormwater runoff. In addition, there have been several

MA0004871

rows of floating, sorbent booms that have been placed around the vicinity of this CSO outfall to help prevent any sheen from migrating beyond this area.

Comment B5 from the City of Fall River:

Additionally, the site plan provided by Shell in its 1992 renewal application clearly shows an extensive network of stormwater drainage system components which are absent from the figure provided with the Fact Sheet. Rather, the figure provided with the Fact Sheet focuses on geographic areas and infiltration failing to document adequately the existing storm drain system. Although the groundwater remediation and recovery wells were disconnected from the storm sewer system shown in the 1992 plan in 2002, there is no evidence in the record to suggest the remainder of the preexisting storm sewer system was dismantled. Indeed, at the EPA site visit conducted on September 19, 2007, EPA concluded that "the gravity operated stormwater system is in disrepair. Nevertheless, storm water does still discharge from outfalls 004 and 001." EPA and MassDEP should require Weaver's Cove to document and demonstrate the existing conditions, including the historic drainage system, and how it contributes to the discharge. Technology is readily available to record via video the interior of the storm drain system to evaluate where contaminated groundwater is entering.

Comment related to Comment B5 from WCE:

The commenter knows that the stormwater and groundwater flows were separated in 2002. Hence any data collected from outfall 001 and 004 prior to 2002 are not representative of today's conditions where all groundwater is discharged through outfall 001A which is permitted to and operated by Shell. There is no evidence showing groundwater flows to the river from outfalls 001 and 004. The oil water separator is in perfect working order today.

Response to the City's Comment B5 and WCE's related comment:

With regard to the City's comment about the stormwater system being in disrepair, EPA was referring mainly to the former infrastructure that had previously collected stormwater in the diked areas around the former petroleum storage tanks and directed this stormwater to one of the stormwater outfalls. As was previously noted, most of these tanks have been removed and it appears that stormwater that collects in these areas mainly infiltrates into the ground. In addition, WCE has made some improvements to the drainage and collection system leading to Outfall 004 since that EPA inspection was conducted. As EPA has already explained above in its responses to prior comments by the City and WCE, EPA has determined that there currently does not exist evidence sufficient to conclude one way or the other whether contaminated groundwater is infiltrating the stormwater drainage system leading to Outfalls 001 and 004, and the Agencies agree that further investigation is needed. Therefore, EPA has included a requirement in Part I.C.9 of the final permit for the permittee to conduct such an investigation, as detailed in EPA's response to Comment B1.

MA0004871

Comment B6 from the City of Fall River:

Next, EPA's dismissal in the Fact Sheet of the detectable contaminants found in Weaver's Cove's response to the Section 308(a) information request should be reversed. Sampling done by Weaver's Cove clearly showed the presence of contaminated groundwater in the effluent discharge resulting in detectable levels of oil & grease, MTBE, zinc, and lead being discharged to the Taunton River. Given that industrial activities at the site have ceased, these contaminants found in the effluent could only have come from contaminated groundwater infiltrating the discharge system.

This detection from the § 308(a) sampling certainly amounts to reasonable potential for the discharge to cause or contribute to violation of water quality standards warranting imposition of numeric effluent limits for the contaminants detected.

Comment related to Comment B6 from WCE:

This statement is not true. These parameters can be detected but are within acceptable limits.

Response to the City's Comment B6 and WCE's related comment:

See responses to Comments B1 and B2.

Comment B7 from the City of Fall River:

Lead, in particular, should have had a numeric effluent limit imposed as a pollutant designated as toxic by EPA in 40 C.F.R. § 401.15. The § 308(a) sample result of 15 ug/1 exceeds the effluent limit of 8.5 ug/1 set by EPA and MassDEP in the NPDES authorization (#MAG910474) issued to Shell Oil on April 22, 2011 for the very same site (outfall 001A). There is no valid legal rationale for imposing a technology-based limit of 8.5 ug/1 for effluent from outfall 001A and no limit whatsoever for outfall 004 from the very same site. Lead contamination in both soil and groundwater is extensive at the site. According to historic data, total lead of surficial soils has been detected as high as 22,500 mg/kg. Weaver's Cove should not be allowed to discharge lead contaminated effluent without any limits whatsoever especially when such discharge likely exceeds the relevant technology-based effluent limit.

Comment related to Comment B7 from WCE:

The commenter has the facts wrong. Outfall 001A is permitted to Shell and is used to discharge pumped groundwater. No storm water flows through outfall 001A. Weaver's Cove does not control outfall 001A. These are two separate outfalls, operating under two separate permits, and the parties responsible for these two outfalls are different. Shell operates outfall 001A and Weaver's Cove operates outfall 001. There is no evidence to support a view that outfall 001 is discharging groundwater.

Response to the City's Comment B7 and WCE's related comment:

Pursuant to EPA's Clean Water Act Section 308 sampling requirements, the permittee's sampling detected an effluent level of 15 ug/l for lead at Outfall 004. As discussed in the Draft Permit's Fact Sheet, the stormwater discharged at Outfall 004 is untreated. The City comments that the limit of 8.5 ug/l that was established for lead for Shell's RGP applicable to Outfall 001A should also be contained in WCE's NPDES permit. EPA responds that the limits for many parameters in Shell's RGP, including the 8.5 ug/l limit for lead, are technology-based limits, which are the effluent levels that typical groundwater remediation systems are designed to achieve. The effluent limit for lead in Shell's RGP is not based on the typical stormwater treatment system. The permittee is required by the final permit to sample the effluent for total lead at both outfalls (001 and 004) once per year. Sampling results required to be obtained by the permittee by the final permit, for lead and other monitored parameters, will be reviewed by EPA to determine whether specific effluent limits should subsequently be required based upon a reasonable potential analysis of whether the discharges cause or contribute to water quality standards violations. EPA has determined that insufficient data currently exist from which EPA may make a reasonable potential determination as to lead at this time.

Additionally, pursuant to the Final Permit, the permittee is requirement to develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which is designed to reduce or prevent the discharge of pollutants associated with stormwater from this permitted facility. EPA expects the permittee to address in its SWPPP the known characteristics of the soils on the site and the potential for metals and other pollutants to be carried into the receiving water via stormwater runoff from these soils.

Comment B8 from the City of Fall River:

Indeed, EPA should have evaluated the data relied upon in connection with the NPDES authorization issued to Shell Oil (#MAG910474) just a month before this Draft Permit was published. The influent data submitted by Shell represents the current groundwater contamination which could be contributing to the Weaver's Cove discharge and accordingly identifies all the contaminants which should be subject to monitoring, if not numeric effluent limits. Conspicuously absent from the Draft Permit monitoring requirements are arsenic and copper, both of which are found in the contaminated groundwater. Indeed, high levels of arsenic were found in surficial soils (within 0 to 0.5 feet) in Area 3 in 2007 up to 110 mg/kg as reported in connection with RTN 4-19032. Although the arsenic contamination was determined to be a result of coal ash, and therefore not regulated under the MCP, its presence in high levels on the surface makes it especially susceptible to discharge as part of stormwater. It was error for EPA to neglect consideration of preexisting arsenic contamination when determining the monitoring requirements and effluent limits in this Draft Permit especially because arsenic is a pollutant designated as toxic by EPA in 40 C.F.R. § 401.15.

MA0004871

Response to Comment B8:

Until WCE conducts an investigation as required by the final permit to determine whether contaminated groundwater is infiltrating the storm drainage system and being discharged through Outfalls 001 and/or 004, the Agencies cannot assume that the contaminated groundwater that Shell is pumping into its remediation system is also being discharged to either one or both of these stormwater outfalls by virtue of groundwater infiltration into the stormwater drainage system. As indicated above in EPA's responses to earlier similar comments by the City and WCE, the source of these metals concentrations (and other parameters) is not known at this time, but may be stormwater runoff from the surface at the site, residual contamination in the storm sewer system from historical activities, and/or contaminated groundwater infiltrating the storm drainage system. EPA has not neglected to consider preexisting arsenic contamination when determining the monitoring requirements and effluent limits for the final permit. The final permit has included arsenic as a once per year effluent monitoring requirement for both of WCE's outfalls, based on its presence in the soils on site, its potential to be carried into the receiving water through the stormwater drainage system, and its low water quality criteria levels.

As to the City's comment about copper, copper is not a parameter typically associated with the remediation that Shell is undertaking on site. In addition, prior sampling that WCE conducted pursuant to a CWA Section 308 letter from EPA did not detect copper at either Outfall 001 or 004. Therefore, no monitoring requirement was established for copper in the final permit. Also see the response to Comment B7 regarding the SWPPP.

Comment B9 from the City of Fall River:

Iron is another contaminant of concern as EPA observed "substantial rust staining ... on the rocks at outfall 001" during the November 27, 2007 site visit. According to the recent data submitted by Shell Oil in connection with its NPDES permit application for outfall 001A, the concentration of iron in groundwater is 46,900 ug/1 whereas the applicable effluent limit in the authorization is only 1,000 ug/1. Where the iron concentration of the discharge is so high that it causes staining on the rocks at the outfall, there is surely a reasonable potential for the discharge to cause violation of water quality standards.

Comment related to Comment B9 from WCE:

References to data from outfall 001A have nothing to do with outfall 001.

MA0004871

Response to the City's Comment B9 and WCE's related comment:

In response to the City's comment, during a site visit conducted on September 22, 2011, EPA and MassDEP noted that there was rust colored staining in Outfall 004's outfall channel as well as in the vicinity of Outfall 001. Although it is not clear whether the staining was from past or current discharges, the monitoring for metals, including iron, in the final permit will provide an assessment of the current levels of several parameters, including iron, in the effluent. The permittee also is required to comply with the conditions of Parts I.A.4 and I.A.7 of the final permit relative to any discoloration of the effluent or the receiving water. EPA has determined that there is insufficient information from which to conclude that there is a reasonable potential for the discharge of iron to cause or contribute to a violation of water quality standards.

In response to WCE's comment related to the City's comment B9, EPA agrees that simply identifying levels of iron in the contaminated groundwater being treated by Shell is not by itself a sufficient basis to conclude that iron is currently being discharged to the Taunton River through outfalls 001 and/or 004. EPA also notes however that WCE's comment does not address the City's comment about iron stains on the surface at the site. But EPA's response above does respond to the City's comment on that point.

Comment B10 from the City of Fall River:

ck

In summary, the Draft Permit is woefully inadequate and does not represent current practices with respect to contaminated groundwater infiltration into stormwater discharges. Technology-based effluent limits should be applied for all contaminants identified in the groundwater. This practice has been followed at other sites by EPA, including present and former bulk petroleum terminals (Permit numbers MA0000833, MA0003425, MA0003298), and it was improper for EPA not to apply those same limits in this case.

Comment related to Comment B10 from WCE:

The premise here is flawed. Groundwater is not infiltrating the stormwater system.

Response to the City's Comment B10 and WCE's related comment:

As EPA has already noted earlier in response to the City's and WCE's other comments, although the permittee contends that groundwater is not infiltrating the stormwater drainage system, EPA has determined that there is insufficient evidence from which to conclude one way or the other that such infiltration is or is not occurring. In this way, this site varies from the other permits which the City mentions in its comment, where contaminated groundwater was known to be infiltrating the storm drainage system and/or outfalls included discharges from a groundwater remediation system. Therefore, as indicated several times in response to other comments above, the permittee is required by the final permit to conduct an investigatory analysis of whether and

MA0004871 ·

to what extent, groundwater is, in fact, infiltrating the stormwater drainage system. See e.g., EPA's response to Comment B1. The information obtained by this investigatory study, coupled with the monitoring of metals and VOCs required by the final permit and the dry weather screening of Outfalls 001 and 004, will enable the Agencies to determine in the future whether additional monitoring and/or effluent limits should be added to WCE's permit.

C. Comments submitted by Cecile Scofield:

Comment C1:

Neither Shell nor the USEPA nor FERC knew that Jay Cashman had flipped the Weaver's Cove property to Fall River Marine Terminal, LLC in March of 2001 for \$1 (One Dollar) approximately three months after Jay Cashman, Inc. purchased the property from Shell.

Response to Comment C1:

WCE, LLC is the current "owner or operator" (as defined at 40 C.F.R. 122.2) of the facility being permitted under the final NPDES permit. Accordingly, WCE, LLC is the entity to which a permit should now be issued. Consistent with this explanation of the way in which EPA's NPDES permitting program is designed to be implemented, EPA has determined that the facts alleged in Comment C1 (even assumed to be true for the purpose of responding to this comment) do not alter the fact that WCE, LLC is, pursuant to EPA's NPDES regulations, the proper permittee.

Comment C2:

NPDES Permit #MA0004871 was transferred UNLAWFULLY from Shell Oil to Jay Cashman, Inc., in 2003 (since Jay Cashman, Inc., was not the "owner" of the property in 2003 as Shell Oil believed and so assured the EPA by letter dated March 12, 2003 (see excerpt below*). The real "current owner" in 2003 (Fall River Marine Terminal, LLC) had no legal or financial affiliation to Jay Cashman, Inc.

*LETTER DATED MARCH 12, 2003, FROM SHELL OIL TO USEPA: "Pursuant to Michael O'Brien's request, Shell is providing written documentation to the USEPA Region I that Jay Cashman, Inc., is the current owner and operator of the Fall River Marine Terminal and therefore is environmentally responsible for Outfalls 001 and 004." In that same letter, Shell also verified that the following information was accurate: "Thus, as we understand it, Shell is currently responsible for existing groundwater contamination and J. Cashman for the marine terminal discharges (001 and 004) and any potential future contamination."

MA0004871

So how can that NPDES Permit be transferred now to any prospective "new" owner? It would be like you finding the Title to my car and then selling my car to another party. The "other" party would not hold legal Title to my car - Right? Wouldn't the issue have to be resolved by a Court of appropriate jurisdiction?

Response to Comment C2:

As EPA noted earlier in response to Comment C1 above, although this site has changed ownership several times, WCE is the current "owner and operator" of the permitted facility and hence is the entity to whom an NPDES permit should be issued. It is EPA's understanding that WCE, LLC is the current title holder to the property being permitted and WCE, LLC has never asserted otherwise.

While not taking a position in this permitting context on the question of whether the factual allegations described by the commenter raise any law enforcement issues, EPA believes that any such enforcement-related implications, if they exist, do not alter the fact that WCE, LLC is the entity that should be the permittee for the facility in question.

Comment C3:

As far as I am concerned, Weaver's Cove Energy, LLC, has been discharging effluents into the Taunton River without a "lawful" NPDES Permit since 2007 - and Fall River Marine Terminal, LLC from 2003 to 2007. Jay Cashman, Inc. transferred a Permit to Weaver's Cove Energy, LLC, in 2007 without Cashman having a legal right to the Permit. The Permit was originally transferred from Shell to Cashman under false pretenses. Shell unwittingly misrepresented the VV facts to the USEPA.

Response to Comment C3:

See EPA's responses to Comments C1 and C2, above. In addition, EPA reiterates that WCE, LLC is the proper entity to which the final NPDES permit should be issued. Without taking a position in this permitting context on the question whether the factual allegations described by the commenter raise any law enforcement issues, EPA believes that any such enforcement-related implications, if they exist, do not alter the fact that WCE, LLC is the entity that should be the permittee for the facility in question.

Comment C4:

I haven't even gotten into all the Restrictive Development Covenants that were contained in the original Deed (Shell to Cashman) that Fall River Marine Terminal, LLC, and Weaver's Cove Energy, LLC, have since "modified" out of the original language. Please note that the original

MA0004871

language was drafted in such a way to protect Shell from liability from any future exacerbation of the contamination at the Weaver's Cove Site. That language is now all "gone." Yes, a company that held no legal or financial liability was somehow going to be responsible for future contamination at the Site, and the company that should have had the liability was a newly formed Limited Liability Corporation. I have a problem with that!

Response to Comment C4:

Shell is responsible for the ongoing cleanup of the contaminated groundwater on the property under the State's MCP and such discharges of treated groundwater, to the extent they may continue to occur, continue to be authorized by a separate EPA permit, #MAG910474, which is a Remediation General Permit for the treated groundwater. WCE retains the responsibility for the permitted stormwater discharges from the site through Outfalls 001 and 004, including a requirement to develop of a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce or prevent the discharge of pollutants associated with stormwater from the permitted facility.

EPA believes that the allegations contained in Comment C4 (even assumed to be true for the purpose of this response) do not alter the fact that WCE, LLC is the "owner or operator" of the facility being permitted and hence is the proper permittee of the facility in question.

As discussed in the response to Comment B3 above, WCE is considered a responsible party by the Commonwealth of Massachusetts under the MCP because it owns a site where contamination has come to be located. However, cleanup activities of historic petroleum releases at the site are being conducted by the past owner, Shell. The site is currently in compliance with the MCP according to the MassDEP.

D. Comments submitted by Ronald M. Thomas:

Comment D1:

The existing permit was in effect for numerous years and the way technology has advanced it seems incomprehensible that the existing site remediation system is still allowing a documented release of oil into a Wild and Scenic River on several periods which have been traced to the site in question through chemical footprint forensic methods. If it is suspected that the system was allowing seepage from the surrounding area into the outfalls, a possible correction may be as simple as adding a plastic liner to the inner diameter of the outfall pipes.

Response to Comment D1:

The result of the groundwater infiltration study as well as the additional pollutant sampling that will be conducted under this reissued permit will allow the Agencies to evaluate whether or not these discharges are meeting WQS and whether additional effluent limits are required in the

MA0004871

future. Regarding the seepage of contaminated groundwater from the site, as noted in the response to Comment B4, it was believed that this oil sheen in 2010 was caused by the infiltration of the City of Fall River's CSO outfall pipe by contaminated groundwater. See responses to Comments B2 and B4 regarding seepage of contaminated groundwater into the Taunton River and a recent project involving the lining of a portion of this CSO pipe to reduce the likelihood of such a release to the Taunton River from reoccurring.

Comment D2:

If necessary, an inspection scope can be utilized to search for any undocumented connections in the outfall system. Even though they could return the reclaimed water back into the contaminated site, this does not mean that the contamination will not circumvent the barrier and still end up in the river. Please take these points into consideration before granting another permit. If the responsible party is not filing the required paperwork under the old permit, the fines and possible civil charges must be toughened up to force them to adhere to the conditions of the permit.

Response to Comment D2:

See responses to Comments B1, B2, and C2.

E. Comments submitted by Elaine Rousseau, Normand Rousseau, and Helena F. Rocha:

Comment E1:

Weaver's Cove failed to actively participate in a meeting held on March 4, 2011 with D. Crafton and A. Hemberger from the MassDEP, members of the U.S. Coast Guard, and Shell Oil Company to discuss the status of the release into the Taunton River on April 12, 2010 and the resulting visible oil sheen.

Response to Comment E1:

See Response to Comment B4. Representatives of WCE were at this meeting. It is not known to what extent they participated. As noted earlier, although this oil sheen emanated from the WCE property, the sheen is believed to have been discharged through and/or underneath Fall River's CSO outfall pipe. This sheen was believed to be comprised of contaminated groundwater from the site that continues to be Shell Oil's responsibility to address through pumping and treating as required by the State's MCP program. See response to Comment B4 regarding the corrective action performed under the MCP.

F. Comments submitted by David M. Franco-Rocha:

Comment F1:

The people running WCE seem to believe that they can move this project ahead without regard for the negative impacts that their project would have on the environment. They don't seem to think that they have to comply with regulations, e.g. their failure to formally notify Public Involvement Plan petitioners concerning the company's proposed NPDES permit. WCE must not be issued a license to destroy what many people have worked hard to improve and protect.

Response to Comment F1:

As noted earlier, WCE has abandoned its plans to build a LNG facility at this site and has offered this property for sale. In the meantime, WCE remains the permittee for this site and continues to be responsible for complying with the conditions of this permit. The Agencies believe that the increased monitoring requirements and other conditions such as dry weather screening and the groundwater infiltration study will better characterize the stormwater runoff from this facility. The Public Involvement Plan (PIP) process is related to the MCP program and does not apply to the NPDES program or permitting process. PIP sites are particular to the MCP, and are regulated under 310 CMR 40.1400 of the MCP. PIP sites, such as the former Shell Terminal in Fall River, require additional public involvement activities beyond the minimum requirements. MCP PIP activities, which include outreach and communication, are specific to sites being cleaned up under the State MCP program.

G. Comments submitted by Marian R. and Robert W. LeComte:

Comment G1:

I have many concerns regarding WCE and what appears to be their disregard for compliance to environmental regulations surrounding discharges into the Taunton River. Despite the legal restrictions outlined in the fact sheet, at their site there continue to be visible oil sheens on the river following heavy rains.

Response to Comment G1:

See responses to Comments B4, C2, and D1.

MA0004871

Comment G2:

WCE have been found guilty of failing to notify and/or consult with the proper agencies at various times throughout this process. The company also failed to file the required submittals regarding the April 12, 2010 release (RTN 4-22552). In spite of the fact that WCE is supposedly withdrawing their application for a permit to construct the LNG facility, I am sending this to you because I don't trust that they are really going away.

Response to Comment G2:

As mentioned in response to Comment F1, although WCE has withdrawn its plans for an LNG facility, WCE remains responsible for complying with its existing NPDES permit (MA0004871) for this site as long as it owns this property. As mentioned earlier, WCE was cited by the MassDEP for failing to provide adequate notification regarding the release in 2010. As discussed in the response to Comment B4 above, Notices of Responsibility (NOR) were issued by MassDEP to WCE and Shell on May 18, 2010. The NOR required certain response actions to address the sheen in order to maintain compliance with the MCP. Shell assumed responsibility for all follow-up work required by the NOR.

A Notice of Noncompliance (NON) was issued by MassDEP to Shell on November 18, 2010, for failure to submit an Immediate Response Action (IRA) Plan by the required deadline. Another NON was issued to Shell on January 27, 2012 requiring them to reevaluate the performance of the groundwater recovery program. The NON resulted in a more aggressive clean up schedule going forward. According to the MassDEP, this site is currently in compliance with the MCP.

H. Comments submitted by Gabrielle LeComte:

Comment H1:

Is WCE exempt from the Clean Water Act (CWA)? If not, then how come they are getting away with the discharges that produce a visible oil sheen on the Taunton River?

Response to Comment H1:

See the response to Comment B4. Although this sheen emanated from WCE's property, it was believed to be discharged through the City of Fall River's CSO pipe and comprised of contaminated groundwater as a result of rising water table levels following a series of heavy rainfall events. WCE is certainly not exempt from the CWA and is required by this permit to meet state and federal WQS as well as specific effluent limits and monitoring requirements.

MA0004871

I. Comments submitted by Marilyn Sokole:

Comment I1:

The following issues are of great concern to us: Weaver's Cove failed to actively participate in a meeting held on March 4, 2011 with D. Crafton and A. Hemberger from the MassDEP, members of the U.S. Coast Guard, and Shell Oil Company to discuss the status of the release into the Taunton River on April 12, 2010 and the resulting visible oil sheen.

Response to Comment I1:

See response to Comments B4 and E1.

Comment I2:

Arrogant opinion of WCE that the company has a mandate from the Federal Energy Regulatory Commission (FERC) to move forward with its project without regard to the negative impacts of its proposal on the environment. The failure of WCE to formally notify Public Involvement Plan petitioners concerning the company's proposed NPDES permit.

Response to Comment I2:

See response to Comment F1.

Comments submitted during the public hearing conducted on May 23, 2012 and up to the extended public comment closing date of June 27, 2012.

J. Testimony provided by Dianne Phillips representing the City of Fall River. Also provided and responded to below are related comments on Diane Phillips' testimony provided by Ted Gehrig of WCE:

Comment J1 from the City of Fall River:

It is the City's position that the Draft Permit which essentially continues the effluent limits from the 1978 permit without change is insufficient and not strict enough. The City acknowledges that monitoring requirements were added to the Draft Permit. But, it is the City's position that the proposed permit should be withdrawn and made more strict in accordance with their comments.

Comment related to Comment J1 from WCE:

This is a mis-statement of fact. The proposed effluent limits in the draft permit include many new monitored parameters when compared to the old permit. Just because a limit from the old permit is being carried over into the new permit does not demand that those old limits be reduced. The limits merely need to be protective of the environment. No evidence has been presented that the old limits were not and are not still protective of the environment. The new permit includes a host of new parameters that must be measured, monitored and reported.

Response to the City's Comment J1 and WCE's related comment:

EPA notes that the City's and WCE's comments above reiterate one or more of the themes contained in their written comments submitted on the Draft Permit. EPA has in essence responded already to those theme(s) and comments in its responses above to the City's Comments B1 and B2 and WCE's related comments. In any event, EPA notes here as well that the final permit has added monitoring for arsenic and a groundwater infiltration study, in addition to the requirements contained in the Draft Permit. Together with the other monitoring requirements of the final permit, the Agencies believe that the stormwater discharges from Outfalls 001 and 004 will be better characterized. Results of the groundwater infiltration study and additional monitoring required by the final permit may result in the reopening of the permit to establish additional permit limits if warranted, as previously described in the responses to the City's Comments B1 and B2 and WCE's related comments. The Agencies believe that there is not a sufficient technical basis to impose any additional monitoring or effluent limits in the final permit at this time.

Comment J2 from the City of Fall River:

The City believes that contaminated groundwater and petroleum products, LNAPLs, are infiltrating the storm sewer system and being discharged illegally through Outfall 001 and 004. This infiltrated groundwater, there is a large record of evidence of contamination in the groundwater going back decades. And I'm prepared to submit some of that information tonight. That infiltrated groundwater is co-mingling with the stormwater and being discharged directly into the river. And it is the City's position that EPA not only is authorized to set an effluent limit with respect to that co-mingled groundwater, but is obligated to.

In 1983, Shell Oil filed a renewal application for the permit and acknowledged that the storm water discharge included storm sewer infiltration, and estimated, in 1983, it has been determined that groundwater is infiltrating the plant underground storm water collection system and the flow diagram, in Part II of Form 2C, described the estimated quantities involved in their estimate of the volume of infiltrated groundwater, according to the Shell engineer in 1983 is 1000.0 million gallons per year. So, I'd like to submit that information for the record, documented since 1983,

24

MA0004871

the contaminated stormwater -- the contaminated groundwater has been infiltrating the storm water system.

Comment related to Comment J2 from WCE:

The commenter has presented no data to support the view that groundwater is being co-mingled with stormwater based on the stormwater system that is in place today and operated today. The system that is operating today is not the same system that operated years ago. Approved and permitted changes were made to the system.

For many decades Shell has pumped groundwater from underneath the site in order to control and remediate LNAPL that floats on the groundwater table underneath the site. For decades the water treatment facilities on the site were designed, built, operated and properly permitted to allow shell to comingle produced groundwater with stormwater runoff. The combined flow was discharged through outfall 001. To be clear, Shell continues to pump groundwater from under the site and to process it and discharge it back into the environment. Based on permit changes made and approved over a decade ago, shell no longer comingles its groundwater with any stormwater runoff. At the time that shell ceased owning the site (well over a decade ago), shell retained the responsibility to remediate the LNAPL on the site. To this day Shell retains this responsibility and has operated all remediation systems on the site. At the time that Shell sold the property (roughly a decade ago), Shell opted to redirect, pump, and treat groundwater from Outfall 001 to a new outfall, Outfall 001a, permitted to Shell and operated by Shell to this day. From the time this change was implemented, only stormwater has been discharged from Outfall 001. The fact that Outfall 001 discharged groundwater in the 1980's and 1990's is true, but this has no bearing on the current flows passing through Outfall 001. Historical data collected from the period that groundwater and stormwater were comingled and quoted by Dianne Phillips in her comments has no bearing on the current renewal application that is the subject of this proceeding nor is this ancient data in any way representative of today's flows from Outfall 001.

Response to the City's Comment J2 and WCE's related comment:

EPA believes that it has already addressed the substantive aspects of these comments earlier in this response to comments document. See EPA's responses above to the City's Comments B1 through B4 and to any comments submitted by WCE related to those comments by the City.

Comment J3 from the City of Fall River:

And in 1992, when Shell filed a further renewal application, a consolidated application, the data submitted at that time showed high concentrations of gasoline contaminants in the effluent in 1992 from Outfall 001, including 7000 ppb of benzene, 2400 ppb of ethylbenzene, 4500 ppb of toluene, and 38,700 ppb of total iron.