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March 25, 2005

*By Email and U.S. Mail*

Mr. Brian Pitt  
U.S. EPA Region 1  
Office of Ecosystem Protection  
One Congress Street  
Suite 1100  
Boston, Massachusetts 02114-2023

Re: Draft NPDES Permit No. MA0003891  
General Electric Company  
Pittsfield, Massachusetts

Dear Mr. Pitt:

On behalf of General Electric Company (GE), I offer the attached comments on the draft NPDES permit for GE's facility in Pittsfield, Massachusetts (NPDES Permit No. MA0003891). Please feel free to contact me with questions.

Sincerely,

A handwritten signature in cursive script that reads "Michael T. Carroll".

Michael T. Carroll  
Manager, GE Pittsfield Remediation Programs

Attachment

cc: David Howland, MADEP, Western Region

Comments on Draft NPDES Permit MA0003891

General Electric Company

Pittsfield, Massachusetts

March 25, 2005

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 General Electric Company  
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## **I. EXECUTIVE SUMMARY**

General Electric Company ("GE") appreciates the opportunity to submit comments on draft NPDES permit number MA0003891, released by the U.S. Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("DEP") for public comment on December 22, 2004 (the "Draft Permit"). As described in Sections IV and V, GE questions the legal and technical basis for certain limitations and the need for others. As described in Sections II, V and VI, GE also seeks certain technical corrections and clarifications to facilitate administration and implementation of the final permit.

GE's site activities are unique in the NPDES context because they involve environmental remediation, not active manufacturing. Those site activities also are unique because they are dictated by a comprehensive remediation consent decree developed and executed by GE, EPA, DEP and others. The consent decree requires GE to implement various response actions that are protective of human health and the environment.

As a threshold matter, GE questions EPA's and DEP's legal authority to impose new site limitations and conditions under an NPDES permit distinct from the consent decree. GE believes that many of those limitations and conditions conflict with, or impermissibly go beyond, the requirements set forth in the consent decree. More specifically, the new limitations and conditions in the Draft Permit require additional response actions that, under the terms of the consent decree, EPA and DEP are barred from imposing. As a result, those limitations and conditions could be voided under the consent decree.

Even if the consent decree did not prohibit EPA and DEP from imposing new site limitations and conditions under an NPDES permit, the Clean Water Act limits the Agencies' authority to impose such requirements. GE also believes that the Agencies lack proper

justification to impose new limitations and conditions that are more stringent than those set forth in GE's existing NPDES permits.

As with its other activities in Pittsfield, GE has been willing to undertake discretionary environmental actions that promote site-wide remediation and development objectives. That said, any discretionary actions need to be carefully tailored to achieve environmentally, scientifically and economically sound ends. GE believes that the changes, corrections and clarifications set forth in Sections II, V and VI are necessary to achieve those ends.

In support of these comments, GE conducted a detailed analysis of the mass limitations, and associated permit conditions, for those outfalls where the wet weather discharge may also include a dry weather component – Outfalls 001, 005 and 009. That analysis is attached as GE Technical Exhibit 5. As a result of that analysis, GE has concluded that the monitoring conditions and sampling/analytical requirements associated with those mass limits are inappropriate and should be revised. In particular, GE urges the Agencies to make the following revisions:

- The composite sampling approach for total suspended solids (“TSS”) should be modified: the collection of an initial grab sample within the first 30 to 60 minutes of the storm event, as well as a flow-weighted composite sample for the first three hours of a storm event, should be replaced by collection and compositing of 24-hour time-weighted samples.
- The definition of wet weather conditions, for sampling purposes, should be modified: the minimum preceding dry-period interval of 72 hours should be replaced with a minimum preceding dry-period interval of 24 hours.

- In determining compliance with the TSS discharge limits for Outfall 001 during wet weather, TSS data corresponding to a 24-hour discharge flow greater than 0.432 million gallons should be excluded from the calculation of the average monthly mass.

**II. TECHNICAL COMMENTS SUMMARY CHART**

	<b>Permit Reference</b>	<b>Proposed Change</b>	<b>Summary Supporting Rationale</b>
<b>1</b>	Part I.A.1	Confirm that "prior to discharging into Silver Lake" means that GE (and, following transfer, PEDDA) will continue to use the current discharge monitoring point located at the effluent end of Oil-Water Separator ("OWS") 31W.	For consistency with GE's existing permit.
<b>2</b>	Part I.A.1, Part I.A.2, Footnotes *3 and *4	Clarify that footnote *3 applies to dry weather flow and *4 applies to wet weather flow. In Part I.A.1, change reference in effluent characteristic column for flow from footnote *4 to footnote *3. In Part I.A.2, change reference in measurement frequency column for flow from footnote *3 to footnote *4 (consistent with related footnote in effluent characteristic column).	Clarifies flow reporting requirements and corrects typographic errors.
<b>3</b>	Permit Attachment A	Revise description of outfalls and discharges consistent with corrected Attachment A (See GE Technical Exhibit 1).	Revisions are consistent with recent site changes and the discharges reported by GE in its NPDES permit application materials.



	<b>Permit Reference</b>	<b>Proposed Change</b>	<b>Summary Supporting Rationale</b>
4	Parts I.A.1 through I.A.13	<p>Option 1: Remove narrative discharge descriptions and, in their place, cross-reference Attachment A, which provides accurate discharge descriptions for each covered outfall.</p> <p>Option 2: Revise narrative discharge descriptions so that they are consistent with Attachment A.</p> <p>Option 3: Maintain proposed narrative discharge descriptions but add at the bottom of each page: "See Attachment A for a comprehensive description of discharges from outfall(s)."</p>	For consistency with Attachment A discharge descriptions.
5	Parts I.A.3, I.A.7, I.A.8, I.A.9 and I.A.10	Remove dry weather flow prohibition at outfalls 01A, 05A, 05B, 006, 06A and SR05.	For consistency with Attachment A, which accurately identifies dry weather flow source(s) at these outfalls.
6	Part I.A.2	Add footnote to TSS discharge limitations that reads as follows: "In determining compliance with the wet weather TSS limits for Outfall 001, TSS data for periods with 24-hour discharge flow from Outfall 001 above 0.432 million gallons shall not be included in calculating average monthly mass."	OWS 31W treats waters going to Outfall 001. Above a 24-hour discharge flow of 0.432 million gallons, the performance of OWS 31W is not representative of the conditions on which the mass limits were based. See Section V.D and GE Technical Exhibit 5.
7	Part I.A.5	Change references in measurement frequency column for VOCs and SVOCs from footnote #5 to footnote #15.	Corrects typographic error.

	<b>Permit Reference</b>	<b>Proposed Change</b>	<b>Summary Supporting Rationale</b>
<b>8</b>	Part I.A.5	Clarify that the sampling point excludes flow from the recharge pond used by GE in connection with its CD-related groundwater treatment requirements, as well as process backwash.	For consistency with water balance diagram and Consent Decree.
<b>9</b>	Part I.A.6	Clarify that when the 005 discharge pipe is flooded, GE will be entitled to collect flow-weighted composite samples of the effluent from 64T and 64G, consistent with GE's existing NPDES permit.	Under flooding conditions, sampling "at the end of the 005 discharge pipe" is infeasible.
<b>10</b>	Part I.A.7	Clarify that sampling is not required when Outfall 05A is flooded.	The required sampling point at Outfall 05A is frequently flooded. Sampling is infeasible during flooding events.
<b>11</b>	Part I.A.7	Delete "and untreated" before effluent.	All discharges from Outfall 05A first pass through OWS 64W.
<b>12</b>	Part I.A.8	Delete "at a point that includes all flow components."	Requirements apply to four separate outfalls (05B, SR02, SR03 and SR04). As a result, there is no single point for sample collection.
<b>13</b>	Part I.A.10	Replace "(overflows from the 006 drainage system)" with "(flows that exceed the capacity of OWS 64X and its related piping system)."	For consistency with water balance diagram.
<b>14</b>	Part I.A.11	Replace "to the Housatonic River" with "to the City of Pittsfield storm sewer system."	For consistency with NPDES application materials.
<b>15</b>	Parts I.A.12 and I.A.13	Move discharge limitations from Part I.A.13 to Part I.A.12.	As depicted on the flow diagram for OWS 119W (See GE Technical Exhibit 2), 009 is the combined flow of the 09B discharge and the OWS 119W bypass. For consistency with EPA's approach to other outfalls with and without oil-water separators, the discharge limitations should apply to 09B in Part

Permit Reference	Proposed Change	Summary Supporting Rationale
16	<p>Part I.A.14</p> <p>Add YD14 to list of outfalls, and replace dry weather discharge prohibition with list of allowable non-storm water discharges set forth in § 1.2.2.2 of EPA's Multi-Sector General Permit.</p>	<p>I.A.12, not 009 in Part I.A.13.</p> <p>For completeness and consistency with EPA's regulatory approach in the Multi-Sector General Permit.</p>
17	<p>Part I.A.21</p> <p>Revise footnote to read: "Except for treatment chemicals used at the 64G groundwater treatment plant, the 64T treatment plant and the Lyman Street groundwater recovery system, the permittee will not add chemicals to any of the discharges at this facility."</p>	<p>GE is required to add treatment chemicals for proper operation of these plants and systems.</p>
18	<p>Part I.D.1</p> <p>Change the deadline for completing a PCB treatment capability study of the 64G treatment system from 9 months to 12 months following the effective date of the permit.</p>	<p>To account for uncertainty associated with the timing of issuance of the final permit and to ensure that representative data are collected, GE requests 12 months to collect seasonal (i.e., spring and fall) performance data.</p>
19	<p>Footnotes *1 and *2</p> <p>Combine footnotes to read as follows: "For purposes of sampling and reporting, wet weather is defined as any day on which more than 0.1 inch of total precipitation falls or on which snow melt occurs, provided that the interval from the previous wet weather event is at least 24 hours. The 24-hour wet weather interval is waived when the preceding wet weather event did not yield a measurable discharge, or if the permittee is able to document that less than a 24-hour interval is representative of local wet weather events during the sampling</p>	<p>The 24-hour wet weather interval is more appropriate for the site-specific situation than the 72-hour interval in the Draft Permit, and it will result in a more representative data set with which to measure compliance. The 24-hour composite requirement is technically appropriate for the site's commingled dry/wet flow discharge, and it will provide more representative data than the Draft Permit's requirement for an initial grab sample and a 3-hour composite. See Section V.D and GE Technical Exhibit 5.</p>

Permit Reference	Proposed Change	Summary Supporting Rationale
20	<p>period. The permittee will collect a time-weighted 24-hour composite when a composite sample is required.”</p> <p>Apply combined footnote to all discharge limitations and monitoring requirements applicable to wet weather conditions.</p> <p>Strike footnote *5, which would apply independently to multiple outfalls, and replace it with a new reporting condition in Part I.E that reads as follows: “The permittee will collect wet weather data and temperature using a heated rain gauge and temperature sensor that is maintained for one on-site location, or use the National Weather Service data for Pittsfield, MA. The permittee will report wet weather (volume) and temperature for the site for each calendar day.”</p>	<p>For consistency with definition of wet weather, and to clarify collection and reporting requirements.</p>
21	<p>Footnote *9</p> <p>GE is willing to use Modified Method 8082, with associated minimum detection level target and reporting protocols, at all outfalls subject to footnote *9 in the Draft Permit.</p>	<p>For consistency in implementation, more precise results, and, in light of the added costs and rigor, for balance with the relief requested by GE elsewhere in these comments.</p>
22	<p>Footnote *13</p> <p>Add at end of footnote: “After two years, if all IC25 results are 100%, then the monitoring requirement will cease. GE will notify the Director and the State 14 days prior to the cessation of monitoring.”</p>	<p>Absent measurable toxicity, GE should not be required to monitor for chronic toxicity. As reported in its application materials, GE has a large monthly toxicity testing database that demonstrates full compliance with toxicity permit limits for over 12 years (93 data sets).</p>

	Permit Reference	Proposed Change	Summary Supporting Rationale
23	Footnote *13	In the chart, change "Submit Results By" dates to "May 30, August 31, November 30 and February 28."	For consistency with GE's existing permit and to accommodate data processing and report preparation by the laboratory.
24	Footnote *15	Add at end of footnote: "After two years, if all results are ND, then the monitoring requirement will cease. GE will notify the Director and the State 14 days prior to the cessation of monitoring."	GE has VOC/SVOC data that do not demonstrate a history of detected and quantifiable concentrations of VOCs/SVOCs in the discharge in question. Absent such a history, GE should not be required to monitor for these parameters.
25	Footnote *16	Revise footnote to read: "The pH of the effluent will not be less than 6.5 or greater than 9.0 at any time, unless due to natural causes."	Addresses out-of-range readings (both high and low).
26	Permit Attachment B	Strike references to and requirements associated with fathead minnow ( <u>Pimephales promelas</u> ).	For consistency with footnote *13.
27	Permit Attachment C	In BMP 3.A, insert "subject to PEDDA approval" before "abandon existing storm sewer piping and related manholes and catch basins located in Drainage Basin 004."	As proposed by EPA, BMP 3.A is inconsistent with the NPDES transfer agreement between GE and PEDDA.
28	Fact Sheet Attachments D, F, G, M, N and Q	Replace data sets with those provided by GE (See GE Technical Exhibit 3).	Data sets identified in the Fact Sheet Attachments are not the most current data sets proved by GE and are inadequate to support reasonable potential determinations.
29	Fact Sheet Attachment O	Add footnote: "Since operations discharging from Building 120X were eliminated in 2001, this discharge monitoring location has been removed from the permit."	For consistency with site changes.

	<b>Permit Reference</b>	<b>Proposed Change</b>	<b>Summary Supporting Rationale</b>
<b>30</b>	Fact Sheet Attachment R	Add time period for data and explanatory footnote that GE previously provided to EPA (See GE Technical Exhibit 4).	For accuracy and consistency with GE's application materials.
<b>31</b>	Fact Sheet	Delete reference to "small Lexan sheet operation."	This operation was shutdown in May 2003.
<b>32</b>	Fact Sheet	Delete references to SR01.	SR01 was removed as part of GE's 1/2-mile removal action.
<b>33</b>	Fact Sheet	Delete references to outfall 011.	Outfall 011 was removed from GE's multi-outfall sampling program by minor modification dated November 21, 1996.
<b>34</b>	Permit and Fact Sheet	Remove references, conditions and limitations applicable to YD4, YD5, YD15, SR02, SR03, 007, OF-P1, OF-T2 and OF-T3.	Conveyances have been eliminated.

### **III. BACKGROUND**

#### **A. History Of GE Site**

GE owns a 254-acre parcel of land in Pittsfield, Massachusetts (the “GE Site”).

Although the GE Site historically housed various manufacturing operations, GE terminated the last of those operations in 2003. Currently, the predominant activities at the GE Site involve environmental remediation.

In the NPDES context, GE has effectively eliminated all manufacturing-related discharges and also has initiated extensive site remediation since the last permit proceeding. Those activities have resulted in material and substantial alterations in flows, constituents and operations that will continue to evolve as the GE Site is further remediated, and as portions of the GE Site are transferred to and redeveloped by the Pittsfield Economic Development Authority (“PEDA”).

#### **B. History Of Permit Proceedings**

GE currently holds NPDES Permit Nos. MA0003891 (the “Individual Permit”) and MAR05A021 (the “Multi-Sector General Permit” or “MSGP”). GE sought and obtained the Individual Permit in the 1980s at a time when the GE Site included numerous process outfalls from active manufacturing operations, as classified under pertinent Standard Industrial Classifications. GE no longer conducts active manufacturing operations at the GE Site and, as a result, no longer discharges manufacturing-related wastewater. GE’s predominant activities involve environmental remediation, which results in the discharge of treated groundwater from GE’s extensive groundwater treatment system via Outfall 005. With the phase-out of manufacturing operations, the remaining discharges covered by the Individual Permit consist primarily of storm water that discharges through Outfalls 001 and 004 to Silver Lake, Outfalls

005 and 007 to the Housatonic River, and Outfall 009 to Unkamet Brook.<sup>1</sup> As described on GE Technical Exhibit 1, inflow from the City of Pittsfield and groundwater infiltration also contribute to the flow at certain of these outfalls. Like the Individual Permit, GE sought and obtained coverage under the MSGP at a time when GE was engaged in active manufacturing at the GE Site.

The Individual Permit was issued by EPA and Massachusetts DEP on September 30, 1988, became effective on February 7, 1992, was modified on May 21, 1992, expired on February 7, 1997, and has been administratively continued by virtue of a timely and complete renewal application submitted on August 9, 1996, and revised from time to time thereafter. The MSGP was issued by EPA on October 30, 2000, and is effective until October 30, 2005.

In October of 2000, the U.S. District Court in Springfield, Massachusetts approved and entered a consent decree signed by GE, EPA, DEP and others. *United States of America, et al. v. General Electric Company*, No. 99-30225-MAP (D.Mass.) (“the Consent Decree”). Among other matters, the Consent Decree established a comprehensive program for environmental remediation of the GE Site and surrounding areas. As described below, the Consent Decree (with limited, defined exceptions) expressly bars both EPA and DEP from requiring GE to undertake response actions for the GE Site other than those set forth in the Consent Decree. GE believes that the requirements and covenants contained in the Consent Decree cover substantially all of the activities that are regulated by the Individual Permit and MSGP. Although GE believes that those permits have been effectively superseded by the Consent Decree, GE has not sought termination of the Individual Permit or MSGP due to the ongoing

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<sup>1</sup> The Individual Permit also encompasses various bypass outfalls and sewer relief overflow outfalls described on GE Technical Exhibit 1.



remediation activities. GE respectfully reserves the right to seek termination of its NPDES obligations at some future date. GE's applications for continued and/or renewed NPDES coverage have contained an explicit reservation that GE does not concede that NPDES requirements continue to be applicable to its discharges after entry of the Consent Decree.

In October 2000, EPA recommended that GE consolidate all of its regulated storm water discharges into one permit. Consistent with that recommendation, GE identified and characterized the discharges covered by its MSGP, and submitted a supplemental NPDES Form 2F to EPA and DEP in July 2001. Since then, GE has provided timely responses to requests for information from EPA and DEP in support of the development of a single storm water permit. The Draft Permit reflects the course of action that EPA recommended in October 2000, and covers all regulated storm water discharges from the GE Site.

C. Pending Transfer For Economic Redevelopment

Under an agreement executed by GE, the City of Pittsfield and PEDA on July 22, 1999, known as the "Definitive Economic Development Agreement," the ownership and operational control of portions of the GE Site - including NPDES compliance responsibility for Outfalls 001, 01A and 004, and YD3 - will be transferred to PEDA. In connection with the transfer, GE and PEDA will provide appropriate notification(s) to EPA and DEP that PEDA is assuming GE's status as the NPDES permit holder for those outfalls.

**IV. CONSENT DECREE LIMITATIONS**

Under the terms of the Consent Decree for the GE Site, the Agencies cannot require GE to implement additional response actions under an NPDES permit.<sup>2</sup> As noted previously, on

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<sup>2</sup> GE reserves its right to rely on the legal positions set forth in these comments in the event that the final permit issued by the Agencies is not substantively acceptable to GE. GE specifically reserves its right to rely on these positions and arguments in the event that the

(continued...)

October 27, 2000, the U.S. District Court for the District of Massachusetts entered the Consent Decree among GE, EPA, DEP and others. *United States of America, et al. v. General Electric Company*, No. 99-30225-MAP. The Consent Decree (or "CD") represents a comprehensive settlement of environmental issues related to the "Site" as defined therein.<sup>3</sup> The CD "Site" includes the entire GE plant area, as well as the adjacent areas of the Housatonic River, known as the "Upper ½ Mile Reach" of the river (CD ¶4). It also includes the "Silver Lake Area" and the "Unkamet Brook Area." *Id.* Thus, the "Site" as defined in the Consent Decree encompasses all of the areas addressed in the Draft Permit.

A. Effect Of Consent Decree

EPA, DEP and GE are all parties to the Consent Decree. EPA and DEP are bound by the federal and state covenants they made in the Consent Decree, and cannot use the NPDES permit program to require new response actions outside the four corners of that agreement. When EPA lodged the Consent Decree with the Court, several interveners objected, alleging that it was inadequate to protect human health and the environment, and specifically challenging the covenants. The government defended the Consent Decree, and the Court, upon entering it, found that the response actions set out in the Consent Decree are protective of human health and the environment.

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Agencies issue a final permit that is substantively unacceptable, or if the Agencies at some future date issue another permit or permit amendment with different limitations or requirements.

<sup>3</sup> The Consent Decree and attachments are incorporated into these comments by reference. Nonetheless, in order to avoid voluminous attachments, and because EPA and DEP are signatories to and familiar with the Consent Decree, GE has not attached those documents to these comments. The Consent Decree and associated attachments can be found on EPA's website for the GE/Housatonic River Site:  
<http://www.epa.gov/region1/ge/cleanupagreement.html>.

The Consent Decree represents a comprehensive agreement among the parties to address contaminants present at the GE Site, discharging from that site, and present in the water. As long as GE meets its obligations under the Consent Decree, neither EPA nor DEP has the authority to require GE to implement any additional response actions to address those contaminants, unless the Agencies can show that previously unknown information demonstrates that the remedial program set out in the Consent Decree is no longer protective of human health or the environment. Neither EPA nor DEP has invoked those provisions under the terms of the CD, nor could they. Rather, the points that follow reinforce the obvious conclusion that discharges from the GE Site were fully understood and taken into account at the time that EPA, DEP and the Court all concluded that the Consent Decree would be fully protective of human health and the environment.

B. Provisions Of The Consent Decree

- Paragraph 8.b of the Consent Decree contains EPA's and DEP's determination that:
  - (i) The Removal Actions, when implemented and completed in accordance with this Consent Decree, the SOW, and the Work Plan for the Upper ½ Mile Reach Removal Action (including achieving and maintaining Performance Standards), are protective of human health and the environment with respect to the areas addressed by those Removal Actions; and
  - (ii) Except as expressly provided in this Consent Decree, no further response actions for the areas addressed by such Removal Actions are necessary to protect human health and the environment.

The “Removal Actions” referred to in this language include meeting soil cleanup standards for the same soils that contact storm water and result in discharges of such storm water to the Housatonic River, Silver Lake and Unkamet Brook. This language is sweeping and clear – implementation of those Removal Actions will protect human health and the environment for “the areas addressed by such Removal Actions,” which include the receiving waters, and *no* further response actions are necessary to protect human health and the environment. NPDES permit requirements that require GE to implement response actions are preempted by these provisions, whether those response actions require additional soil removal, modifications to conveyance and treatment facilities, changed or increased monitoring, or other actions. *See* CERCLA § 101(24): “remedial action” includes, *inter alia*, the “collection of . . . runoff,” “onsite treatment,” and monitoring.

- In the federal covenants, EPA agreed that it would not seek to compel GE to implement additional response actions to address releases of waste material at the Site, *including* pursuant to Section 309 of the Clean Water Act. Section 309 is EPA’s source of authority to enforce the NPDES provisions of the Act. CD ¶ 161.b. The only relevant exception is if previously unknown conditions are discovered at the Site indicating that the response actions set out in the Consent Decree are no longer protective of human health or the environment. CD ¶ 162.b. There is nothing new about the existence of residual PCBs in soils at the GE Site, which is the focus of many of the response actions for the plant site. It is similarly well known that there are storm water discharges from the plant site

to the river, Unkamet Brook and Silver Lake, as documented in GE's existing NPDES permits, permit applications and related correspondence.

- Likewise, in the state covenants, DEP agreed that after the lodging of the Consent Decree it would not sue or take administrative action to compel GE to abate or respond to the continued presence or passive release of Waste Materials at the Site, or to secure a permit for such continued presence or passive release, *including* pursuant to the State Clean Waters Act. CD ¶ 166(b)(ii)(C) and ¶ 166(b)(iii) (identifying Sections 26 through 53 of Massachusetts General Laws Chapter 21, the State Clean Waters Act).
- The Statement of Work ("SOW") for the Upper ½ Mile Reach Removal Action (Appendix F to the Consent Decree) contains a performance standard (No. 7) that specifically addresses potential ongoing discharges to the Housatonic River, to the extent that those discharges cause redeposit of PCBs. Performance standard No. 7 provides that GE will evaluate potential redeposition of PCBs to the Upper ½ Mile Reach. However, that evaluation is not required until five years after the completion of that Removal Action (October 2007). If it is shown that PCBs have redeposited to that Reach, EPA can then require additional source control response actions under the Consent Decree, but only if the PCBs are coming from sources not addressed under the Consent Decree. ½ Mile SOW, p. 2-3.
- The SOW for Removal Actions Outside the River includes a performance standard applicable to the Silver Lake response action (No. 9) with a similar provision on redeposit of PCBs. That performance standard specifically bars

EPA from requiring additional response actions if the redeposit of PCBs comes from “currently known discharges of PCBs into the lake from NPDES-permitted to [sic, should be “or”] other outfalls.” SOW for Removal Actions Outside River, p. 79. *See also* Exhibit K-1 to Technical Att. K, p. 4 (estimating the amount of PCB discharges from the Silver Lake outfall to the Housatonic River).

- The Consent Decree specifically addresses discharges from GE’s groundwater treatment facility, known as the “64G” facility, which is also addressed in the Draft Permit. The 64G facility does not treat active industrial discharges in the normal NPDES context. Its sole purpose is remedial, including treatment of contaminated groundwater collected as part of NAPL recovery operations and groundwater collected during the implementation of Removal Actions pursuant to the Consent Decree. Attachment H to the SOW for Removal Actions Outside the River, Section 3 (p. 8), requires that GE continue to perform the groundwater response activities, including recovery and treatment of groundwater, described in Section 2 until EPA determines that the criteria in Section 7.3 for discontinuing those activities are met. Section 2 describes the existing groundwater recovery and treatment program, including operation of the 64G facility, which discharges pursuant to the existing Individual Permit.
- EPA’s evaluation of applicable, relevant and appropriate requirements (“ARARs”) in the Consent Decree strongly reinforces GE’s position that the Consent Decree comprehensively regulates PCBs that might be discharged from the GE Site to the receiving waters. The analysis of ARARs appended to the

Consent Decree shows that EPA specifically considered and evaluated the same discharges addressed in the Draft Permit. Among other things, the ARARs for source control activities and discharge of treated water expressly address discharge limits from the 64G facility, as follows:

- SOW, Table 2, Sec. A, p. 2: Identifies Clean Water Act NPDES regulations as an ARAR, applicable to point source discharges of treated waters to the Housatonic River. EPA's "Determination Re Attainment" states that this ARAR "[w]ill be attained," because discharges "from GE's existing Ground-Water Treatment Facility (via NPDES-permitted outfall) . . . will meet same effluent limitations as in GE's existing NPDES permit." This determination makes clear that this ARAR will be satisfied by reference to the limits in GE's existing Individual Permit.
- SOW, Table 2, Sec. A, p. 5: Similar to the federal ARAR above, identifies Massachusetts' water discharge program as an ARAR. The description states that the state requirements are "[a]pplicable to settling [sic, should be "setting"] effluent limitations for discharge of treated water." EPA then cross-references the federal "Determination Re Attainment," above, making clear that the state ARAR, too, will be satisfied by reference to the limits in GE's existing Individual Permit.
- SOW, Table 2, Sec. A, p. 4: Identifies Clean Water Act ambient water quality criteria as an ARAR, specifically citing EPA's PCB water quality criteria of 0.014 ppb "[f]or protection of freshwater aquatic life due to chronic exposure," and 0.00017 ppb for human consumption of

water and organisms. EPA's "Determination Re Attainment" provides that these discharges, too, will be addressed by meeting GE's existing NPDES permit limits.

- SOW, Table 1, p. 1: Identifies Clean Water Act ambient water quality criteria as a chemical-specific ARAR for PCBs for surface water quality (cross-referencing the 0.014 ppb aquatic and 0.00017 ppb human consumption criteria discussed above). EPA states that these requirements are "[r]elevant and appropriate for settling [sic] effluent limitations for point source discharges of treated water to river." The Agency's "Determination Re Attainment" specifically provides that if these criteria are not attained in surface waters adjacent to the plant site, then "no further response actions to attain the criteria shall be required as part of these Removal Actions (beyond the actions described in the SOW), because EPA has determined that such further response actions are not practicable as part of these Removal Actions."

Taken as a whole, these interrelated ARARs make clear that EPA and DEP specifically considered discharges (including discharges from GE's 64G facility) as part of the evaluation of the removal actions required in the Consent Decree, and that EPA relied on GE's existing permit limits to satisfy applicable, relevant and appropriate federal Clean Water Act and parallel state law requirements. EPA also specifically considered the applicable water quality criteria, and concluded that to the extent the Consent Decree removal actions would not attain those criteria, the ARAR was waived as not practicable.



C. Conflicts Between Consent Decree And Draft Permit

In contravention of the Consent Decree, the Draft Permit would require GE to undertake numerous additional response actions. These include imposing restrictive limitations on the discharges to Outfall 005 and requiring modifications to the treatment facility that processes groundwater from the NAPL recovery operations under the CD. In short, the Draft Permit would require GE to implement new response actions to treat groundwater that is specifically subject to remedial action under the Consent Decree.

In addition, the Draft Permit would require GE to implement a series of expensive BMPs to reduce potential discharges to the Housatonic River, Unkamet Brook and Silver Lake. The source of the constituents addressed by those BMPs is primarily soil on the GE Site. That is, the presence of contaminants in storm water is the result of rainwater or snow melt coming into contact with soil containing residual levels of contaminants. As a result, the BMPs are *de facto* soil cleanup requirements. EPA and DEP already concluded that the response actions set out in the Consent Decree are fully protective of human health and the environment, taking into consideration the residual PCBs and other constituents remaining in soil on the GE Site and discharging to the river. As a result, additional BMPs cannot be required of GE without violating the agreements set out in the Consent Decree.

The additional response actions required by the Draft Permit include the following:

- The obligation to remove accumulated debris from approximately 211 manholes and 121 catch basins in drainage basins 005, 006 and 007.

- The continuing obligation to remove additional accumulated debris from specified manholes and catch basins in drainage basins 005 and 006, if the thickness of the debris exceeds certain criteria.
- The requirement to remove accumulated debris from five specified oil-water separators, following issuance of the permit and thereafter.
- The requirement to clean, repair, and rehabilitate piping within drainage basins 005 and 006, based on criteria set out in the Draft Permit.
- The obligation to implement enhancements to oil-water separators, changing them from an underflow to an overflow system and increasing the water storage volume and solids settling capabilities of each.
- The requirement to implement permanent changes to the solids settling capabilities of certain oil-water separators, based on studies and criteria set out in the Draft Permit.
- The obligation to place soil and vegetative covers over impervious surfaces in the 60s Complex at the GE Site.

GE believes that these BMPs, and a number of other actions called for in the Draft Permit, are clearly additional “response actions” that under the terms of the Consent Decree cannot be imposed on GE, and that can be voided by an appeal under the Consent Decree. That said, in a number of past circumstances, GE has elected not to exercise all of its potential legal appeal rights and, as a consequence, has undertaken a number of discretionary environmental actions in Pittsfield in order to further site-wide remediation and development objectives. GE will determine whether to appeal specific NPDES requirements after the Agencies issue the final permit.

## V. CLEAN WATER ACT LIMITATIONS

In addition to conflicts between the Draft Permit and the Consent Decree, there are substantial Clean Water Act-based reasons not to impose any more stringent requirements than are already contained in the Draft Permit, such as numeric effluent limits for PCBs.

### A. Numeric Storm Water Limits Are Unnecessary And Infeasible

EPA's decision to impose storm water BMPs instead of numeric PCB limits in the Draft Permit is supported by long-standing EPA policy and unique site-specific constraints.

Due to the practical difficulties associated with regulating storm water runoff (*e.g.*, inherent variability and intermittent volume), EPA adheres to an interim permitting policy for water quality-based limits in storm water permits. *See* Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits (EPA 833-D-96-001) (September 1996); *see also* 61 Fed. Reg. 43,761 (August 26, 1996). EPA's policy is predicated on the technical infeasibility of deriving justifiable numeric limits and the risk of imposing unnecessarily stringent numeric limits. *Id.*

Through its interim permitting policy, EPA recommends BMPs (augmented as necessary in subsequent permit cycles) instead of numeric limits to protect water quality standards. EPA's recommended approach is supported by 40 CFR § 122.44(k), which authorizes BMPs, *inter alia*, where numeric limits are infeasible. EPA's approach also is supported by a string of uniformly favorable court decisions.<sup>4</sup>

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<sup>4</sup> *See NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977) (prompting the promulgation of 40 CFR 122.44(k)); *In Re: Arizona Municipal Storm Water NPDES Permits for City of Tucson, Pima County, City of Phoenix, City of Mesa, and City of Tempe*, NPDES Appeal No. 97-3 (EAB 1998) (upholding the permit writer's decision not to impose numeric limits on grounds of infeasibility, in particular, due to the unique nature of storm water discharges in the arid Arizona environment and the uncertainties associated with the impacts of short-term, periodic discharges) (subsequently appealed and decided on other grounds); *Communities for a*  
(continued...)

As contemplated in EPA's interim permitting policy, GE's existing and EPA's proposed BMPs render numeric limits unnecessary. Those BMPs include structural measures to reduce solids loadings (including PCBs) and non-structural measures to maximize removal efficiency. See Draft Permit Part I.C and Attachment C.

Site-specific constraints also render numeric limits infeasible. To even approach numeric PCB limits at its storm water outfalls, GE would need to design, construct, operate, and maintain a massive storm water collection, conveyance, storage and treatment system. The system would need to address an approximate 315-acre drainage area (80% of which is impervious) that is in flux due to remedial activity, demolition, reconstruction and City inflow. Due to the size and nature of this drainage basin, the system would need to accommodate very large runoff volumes. For example, one inch of rainfall results in 6.5 million gallons of runoff, while the 25-year, 24-hour storm event in Pittsfield would produce a runoff volume of approximately 34 million gallons. The location, number and size of the required system components would adversely impact areas of the GE Site slated for Brownfields redevelopment by PEDDA. The system also would be cost-prohibitive to design, construct, operate and maintain.

The factors that militate against numeric limits here (*i.e.*, necessity and feasibility) are precisely the same as the ones that prompted EPA to develop its interim permitting policy and

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*Better Environment, et al., v. State Water Resources Control Board*, 1 Cal.Rptr.3d 76 (Cal. Ct. App., 2003) (upholding the permit writer's decision not to impose numeric limits on grounds of infeasibility, in particular, due to the need for a comprehensive TMDL study of all sources and causes of impairment, the significant reductions achieved by the permit holder during the previous permit cycle, and the relatively prohibitive costs of additional reductions by the permit holder).

that have led various courts to affirm the use of BMPs to protect water quality standards. The Draft Permit properly reflects this precedent.

B. Numeric Storm Water Limits Cannot Be Calculated Until The Remediation Work Is Complete

The ongoing and planned remediation and redevelopment work will alter “background” water quality conditions in Unkamet Brook, Silver Lake and the Housatonic River. Until that work has been completed and a true background has been established, the Agencies cannot calculate or, more importantly, confirm the need for numeric limits for GE’s storm water outfalls.

Water quality-based limits are required whenever a permit writer determines that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above an applicable water quality criterion (commonly referred to as a “reasonable potential determination”). In making a reasonable potential determination, the permit writer is required to use procedures that account for certain background water quality conditions, including existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

Where, as here, water quality conditions are in flux due to ongoing and planned remediation and redevelopment work, the permit writer lacks the necessary inputs to make a reasonable potential determination. Recent precedent bears this out.

For example, remediation of PCB-contaminated sediments in New Bedford Harbor has been underway for over a decade. One of the facilities involved in and affected by the remediation work, Aerovox, Inc., received an NPDES permit for storm water discharges to the

Acushnet River/New Bedford Harbor on October 17, 2000 (Permit No. MA0003379). In the fact sheet accompanying that permit, EPA acknowledged that PCBs would be present in the storm water discharge due to past activities at the facility. However, the Agency elected not to impose numeric PCB limits at Aerovox's storm water outfalls for the following reason:

A true water quality based limit cannot be determined until the sedimentation remediation work is completed and background PCB levels are determined. It is reasonable to assume that remediation of the high concentration of PCBs in the sediments will result in improved background concentrations of PCBs.

Fact Sheet at p. 3.

EPA reached an identical conclusion in the NPDES permit proceeding for Cornell-Dubilier Electronics Corporation, which also discharges storm water contaminated with PCBs to the Acushnet River/New Bedford Harbor (Permit No. MA0003930, December 28, 2000). As in the Aerovox proceeding, EPA elected not to impose numeric PCB limits at Cornell Dubilier's storm water outfalls due to the ongoing and planned remediation work in the Harbor.

In response to comments on the draft permit, EPA explicitly acknowledged that it was unable to make a determination at [that] time as to whether or not [Cornell Dubilier] causes or contributes to a water quality standards violation due to the ongoing Superfund cleanup activities.

EPA Response to Comment No. 1.

Like the New Bedford Harbor clean-up, the remediation and redevelopment activities associated with the GE Site will alter background water quality conditions in Unkamet Brook, Silver Lake and the Housatonic River. These activities include:

- GE has already completed remediation of the 1/2 Mile reach of the river adjacent to the plant site, including substantial removal of sediments and bank

soils, and remediation of NAPL seeps to the river encountered during excavation activities.

- At Silver Lake, remediation will include removal of select bank soils, removal and replacement of identified sediments near an outfall, capping of the entire 26 acre lake bottom, and armoring the perimeter of the lake.
- For the GE Plant Area, GE must meet soil cleanup levels set forth in the CD. In some places, this will involve substantial excavation of soils, backfilling with clean soils, and installation of engineered barriers.
- Pavement will be removed in a 200-foot-wide buffer zone along an area on the northern side of the Housatonic River, in the plant area, to reduce storm water runoff.
- In the Lyman Street and Newell Street parking lots adjacent to the river, GE will install vegetative engineered barriers.
- In the oxbows, soil cleanup standards will be met through excavation of soils where necessary.
- Unkamet Brook will be rerouted to its former channel, and the Unkamet Brook landfill will be capped. Sediments in the brook and adjacent wetlands and floodplain areas will be removed to achieve specific standards.
- GE will shortly convey to PEDDA the first portion of the 52 acres of the GE Site scheduled for Brownfields redevelopment. PEDDA's redevelopment activities will include, at a minimum, grading, seeding and planting. More fundamentally, PEDDA has indicated that it plans substantial modifications to the existing storm water conveyance and discharge systems.