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de maximis, inc.

186 Center Street
Suite 290
Clinton, NJ 08809
(908) 735-9315
(908) 735-2132 FAX

May 15, 2017 ***VIA ELECTRONIC & US MAIL***

Ms. Jennifer LaPoma
ATTN: Lower Passaic River Remedial Project Manager
Emergency and Remedial Response Division
U.S. EPA, Region 2
290 Broadway, 19th Floor
New York, New York 10007

Re: Monthly Progress Report No. 120 – April 2017
Lower Passaic River Study Area (LPRSA) Remedial Investigation/Feasibility Study (RI/FS)
CERCLA Docket No. 02-2007-2009

Dear Ms. LaPoma:

de maximis, inc. is submitting this Monthly Progress Report for the above-captioned project on the behalf of the RI/FS Agreement Settling Parties (Cooperative Parties Group or CPG) pursuant to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement or AOC). The Progress Report satisfies the reporting requirements of Paragraph 42 of said Settlement Agreement. The CPG has revised this Progress Report to address the Region's direction in its September 1, 2015 letter about Section (d).

(a) Actions which have been taken to comply with this Settlement Agreement during the previous month.

Meetings/Conference Calls

- On April 6, CPG and EPA Region 2 (Region 2) and CPG and Region 2 consultants held a meeting to discuss the Contaminant Fate and Transport (CFT) model.

Correspondence

- On April 4, Region 2 provided their updated Remedial Investigation/Feasibility Study (RI/FS) organization chart to CPG and indicated anticipated delivery of comments on the Draft 17-mile RI Report and the Draft 17-Mile Baseline Ecological Risk Assessment (BERA) documents.
- On April 6, Region 2 provided to CPG a list of comments on the Draft 17-mile RI Report that Region 2 considers addressed, at least in part, by the reach-by-reach analysis to be provided by CPG.
- On April 12, Region 2 requested CPG update a table provided by Region 2 with proposed CFT model calibration and remedial alternative prediction approach information.

- On April 13, Region 2 provided personnel availability on specified dates for a meeting to discuss Chemicals of Potential Concern (COPC) mapping and calculation of remedial benefit to CPG
- On April 14, CPG responded to Region 2's email regarding potential dates for a COPC mapping meeting.
- On April 14, CPG modeling consultants provided Region 2 modeling consultants GIS shapefiles used to generate maps that compared 2,3,7,8-TCDD interpolated concentrations (ICs) to ICs based on the Thiessen mapping in the Draft 17-mile RI/FS model.
- On April 18, CPG delivered the March Monthly Progress Report to Region 2.
- On April 18. Region 2 agreed to a May 1 date for meeting to discuss COPC mapping and calculation of remedial benefit.
- On April 20, Region 2 requested CPG provide documentation of the American eel sediment ingestion rate referenced on a table in the Draft 17-mile BERA.
- On April 21, CPG provided the paper from which the information on the American eel sediment ingestion rate on the indicated table in the Draft 17-mile BERA was developed to Region 2.
- On April 24, Region 2 acknowledged receipt of the information on the American eel sediment ingestion rate from CPG.
- On April 24, Region 2 and CPG exchanged emails regarding the meeting location and start time for the scheduled May 1 CFT model meeting.
- On April 24, CPG provided clarification to Region 2 on which comments on the Draft 17-mile RI Report will be addressed by the reach-by-reach analysis.
- On April 24, CPG and Region 2 exchanged emails regarding the potential need to reschedule the May 1 CFT model meeting.
- On April 26, Region 2 provided a draft agenda for review prior to the May 1 CFT model meeting to CPG.
- On April 26, Region 2 provided an evaluation of CPG's responses to Region 2 comments on the Draft 17-mile RI Report to CPG and indicated that Region 2 would be sending out an evaluation of the responses to the comments on Section 7 of the Draft 17-mile RI Report by May 5, 2017.
- On April 26, CPG acknowledged receipt of Region 2's responses to the CPG's response to comments on the Draft 17-mile RI Report.
- On April 27, CPG provided comments on the agenda provided by Region 2 and a modified agenda with notes for the scheduled May 1 CFT model meeting.
- On April 27, Region 2 indicated to CPG that the modified agenda for the May 1 CFT model meeting was acceptable.

Work

- CPG continued reviewing and preparing responses to Region 2 comments on the Draft 17-mile RI Report and Model Appendices.

- CPG has undertaken some preliminary identification and evaluation of upper 9-mile remedial alternatives

(b) Results of Sampling and Tests

- None.

(c) Work planned for the next two months with schedules relating to the overall project schedule for RI/FS completion

- CPG will continue work on the revised Draft 17-mile RI Report and Model Appendices.
- CPG will continue calibration of the LPR/Newark Bay CFT model
- CPG will continue some preliminary identifications of remedial alternatives for the upper 9-miles

(d) Problems encountered and anticipated problems, actual or anticipated delays, and solutions developed and implemented to address actual or anticipated problems or delays.

The CPG has agreed to retain only near-term problems and concerns in the monthly reports moving forward pursuant to the direction in Region 2's September 1 letter; however, previous Progress Reports through July 2015 document in Section (d) significant issues and matters largely the result of actions and decisions by the Region and its Partner Agencies that have significantly delayed and complicated the completion of the 17-mile RI/FS. The removal of this previous information does not in any way lessen its impact on the completion of the 17-mile RI/FS.

- **Remedial Investigation (RI) Report** – The CPG submitted the Draft 17-mile RI Report over one year ago on February 18, 2015. The CPG inquired about the status of the draft RI Report during the February 17, 2016 COPC Mapping meeting and Region 2 was unable to provide a definitive date to deliver comments on the draft report. Region 2 provided 618 comments on the Draft 17-mile RI Report and LPRSA Models on April 14, 2016. The extended delay by the Region in providing the comments was beyond the control of the CPG and will further delay the completion of the 17-mile RI/FS. The Region and the CPG are in the process of comment review and resolution and provide preliminary responses to comments within 60 days as directed by the Region in its July 14, 2016 email. The CPG delivered responses to Region 2 non-modeling RI Report comments on September 13, 2016. The CPG delivered responses to the EPA's RI Report modeling comments on February 9, 2017. The CPG received EPA's evaluation of the CPG's September 2016 responses to comments on April 26.

- **Feasibility Study (FS)** – The CPG delivered the Draft FS over 20 months ago on April 30, 2015. The Region stated in its August 4, 2016 RAO/PRG Technical Memorandum comments it has decided not to provide comments on the Draft FS. In

addition, Region 2 provided comments on the Draft RAO/PRG Technical Memorandum (submitted on March 27, 2015), Draft Alternatives Screening Technical Memorandum (submitted on April 16 and 21, 2015) and the Draft Alternatives Evaluation Technical Memorandum (submitted on April 26, 2015). Region 2 provided comments on August 4, 2016 after more than 16 months for the RAO/PRG Technical Memorandum and informed the CPG that comments on the remaining two Technical Memoranda will be provided by the end of September. The CPG provided a preliminary response to comments to the Region's RAO/PRG Technical Memorandum comments on September 6. Region 2 provided comments on the Draft Alternative Screening Technical Memorandum and the Draft Alternatives Evaluation Technical Memorandum on September 29, 2016 – 17 months after delivery of the memoranda. The CPG prepared and delivered responses on December 2, 2016 as directed by Region 2. The extended delay by the Region in providing the comments on the FS technical memoranda is beyond the control of the CPG and will further delay the completion of the 17-mile RI/FS. The CPG provided two suggested streamlining options to Region 2 on March 10, 2017 and offered a series of collaboration meetings to support this approach.

- **Baseline Human Health Risk Assessment (BHHRA)** – The CPG submitted the 17-mile BHHRA on June 6, 2014 and the Region provided comments on June 5, 2015. The CPG and the Region conducted several teleconferences and exchanged correspondence throughout June and August 2015. The CPG provided responses to comments (RTC) on August 21, 2015. In addition, the CPG prepared responses to the Region's July 15, 2015 additional comments, which were submitted to the Region on September 1, 2015. As documented in the CPG's RTCs, many of the Region's comments direct the CPG to make changes to the BHHRA that are inconsistent with the Region 2-approved Problem Formulation Document and the CPG's October 2013 Risk Assessment and Risk Characteristic Plan and the associated Region 2's January 31, 2014 comments and USEPA risk assessment guidance. The Region failed to meet the 30-day turnaround on responding to the CPG's response to comments that it proposed in its July 20, 2015 letter to the CPG; the failure to provide a timely response caused further delay to the delivery of a revised 17-mile BHHRA and ultimately further delays the completion of the 17-mile RI/FS. The CPG received the Region's responses on October 16, 2015 and October 30, 2015. The CPG informed Region 2 that it would submit a revised 17-mile BHHRA by December 18, 2015 during an October 22, 2015 conference call. The Region did not provide additional clarification on several remaining issues until December 4 which did not delay delivery of the revised 17-mile BHHRA by the CPG. The CPG submitted a revised 17-mile BHHRA on December 18, 2015. The Region provided a response to the CPG's December 18 transmittal letter on January 7, 2016; the CPG responded to the Region's letter on April 13, 2016. The Region provided its comments on August 25 on the December 2015 revised BHHRA more than 8 months after delivery. As directed by the Region, the CPG provided its responses on September 26. Region 2 promised to provide its responses in December 2016; however, this was

subsequently delayed by the Region until January 5, 2017. The Region and CPG had a call on January 19 to discuss the January 5 responses. The CPG delivered a second revision to the Draft BHHRA on March 1, 2017 to the Region.

- **Baseline Ecological Risk Assessment (BERA) -** The CPG submitted the 17-mile BERA on June 13, 2014 and the Region provided comments on May 1, 2015. The CPG and the Region conducted several teleconferences and exchanged correspondence throughout May and July 2015. The last teleconference was conducted on July 29, 2015, during which the Region requested the CPG provide a list of action items. The action items were provided on July 30 and included three items for Region 2 and one item for the CPG that required the Region's input. The Region provided its response to these two of these action items on December 22. The CPG provided 17-mile Draft BERA responses to comments (RTCs) on September 11, 2015 and additional material on September 15, 2015; the Region stated in its July 20, 2015 letter that it would provide its responses in 30 days – Region 2's responses were received in part on December 22, 2015 – more than two months later than promised. The Region provided the remaining material on January 5, 2016. The Region and CPG conducted a teleconference to clarify a number of issues on January 13, 2016. The CPG received additional Mullica River and Great Bay reference data from the Region 2 on June 7, 2016 which was heretofore not available to the CPG which addresses the CPG's concerns about this reference data set. The Region provided further statements on June 20, 2016 with respect to common carp that did not resolve the inconsistent comments and previous statements by the Region (Dec. 2015 BERA Comment 3 Response and RI Comment 179). The Region and CPG communicated via emails, a July 6, 2016 telephone call and the CPG's July 18, 2016 letter to the Region discussing the revised BERA schedule and outstanding issues. As discussed in CPG's July 11, 2016 email and July 18, 2016 letter, the CPG anticipates that it will take until October 1, 2016 to deliver a revised draft 17-mile BERA based on the extensive changes that the Region has directed, delays in providing the additional reference data and assuming the remaining matter of common carp in the BERA are quickly resolved. The Region agreed to an October 1 (actual delivery will be on October 3 since October 1 is a Saturday) delivery date in its August 4, 2016 letter. The CPG delivered a set of clarifications regarding the BERA on September 12, 2016 and received responses from the Region on September 27, 2016; the CPG disagrees with the Region's contention that these were previously resolved by earlier communications. Thereafter, on October 3, 2016, Region 2 refused a CPG request for a brief extension for the delivery of the revised BERA. The revised BERA was submitted on October 7, 2016. A transmittal letter detailing a number of the CPG's significant disagreements with the directives imposed by the Region was delivered to the Region's LPR SharePoint on October 19, 2016. Region 2 requested that the CPG provide a hardcopy of the October 2016 revised BERA to the NJDEP on December 8, 2016 – two months after the revised BERA was posted the Region's LPR SharePoint on October 7, 2016.

- As documented in the CPG's RTCs, many of the Region's comments direct the CPG to make changes to the revised BERA that are inconsistent with the Region 2-approved Problem Formulation Document, the CPG's October 2013 Risk Analysis and Risk Characterization Plan and the associated Region 2's January 31, 2014 comments, and USEPA risk assessment guidance. Specifically, the Region has caused an extended delay with its introduction of a Sediment Quality Triad and Reference Methodology that is (1) contradictory and (2) wholly inconsistent with USEPA guidance during June and July 2015 and continues to the present-time. Furthermore, the CPG questions and strongly disagrees with the Region's need to provide the revised 17-mile BERA to its Partner Agencies for a complete review.

- **COPC Mapping** - The CPG began discussions with the Region regarding COPC mapping in May 2013 with the submission of the "Lower Passaic River Surface Sediment Concentration Mapping Technical Memorandum". The CPG has attempted, but was unable to conduct significant and meaningful dialogue with the Region on COPC mapping between that time and early 2015. COPC Mapping is an integral part of the 17-mile RI/FS including the chemical fate and transport modeling and the identification and evaluation of remedial alternatives. Both the mapping approach and data density are consistent with mapping and data density at other large sediment sites such as the Hudson River, Fox River, and the Lower Duwamish. The Region and CPG representatives met on March 18, 2015 to discuss the CPG's mapping and agreed to follow-on discussions. The Region and the CPG agreed to meet on June 16, 2015 and the Region stated that it would provide its portion for the CPG's review in advance of the meeting. The Region provided its position paper on June 10, 2015. Due to the short-time frame and the complexity of the Region's responses, the CPG postponed the meeting. In a June 12, 2015 email, the CPG requested that the Region provide the underlying documentation for its June 10, 2015 position paper. The Region provided this material on July 20, 2015. The CPG submitted a response to the Region's position paper which was delivered in November 2015 and documents several significant shortcomings in the Region's analysis. The CPG met with Region 2 and USEPA Headquarters on January 27, 2016 to discuss this matter. The CPG completed the action items identified during the February 17, 2016 COPC Mapping meeting and presented the refined COPC Mapping to Region 2 at an April 27, 2016 meeting. On September 20, 2016 more than 5 months after the April 2016 meeting, the CPG asked for and was given provisional approval to proceed with COPC mapping using conditional simulation; Region 2 promised to provide a written confirmation within 1-2 weeks. Region 2 provided preliminary approval of the conditional simulation mapping method on October 11, 2016. The CPG delivered a revised RI Report Appendix J to detail the conditional simulation approach on February 9, 2017. The EPA and CPG had a brief discussion of using the COPC mapping to evaluate remedial benefit during the March 29, 2017 modeling meeting and a meeting was scheduled for May 1, 2017.

- **Exposure Depth/Zone(s)** – The CPG initiated discussions with the Region in early 2014 on the matter of an appropriate site-specific exposure depth/zone for benthic invertebrates. EPA HQ, Region 2 and CPG representatives conducted a teleconference and web-meeting on February 13, 2014 to discuss this matter. The CPG provided additional material to the Region on February 19, 2014. The CPG was unable to engage the Region on this matter for the remainder of 2014. In January 2015, the Region and CPG agreed to meet to discuss the exposure depth/zone and in advance of this meeting the Region and CPG exchanged information including a May 2014 paper on burrowing depth prepared by Region 2 contractors. EPA HQ, Region 2 and CPG representatives met on February 6, 2015. As a result of the meeting, it was agreed to have follow-on meetings and/or teleconferences later in February 2015; however, these meetings/teleconferences were subsequently cancelled by Region 2. On June 1, 2015, the Region provided a brief letter summarizing its rejection of the CPG's shallow exposure depth/zone. The CPG invoked dispute resolution on June 12, 2015 and began preparation of a position paper. On June 25, 2015 the Region acknowledged the CPG's invocation of dispute resolution. On July 2, 2015 the CPG requested that the Region provide the additional information mentioned in its June 25 letter that it relied upon. The Region responded on July 9, 2015 to the CPG's request. On August 18, 2015, the CPG contacted the Region and proposed to table dispute resolution and develop a sampling plan to determine LPR site-specific exposure zone(s). In advance of the August 26, 2015 teleconference, the CPG provided a brief presentation outlining data quality objectives and proposed sampling. As a result of the teleconference, the CPG provided draft QAPP worksheets on September 17, 2015 for further discussion with Region 2. The CPG submitted its dispute resolution statement on November 13, 2015; the Region responded on November 19, 2015 stating that the Region would inform the CPG its intention on how to proceed in early December 2015. Region 2 informally contacted the CPG on December 15, 2015 that the Region has not made a decision on how to proceed on this matter Region 2 subsequently notified CPG on January 13, 2016 that it closed the dispute negotiation period and would refer the matter to Walter Mugdan. CPG submitted supplemental information to its Dispute Resolution Statement to Region 2 on January 28, 2016 citing recently published Agency guidance on determination of the biologically active zone. The CPG also believes that the negotiation period should have been reopened and informal discussions continue to resolve this matter. On February 17, 2016 the CPG inquired upon the status of the Region's staff statement and the CPG's proposal to reopen the negotiations on exposure depth. The Region offered no anticipated delivery date and promised a response to the CPG's January 28, 2016 letter – this was never provided. The Region provided its staff statement on June 7, 2016. The CPG provided a supplemental statement on June 23, 2016. The Region's decision was received from Walter Mugdan on June 28, 2016 which included acceptance of the staff recommendation and direction to use 15 cm as an exposure depth. The Region also rejected the CPG's meeting request and the CPG's renewed proposal from January 2016 offer to conduct sampling in accordance with USEPA's 2015

guidance The extended delay (more than 7 months) by the Region in resolving this dispute was beyond the control of the CPG and has further delayed the completion of the 17-mi RI/FS.

- **Other Documents** - There are number of reports and technical memos (both original and revised submissions) that have been submitted to Region since 2011 that the CPG is awaiting either approval or Region 2's comments. These reports include:

  1. Upstream Reference Benthic Data Report – submitted August 2013
  2. Background Sediment Data Report – submitted October 2013

  The CPG has received the Region's comments on a number of previously submitted reports and revised and re-submitted them in November 2015. Please advise the CPG of the Region 2's schedule for action on these remaining documents.

- **17-mile RI/FS Schedule** – Region 2 representatives stated at October 2016 Passaic River Symposium that it intends to complete the 17-mile RI/FS in 2018 and issue a Proposed Plan in 2019. The Region proposes an ambitious schedule considering the revisions and additional work that Region has directed for the RI, FS, modeling and related deliverables and its plan to conduct a peer review of the modeling. It will require a concerted effort on the Region's part to provide timely comments on deliverables to meet this schedule. The CPG met with Region 2 on January 24, 2017 to discuss the schedule to complete the 17-mile RI/FS. The CPG is employing this draft schedule during the Region's review; however, the Region's delay in its commitment to discuss and respond to the draft January 2017 draft 17-mile RI/FS schedule is placing timely execution of some tasks especially related to the Feasibility Study in jeopardy.

If you have any questions, please contact Rob Law or me at (908) 735-9315.

Very truly yours,

de maximis, inc.

Willard Potter
CPG Project Coordinator

cc: Frances Zizila, EPA Region 2 Office of Regional Counsel
William Hyatt, CPG Coordinating Counsel
Lisa Baron, USACE
Clay Stern, USFWS
Reyhan Mehran, NOAA
Jay Nickerson, NJDEP

Beth Franklin, USACOE
Laura Kelmar, AECOM

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