de maximis, inc.

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

September 15, 2016 ***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. 112 – August 2016
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 August 2, CPG and EPA Region 2 (Region 2) held a call to discuss comments on the draft 17-mile Baseline Ecological Risk Assessment (BERA) regarding the Sediment Quality Triad (SQT) data, the presentation of common carp in the revised draft 17-mile BERA, and the CPG's request for an extension to complete the revised 17-mile BERA.
- On August 24, CPG, Region 2 and CPG and Region 2 consultants met to discuss Region 2's issues and concerns with CPG's Bioaccumulation Model.

Correspondence

- On August 4, Region 2 sent CPG a letter regarding comments on the draft 17-mile BERA regarding the SQT data, the presentation of common carp in the revised draft 17-mile BERA, and the CPG's request for an extension to complete the revised 17-mile BERA, granting the request for an October 1 delivery date.
- On August 4, Region 2 provided comments to CPG on the Draft 17-mile Remedial Action Objectives and Preliminary Remediation Goals (RAO/PRG) Technical

Memorandum. The Region directed the delivery of a response to comments within 30 days.

- On August 4, Region 2 suggested August 24 to CPG for the Benthic Ecologist call that was an action item from the June 29, 2016 Bioaccumulation Model Meeting and requested a list of planned attendees for the call.
- On August 8, 9, and 10, Region 2 and CPG exchanged emails regarding logistics and attendee lists for the proposed August 24 Benthic Ecologist meeting.
- On August 12, CPG submitted a letter to Region 2 in response to Region 2's comments on CPG's June 16, 28 and 29, 2016 Draft 17-mile Remedial Investigation (RI) and the Lower Passaic River Study Area (LPRSA) Modeling comment meeting summaries provided to CPG on July 14 and 26, 2016.
- On August 15, CPG submitted the July Monthly Progress Report to Region 2.
- On August 16, CPG and Region 2 exchanged emails regarding the August 24 Benthic Ecologist meeting.
- On August 22, Region 2 provided CPG information in advance of the August 24 Benthic Ecologist meeting and requested clarification on a July 21 email regarding the LPRSA model predicted BSAF values.
- On August 25, Region 2 provided comments to CPG on the revised Draft 17-mile Baseline Human Health Risk Assessment (BHHRA). The Region directed the delivery of a response to comments within 30 days.
- On August 30, Region 2 provided suggested meeting dates to CPG to discuss the path forward for the LPRSA RI/FS.

Work

- CPG continued revisions to the draft 17-mile BERA.
- CPG continued reviewing Region 2 comments on the Draft 17-mile RI Report and Model Appendices.
- CPG began preparing responses to the Draft 17-mile (RAO/PRG) Technical Memorandum.
- CPG began preparing responses to comments on the revised Draft 17-mile BHHRA.

(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 revisions to the Draft 17-mile BERA.
- CPG will continue responding to comments on the revised Draft 17-mile BHHRA.

- CPG will continue responding to comments on the Draft 17-mile RAO/PRG Technical Memorandum.
- CPG will review and revise the two remaining Draft FS Technical Memoranda after receipt of Region 2 comments.
- CPG will finalize COPC Mapping using Conditional Simulation methodology pending Region 2's comments following the April 27, 2016 Meeting.
- CPG will continue review and responding to Region 2's comments on the Draft 17-mile RI Report and Model Appendices.

(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 the CPG will be providing a preliminary response to comments within 60 days as directed by the Region in its July 14, 2016 email.

- **Feasibility Study (FS)** – The CPG submitted the Draft FS over 13 months ago on April 30, 2015. The Region has not provided a definitive date to deliver comments on the Draft FS. In addition, Region 2 has not provided comments on the RAO/PRG Technical Memorandum (submitted on March 27, 2015), Alternatives Screening Technical Memorandum (submitted on April 16 and 21, 2015) and the 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 will be providing a preliminary response to comments to the Region's RAO/PRG Technical Memorandum comments in 30 days as directed. The extended delay by the Region in providing the comments on the FS is beyond the control of the CPG and will further delay the completion of the 17-mile RI/FS.

- **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 delay the completion of the 17-mile RI/FS. The CPG received the Region's responses on October 16 and October 30. 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 over 6 months ago on December 18. 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. This extended delay in providing its comments on the revised BHHRA is the direct result of the Region's decision to provide the revised 17-mile BHHRA to its Partner Agencies for a complete review.

- **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; the Region stated in its July 20 letter that it would provide its responses in 30 days – Region 2's responses were received in part on December 22 – 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. The CPG received additional Mullica River and Great Bay reference data from the Region 2 on June 7 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 with respect to common carp that did not resolve the inconsistent comments and previous statement (Dec. 2015 BERA Comment 3 Response and RI Comment 179). The Region and CPG communicated via emails, a July 6 telephone call and the CPG's July 18 letter to the Region discussing the revised BERA schedule and outstanding issues. As discussed in CPG's July 11 email and July 18 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 Saturday) delivery date in its August 4, 2016 letter.

- As documented in the CPG's RTCs, many of the Region's comments direct the CPG to make changes to the 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 email, the CPG requested that the Region provide the underlying documentation for its June 10 position paper. The Region provided this material on July 20. The CPG submitted a response to the Region's positon paper which was delivered in November and documents several significant shortcomings in the Region's analysis. The CPG met with Region 2 and USEPA Headquarters on January 27 to discuss this matter. The CPG completed the

action items identified during the February 17 COPC Mapping meeting and presented the refined COPC Mapping to Region 2 at an April 27 meeting. The CPG has been awaiting further feedback from Region 2 for over 4 months.

- **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, the Region acknowledged the CPG's invocation of dispute resolution. On July 2, 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 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 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 for further discussion with Region 2. The CPG submitted its dispute resolution statement on November 13; the Region responded on November 19 stating that the Region would inform the CPG its intention on how to proceed in early December. Region 2 informally contacted the CPG on December 15 that the Region has not made a decision on how to proceed on this matter Region 2 subsequently notified CPG on January 13 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 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, 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 letter – this was never provided. The Region provided its staff statement on June 7. The CPG provided a supplemental statement on June 23, 2016. The Region's decision was received from Walter Mugdan on June 28 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 will further delay 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. Lower Passaic River Surface Sediment Concentration Mapping Technical Memorandum – submitted May 2013
  2. Upstream Reference Benthic Data Report – submitted August 2013
  3. 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. 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 the July 2015 CAG Meeting that it intended to complete the 17-mile RI/FS and issue a Proposed Plan in CY 2016. It subsequently stated that it plans to issue a proposed plan in 2017. The CPG is concerned that the current backlog of reports held by Region make such a goal unlikely.

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

PAPER