## BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

#### IN THE MATTER OF:

WATER QUALITY STANDARDS AND ) EFFLUENT LIMITATIONS FOR THE ) CHICAGO AREA WATERWAY SYSTEM ) AND THE LOWER DES PLAINES RIVER: ) PROPOSED AMENDMENTS TO 35 III. ) Adm. Code Parts 301, 302, 303 and 304 )

R08-9(C) (Rulemaking – Water)

## **NOTICE OF FILING**

 TO: Mr. John T. Therriault Assistant Clerk of the Board Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601 (VIA ELECTRONIC MAIL) Ms. Marie E. Tipsord Hearing Officer Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601 (VIA FIRST CLASS MAIL)

#### (SEE PERSONS ON ATTACHED SERVICE LIST)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board PRE-FIRST NOTICE COMMENTS OF EXXONMOBIL OIL CORPORATION ON THE PROPOSED AQUATIC LIFE USE DESIGNATION FOR THE UPPER DRESDEN ISLAND POOL, a copy of which is herewith served upon you.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,

Dated: March 5, 2012

By: <u>/s/ Katherine D. Hodge</u> Katherine D. Hodge

Katherine D. Hodge Monica T. Rios HODGE DWYER & DRIVER 3150 Roland Avenue Post Office Box 5776 Springfield, Illinois 62705-5776 (217) 523-4900

#### CERTIFICATE OF SERVICE

I, Katherine D. Hodge, the undersigned, hereby certify that I have served the

### attached PRE-FIRST NOTICE COMMENTS OF EXXONMOBIL OIL

#### CORPORATION ON THE PROPOSED AQUATIC LIFE USE DESIGNATION

#### FOR THE UPPER DRESDEN ISLAND POOL upon:

Mr. John T. Therriault Assistant Clerk of the Board Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601

via electronic mail on March 5, 2012; and upon:

Ms. Marie E. Tipsord Hearing Officer Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601

Matthew J. Dunn, Esq. Thomas H. Shepherd, Esq. Environmental Enforcement Division Office of the Attorney General State of Illinois 69 West Washington, 18th Floor Chicago, Illinois 60602

Aeril J. Tesher, Esq. Jeffrey C. Fort, Esq. SNR Denton US LLP 233 South Wacker Drive, Suite 7800 Chicago, Illinois 60606-6404 Deborah J. Williams, Esq. Stefanie N. Diers, Esq. Illinois Environmental Protection Agency 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Frederick M. Feldman, Esq. Ronald M. Hill, Esq. Mr. Louis Kollias Margaret T. Conway Metropolitan Water Reclamation District 100 East Erie Street Chicago, Illinois 60611

Susan Charles, Esq. Thomas W. Dimond, Esq. Ice Miller LLP 200 West Madison, Suite 3500 Chicago, Illinois 60606

Claire A. Manning, Esq. Brown, Hay & Stephens, LLP 700 First Mercantile Bank Building 205 South Fifth Street Post Office Box 2459 Springfield, Illinois 62705-2459

Mr. Robert VanGyseghem City of Geneva 1800 South Street Geneva, Illinois 60134-2203

Jerry Paulsen, Esq. Cindy Skrukrud, Esq. Environmental Defenders of McHenry County 110 S. Johnson Street, Suite 106 Woodstock, Illinois 60098

Mr. James L. Daugherty Thorn Creek Basin Sanitary District 700 West End Avenue Chicago Heights, Illinois 60411

Ms. Traci Barkley Prairie Rivers Network 1902 Fox Drive, Suite 6 Champaign, Illinois 61820

Mr. Keith I. Harley, Esq. Ms. Elizabeth Schenkler Chicago Legal Clinic, Inc. 211 West Wacker Drive, Suite 750 Chicago, Illinois 60606

Frederick D. Keady, P.E. Vermilion Coal Company 1979 Johns Drive Glenview, Illinois 60025

W.C. Blanton, Esq. Husch Blackwell Sanders LLP 4801 Main Street Suite 1000 Kansas City, Missouri 64112 Mr. Bernard Sawyer Mr. Thomas Granato Metropolitan Water Reclamation District 6001 West Pershing Road Cicero, Illinois 60650-4112

Ms. Lisa Frede Chemical Industry Council of Illinois 1400 East Touhy Avenue, Suite 110 Des Plaines, Illinois 60019-3338

Fredric P. Andes, Esq. Erika K. Powers, Esq. Barnes & Thornburg 1 North Wacker Drive, Suite 4400 Chicago, Illinois 60606

Tracy Elzemeyer, Esq. American Water Company 727 Craig Road St. Louis, Missouri 63141

Kristy A. N. Bulleit, Esq. Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

Mr. Mark Schultz Navy Facilities and Engineering Command 201 Decatur Avenue, Bldg. 1A Great Lakes, Illinois 60088-2801

Ms. Kay Anderson American Bottoms RWTF One American Bottoms Road Sauget, Illinois 62201

Albert Ettinger, Esq. Jessica Dexter, Esq. Environmental Law & Policy Center 35 East Wacker, Suite 1300 Chicago, Illinois 60601

Mr. James E. Eggen City of Joliet, Department of Public Work and Utilities 921 East Washington Street Joliet, Illinois 60431

Mr. Jack Darin Sierra Club 70 East Lake Street, Suite 1500 Chicago, Illinois 60601-7447

Ms. Beth Steinhour 2021 Timberbrook Springfield, Illinois 62702

Mr. Bob Carter Bloomington Normal Water Reclamation District Post Office Box 3307 Bloomington, Illinois 61702-3307

Mr. Kenneth W. Liss Andrews Environmental Engineering 3300 Ginger Creek Drive Springfield, Illinois 62711

Susan M. Franzetti, Esq. Kristen Laughridge Gale, Esq. Nijman Franzetti LLP 10 South LaSalle Street, Suite 3600 Chicago, Illinois 60603

Stacy Meyers-Glen, Esq. Openlands 25 East Washington Street, Suite 1650 Chicago, Illinois 60602

Mr. James Huff Huff & Huff, Inc. 915 Harger Road, Suite 330 Oak Brook, Illinois 60523 Ms. Cathy Hudzik City of Chicago – Mayor's Office of Intergovernmental Affairs 121 North LaSalle Street City Hall – Room 406 Chicago, Illinois 60602

Mr. Tom Muth Fox Metro Water Reclamation District 682 State Route 31 Oswego, Illinois 60543

Dr. Thomas J. Murphy 2325 North Clifton Street Chicago, Illinois 60614

Ms. Olivia Dorothy Office of Lt. Governor Room 414 State House Springfield, Illinois 62706

Ms. Vicky McKinley Evanston Environment Board 223 Grey Avenue Evanston, Illinois 60202

Mr. Irwin Polls Ecological Monitoring and Assessment 3206 Maple Leaf Drive Glenview, Illinois 60025

Mr. Lyman C. Welch Alliance for the Great Lakes 17 N. State Street, Suite 1390 Chicago, Illinois 60602

Ann Alexander, Esq. Natural Resources Defense Council 2 North Riverside Plaza, Suite 2250 Chicago, Illinois 60606

Roy M. Harsch, Esq. Drinker Biddle, & Reath 191 North Wacker Drive, Suite 3700 Chicago, Illinois 60606-1698

by depositing said documents in the United States Mail, postage prepaid, in Springfield,

Illinois on March 5, 2012.

/s/ Katherine D. Hodge Katherine D. Hodge

Mobo:041/Fil/ NOF-COS -- Pre-First Notice Comments of ExxonMobil Oil Corp.

### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: ) WATER QUALITY STANDARDS AND ) EFFLUENT LIMITATIONS FOR THE ) CHICAGO AREA WATERWAY SYSTEM ) AND THE LOWER DES PLAINES RIVER ) PROPOSED AMENDMENTS TO 35 ILL ) ADM. CODE PARTS 301, 302, 303 and 304 )

R08-9(C) (Rulemaking – Water)

## PRE-FIRST NOTICE COMMENTS OF EXXONMOBIL OIL CORPORATION ON THE PROPOSED AQUATIC LIFE USE DESIGNATION FOR THE UPPER DRESDEN ISLAND POOL

NOW COMES EXXONMOBIL OIL CORPORATION ("ExxonMobil"), by and through its attorneys, HODGE DWYER & DRIVER, and pursuant to the February 3, 2012 Hearing Officer Order, submits the following Pre-First Notice Comments of ExxonMobil Oil Corporation on the Proposed Aquatic Life Use Designation for the Upper Dresden Island Pool.

## I. INTRODUCTION

ExxonMobil ("ExxonMobil") owns and operates a petroleum refinery ("Refinery") located in Channahon, Illinois that discharges treated process wastewater and storm water to the Upper Dresden Island Pool ("UDIP") of the Lower Des Plaines River ("LDPR"). Any changes to the existing designated uses and applicable water quality standards of the UDIP could have technical and economic impacts on Refinery operations. Accordingly, ExxonMobil has a direct interest in the proposed revisions to the use designations for the UDIP.

Because the designated uses of the UDIP will establish the numeric and narrative water quality standards that are applicable to the UDIP, it is essential to the continued operation of the Refinery that any revisions to the designated uses for the UDIP be based on sound science that reflects the uses actually attainable in the LDPR. These comments address the reasons why the

record before the Illinois Pollution Control Board ("Board") warrants the adoption of an aquatic life use designation for the UDIP that is less than Clean Water Act ("CWA") goals. As explained in more detail below, proposed Section 303.237 should be revised to reflect the appropriate scope of aquatic-life populations that are present in the UDIP.

The rulemaking record for R08-9 Subdocket C is voluminous and contains extensive scientific documentation on the achievable and appropriate aquatic life use designation for the UDIP. ExxonMobil's comments are offered to direct the Board's attention to the site-specific conditions of the UDIP that justify an aquatic life use subcategory that does not fully achieve CWA goals and to flaws in the proposed aquatic life use definition that must be remedied before its adoption.

# II. <u>THE AQUATIC LIFE USE DESCRIPTION FOR THE UDIP SHOULD BE</u> <u>BASED ON THE USE THAT IS DEMONSTRATED AS ACHIEVABLE WITH</u> <u>THE EXISTING HABITAT LIMITATIONS.</u>

The Illinois Environmental Protection Agency's ("Illinois EPA") proposed aquatic life

use designation for the UDIP states:

Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge shall be designated for the Upper Dresden Island Poll Aquatic Life Use. These waters are capable of maintaining aquatic-life populations consisting of individuals of tolerant, intermediately tolerant and intolerant types that are adaptive to the unique flow conditions necessary to maintain navigational use and upstream flood control functions of the waterway system. These waters must meet the water quality standards of 35 Ill. Adm. Code 302, Subpart D.

Proposed 35 Ill. Admin. Code § 303.237. This proposed use designation for the UDIP, which

includes intolerant types of aquatic-life populations, is not achievable.

The proposed inclusion of intolerant species in the definition of the aquatic life use for

the UDIP is apparently based on certain assumptions about existing water quality, as described in

the Use Attainability Analysis ("UAA") for the LDPR. Statement of Reasons, Attachment A -

Lower Des Plaines River Use Attainability Analysis Final Report (Dec. 2003), In the Matter of: Water Quality Standards and Effluent Limitations for the Chicago Area Waterway System and the Lower Des Plaines River: Proposed Amendments to 35 Ill. Adm. Code Parts 301, 302, 303 and 304, R08-09 (Ill.Pol.Control.Bd. Oct. 26, 2007) (rulemaking hereafter cited as "R08-09" and Attachment A hereafter cited as "UAA"). The UAA recommended that the UDIP be assigned an aquatic life use of "General (Impounded) Use" with site-specific standards for dissolved oxygen and copper. UAA at 8-35 - 8-37. Based on the field data presented elsewhere in the UAA, this recommendation is not scientifically supported and is an unachievable standard. Id. at 5-14 (stating that the Dresden Pool water is "impounded, reducing stream velocity and creating a deep water habitat that is not optimum for a diverse benthic macroinvertebrate community."); 6-13 (stating that "[i]ntolerant species were very rare or absent in all samples . . . "). While Illinois EPA modified the description of the aquatic life use for the UDIP, it retained the erroneous assumption that intolerant species of fish and macroinvertebrates could develop into sustainable, reproducing populations in the UDIP notwithstanding the habitat limitations that are clearly present.

In the case of the macroinvertebrates, the authors of the UAA appear to have relied upon artificial substrate data to conclude that water quality in the UDIP is suitable to maintain successful diverse macroinvertebrate populations. *Id.* at 5-17. The use of artificial substrate data to conclude that a higher aquatic life use is achievable is not scientifically justified. Benthic macroinvertebrates live on the bottom, and the physical and chemical conditions of the bottom habitat determine the success of benthic macroinvertebrate populations. As noted in the UAA, the impounded pool depths, minimal ambient velocities, homogeneous fine-grained sediments, sediment pollutant concentrations, scouring of sediments during storm events, and continuous

3

sediment disturbances by barge traffic are the limiting factors on the benthic macroinvertebrate populations that can inhabit the UDIP and Lower Dresden Island Pool ("LDIP"). *Id.* at 5-17-5-18.

The macroinvertebrate populations in the UDIP are also demonstrated to be limited in diversity and abundance due to lack of suitable habitat conditions. UAA at 5-14. The UAA describes the entire study area, including the UDIP, as having limited invertebrate habitat such as "woody debris, cobbles and stable substrate." *Id.* at 5-17. In addition, as noted above, the UAA cites low velocities in deeper water formed by the impounded pools, homogeneous fine-grained sediments, and ship and barge traffic<sup>1</sup> that suspends bottom sediments as additional habitat stressors that preclude development of diverse benthic macroinvertebrate communities. *Id.* 

Also, the Board has heard testimony discussing the habitat limitations in the UDIP. The prefiled testimony of G. Allen Burton and Greg Seegert provide a detailed evaluation of the irreversible habitat limitations in the UDIP that prevent attainment of a higher aquatic life use subcategory and the deficiencies in the proposed Section 303.237 use definition. *See generally* Pre-filed Testimony of G. Allen Burton, R08-09 (Ill.Pol.Control.Bd. Sept. 8, 2008) (hereafter "Burton Testimony") and Pre-filed Testimony of Greg Seegert, R08-09 (Ill.Pol.Control.Bd.

<sup>&</sup>lt;sup>1</sup> ExxonMobil has provided information regarding the constant barge traffic on the LDPR. In his pre-filed testimony, Mr. Bob Elvert, on behalf of ExxonMobil, stated:

Barge traffic on the LDPR is a constant twenty-four hour a day, seven days a week activity. In 2007, 825 barges were unloaded or loaded at the ExxonMobil Refinery dock, with each barge being moved across the river or upstream on the river by tugboat two to three times during loading and unloading operations. This amounts to hundreds of trips by tugboats and over 2,400 barge movements back and forth across the width of the LDPR. In addition to the barges that are unloaded or loaded at the Refinery, several other facilities along the LDPR are served by barges, and thus, the actual number of barges on the LDPR could be substantially greater than that noted above.

Pre-Filed Testimony of Robert S. Elvert, R08-09 at 3 (Ill.Pol.Control.Bd. Aug. 4, 2008).

Sept. 8, 2008) (hereafter cited at "Seegert Testimony"). Their testimony identifies flaws in Illinois EPA's UAA evaluation of the aquatic life use that is attainable in the UDIP, including the evaluation of additional field data on sediment and habitat quality. For example, Illinois EPA's Statement of Reasons ("SOR") states that the Qualitative Habitat Evaluation Index ("QHEI") scores for the UDIP ranged from 45 to 80, which correspond to a fair to excellent biological potential. Statement of Reasons, R08-09 at 52 (Ill.Pol.Control.Bd. Oct. 26, 2007) (hereafter cited as "SOR"). In fact, as pointed out by Mr. Seegert in his testimony on the 2008 QHEI study, approximately half of the QHEI scores are below 45, which represent habitat that is only "fair." Seegert Testimony at 9-10. Furthermore, Mr. Seegert also noted that, as per protocol, the area within the navigation channel was not evaluated for the 2008 QHEI, which is approximately 50% of the UDIP. Due to barge traffic<sup>2</sup> and other factors, Mr. Seegert surmised that the navigational channel "certainly would have scored well below 45 had it been evaluated." *Id.* at 10. Thus, relying on Illinois EPA's "modified" QHEI scores is not a scientifically supportable basis for assigning the described aquatic life use for the UDIP.

The designated aquatic life use subcategory for the UDIP should represent existing, achievable habitat conditions, not aspirational uses that are unsupported by the available field data. Further, the description of the UDIP aquatic life use must reflect the attainable use under the existing physical conditions of the UDIP, and thus, the identification of a use that includes intolerant fish and macroinvertebrate species must be revised, as discussed below. Illinois EPA's proposed definition of the aquatic life use subcategory for the UDIP appears to ignore the habitat analysis presented in the UAA and the biological data for the LDIP that shows no

<sup>&</sup>lt;sup>2</sup> See footnote 1.

intolerant fish species are present and the benthic invertebrate populations are impacted even though the General Use criteria for temperature, dissolved oxygen, and toxics may be achieved.

## III. <u>THE IRREVERSIBLE PHYSICAL HABITAT CONDITIONS IN THE UDIP</u> JUSTIFY APPLICATION OF 40 CFR 131.10(g) FACTORS FOR THE ESTABLISHMENT OF DESIGNATED USE SUBCATEGORIES THAT DO NOT ACHIEVE CWA GOALS.

The UDIP cannot achieve the CWA aquatic life use goals (defined in Illinois as General Use waters) because of irreversible existing conditions of the UDIP, which are described in the Illinois EPA's SOR. SOR at 16-51. The existing designated uses of the LDPR, including the UDIP, are Secondary Contact and Indigenous Aquatic Life.<sup>3</sup> 35 Ill. Admin. Code Part 302, Subpart D. These existing designated uses reflect the historic widespread and permanent modifications to the LDPR that were made to facilitate commercial navigation and to provide for the transport of treated sewage and storm water from the Greater Chicago metropolitan area to downstream waters. In the SOR, Illinois EPA provided a description of the history of the Chicago Area Waterway System ("CAWS") and LDPR and the many physical modifications to these water bodies that have permanently altered their hydrology, hydraulics, and aquatic habitat. SOR at 14-23. Such irreversible alterations have made it impossible for these waters to fully comply with CWA goals.

Illinois EPA proposed to revise the current designated aquatic life use of the UDIP by following the procedures described in the federal water quality standards regulations. *See* 40 C.F.R. Part 131. The federal regulation that implements the CWA lists six factors ("UAA factors") that justify establishing subcategories of uses that do not meet the CWA goals. 40 C.F.R. § 131.10(g). The following four of the six factors can be applied to the UDIP:

<sup>&</sup>lt;sup>3</sup> An existing use is an actual use that existed as of November 28, 1975. 40 C.F.R. § 131.3(e).

(3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

(5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(6) Controls more stringent than those required by sections 301(b) and 306 of the (CWA] would result in substantial and widespread economic and social impact.

40 C.F.R. 131.10(g). Illinois EPA's SOR describes the applicability of UAA factors to the UDIP and how the physical conditions limit the aquatic life (and recreational) uses in this stream segment. *See generally* SOR.

## A. UAA Factor 3: Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.

The majority of the flow in the UDIP consists of treated wastewater, combined sewer overflows (recognizing the TARP has reduced these), and urban runoff from the Greater Chicago Metropolitan Area. UAA at 1-8. The Des Plaines River is heavily polluted and impaired. Burton Testimony at 3. Pollutants include "organic chemicals, nutrients, metals, pathogens, ammonia, sedimentation/siltation, total dissolved and suspended solids, chlorides, and dissolved oxygen," and the "most common sources of impairment are municipal point source discharges, combined sewer overflows, urban runoff/storm sewers, contaminated sediments channelization, flow regulation, hydromodification, and habitat alteration." *Id.* These human caused impairments and sources of pollution prevent attainment of CWA goals, and although in the case of combined

sewer overflows, TARP has contributed to reduced events, there appear to be, at this time, no technically or economically feasible treatment or management method that could be applied to the other waste sources or impairments to assure attainment of the General Use standards in the UDIP.

## B. UAA Factor 4: Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use.

Almost the entire stretch of the LDPR that is currently designated secondary contact and indigenous aquatic life use, including the UDIP, is impounded. SOR at 16. Illinois EPA concluded that it "is clear from the UAA that the [LDPR] continues to be a highly modified water body that does not resemble its pre-urbanized state." *Id.* at 22. Further, the LDPR is part of "one of the busiest inland commercial navigation systems in the nation," the Upper Illinois Waterway, and the UDIP has a maintained (dredged) navigation channel to support the designated commercial navigation use. *Id.* at 17; UAA at 7-23. Since navigation is a protected use, there will continue to be impacts on the habitat of the waterways, including the UDIP, which precludes attainment of CWA goals.

## C. UAA Factor 5: Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses.

As explained in the UAA, "impoundment of the [LDPR] by the Brandon Road and Dresden Island Lock and Dams creates a deep pool environment that is lacking in coarse substrate, channel diversity, riffle habitat, and gradient." UAA at 4-32. In addition, the UAA stated that "[a]s long as commercial navigation takes place on the [LDPR], changes to the . . . habitat features [i.e. substrate, channel morphology, pool

quality, riffle quality, and stream gradient] are irreversible. *Id.* The UAA further stated that "[a]t the current time, the [LDPR] is heavily used or commercial barge traffic, a protected use under the [CWA]. While commercial barge traffic continues on the [LDPR], the major causes of the degraded habitat are considered irreversible, as the lock and dam system is vital to commercial navigation." *Id.* at 4-34.

In addition, the UAA comparison of the potential fish community in the LDPR to free-flowing segments of the Fox River suggested that the "presence of and proximity to dams has significant effects on the fish biotic integrity." *Id.* at 6-25. The UAA concluded in regards to the LDPR that a modified classification was warranted in order "to reflect the currently altered habitat of the waterway." *Id.* at 6-26. Consequently, as noted in the discussion UAA Factor 4, the highly modified and impounded UDIP has poor aquatic life habitat features that are irreversible, which prevent attainment of CWA goals.

# D. UAA Factor 6: Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

Although Illinois EPA has not referenced this aquatic life use-limiting factor in its proposal, there would be widespread social and economic impacts if an aquatic life use description that approaches the General Use standard is adopted for the UDIP. As discussed above, the UDIP is designed and operated for navigation, and the quality of the aquatic life habitat is limited by the fact that the pool is impounded water. The UAA stated that the poor quality habitat cannot be "improved without removal or major modification to the navigation system." UAA at 4-32. The report explained that these

habitat limitations are irreversible as long the LDPR is used for commercial navigation, which is a designated use. *Id.* at 4-33.

Elimination of commercial navigation on the LDPR and remediation of the aquatic habitat, which would include removing the existing dams and returning the river channel to "natural" physical conditions, would be controls that "result in substantial and widespread economic and social impact." Furthermore, modification of the CAWS and LDPR flow regime and hydraulic characteristics, that would be required to return the habitat to a condition that would fully support the General Use aquatic life category, would be virtually impossible because there are currently no economically feasible alternatives for managing urban storm water from the greater Chicago Area.

At a minimum, elimination of commercial navigation, restoration of the UDIP channel, including removal of all contaminated sediment, and treatment of all wastewater and urban runoff, would be required to attain an aquatic life use that could be considered as achieving the description at proposed Section 303.237. The costs of such actions have not been estimated, but it could be in the billions of dollars and would affect thousands of jobs that are dependent on the commercial navigation in the LDPR and CAWS.

# IV. <u>THE AQUATIC LIFE USE FOR THE UDIP SHOULD REPRESENT THE</u> EXISTING AND ACHIEVABLE USE.

Based on the discussion above, ExxonMobil proposes that the Board revise proposed

Section 303.237 as follows:

Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge shall be designated for the Upper Dresden Island Poll Aquatic Life Use. These waters are capable of maintaining aquatic-life populations consisting of individuals of tolerant, <u>and</u> intermediately tolerant and intolerant types that are adaptive to the unique flow conditions necessary to maintain navigational use and upstream flood control functions of the waterway system. These waters must meet the water quality standards of 35 Ill. Adm. Code 302, Subpart D.

Illinois EPA's proposed Section 303.237 quoted above, as well as proposed Sections 303.230 and 303.235, use the terms "tolerant," "intermediately tolerant," and "intolerant" to describe the types of aquatic life populations that can be maintained in the CAWS, Brandon Pool, and the UDIP. The proposed rule does not define, even in generic terms, what species of fish and macroinvertebrate animals will be classified as tolerant, intermediately tolerant, or intolerant, and how such classification will be made. The definitions of aquatic life types/classifications that are used in the aquatic life use descriptions of the proposed rule should be included in the rule, at a minimum by referencing the appropriate and scientifically supported methods for classifying vertebrate and invertebrate species that will be used to assess the attainment of the designated use categories. Further, Illinois EPA should provide guidance and/or proposed rule language on how it would define and categorize aquatic life as tolerant, intermediately tolerant, or intolerant.

Thus, ExxonMobil objects to the inclusion of "intolerant" types of aquatic species in the description of the UDIP use at proposed Section 303.237 because the UAA and other available data in the record do not justify the conclusion that the habitat of the UDIP supports (or can support) intolerant species in sustainable populations. The UAA section on the metrics for the Index of Biotic Integrity for the LDPR, including the UDIP, states that intolerant fish species were "very rare or absent in all samples," including in the LDIP. UAA at 6-13. The UAA attributes the lack of intolerant species of fish to poor habitat and possibly thermal and/or dissolved oxygen stresses. *Id.* However, because no intolerant species were identified in the LDIP, which the UAA evaluation indicates is not subject to either thermal or low dissolved oxygen stresses, it is apparent that the physical habitat limitations (channelized, impounded

11

pools) of the UDIP are likely the environmental conditions that preclude the development of sustainable populations of intolerant fish species.

The site-specific data collected for over a decade document that the UDIP does not support intolerant fish species or diverse benthic macroinvertebrate (see discussion in Section II of these comments) communities and the irreversible physical habitat conditions preclude the development of sustainable populations of such species. Therefore, the description of the aquatic life use of the UDIP at proposed Section 303.237 is not representative of the existing or achievable use and should be revised as suggested above.

## V. <u>CONCLUSION</u>

ExxonMobil appreciates the opportunity to provide these comments, and it respectfully requests that the Board consider the issues raised above and revise the aquatic life use designation at proposed Section 303.237 for the UDIP, consistent with ExxonMobil's suggested revisions.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,

Dated: March 5, 2012

By: /s/ Katherine D. Hodge Katherine D. Hodge

Katherine D. Hodge Monica T. Rios HODGE DWYER & DRIVER 3150 Roland Avenue Post Office Box 5776 Springfield, Illinois 62705-5776 (217) 523-4900

MOBO:041/Fil/Pre-First Notice Comments Subdocket C