## NPDES Permit No. IL0080066 Notice No. BWC:14070201bwc.docx

Public Notice Beginning Date: December 15, 2014

Public Notice Ending Date: January 16, 2015

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft New NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency Bureau of Water, Division of Water Pollution Control Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-0610

Name and Address of Discharger:

Name and Address of Facility:

Marseilles Land and Water Company 919 Towne Centre Drive, Suite 210 San Diego, California 92122 Marseilles Land and Water Company Marseilles Lock and Dam 150 E. Main Street Marseilles, Illinois 61341 (LaSalle County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Brian W. Cox at 217/782-0610.

The applicant is engaged in the construction of a hydroelectric power plant (SIC 1629). Wastewater will be generated from dewatering the North Headrace and from continued dewatering from excavation activities associated with the removal of contaminated sediment and the construction of the hydroelectric power plant. The excavation dewatering discharges will be discharged at an average rate of 0.1728 MGD from Outfall 001 and at an average rate of 0.1728 MGD from Outfall 002.

The excavation dewatering discharges from within the remediation area will be treated using granular activated carbon (GAC) units as permitted in IEPA Permit Number 2014-EN-58996 and if necessary will be treated with bag filters prior to the GAC units.

Discharges of storm water and clean groundwater generated from construction activities occurring outside of the remediation area are covered under NPDES Permit Number ILR105866.

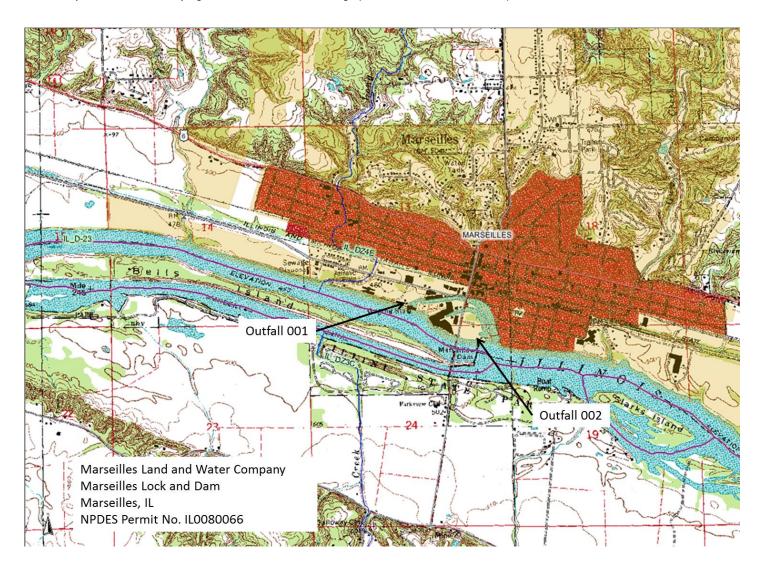
Application is made for the new discharge which is located in LaSalle County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Illinois River	41° 19' 25"	North	88° 42' 50"	West	General Use	Not Rated
002	Illinois River	41° 19' 17"	North	88° 42' 32"	West	General Use	Not Rated

The stream segment, IL\_D-23 of the Illinois River, receiving the discharges from Outfall(s) 001 and 002 is on the draft 2014 303(d) list of impaired water, and is not listed as a biologically significant stream and is not given a Stream Integrity Rating in the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*. The following parameters have been identified as the pollutants causing impairment:

Outfall(s)	Designated Uses_	Potential Causes
		Mercury, Polychlorinated
001 and 002	Fish Consumption	biphenyls
001 and 002	Primary Contact Recreation	Fecal Coliform

To assist you further in identifying the location of the discharge please see the attached map.



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The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfalls: 001 and 002 Excavation Dewatering (DAF = 0.1728 MGD)

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						
pH				Shall be within 6.0-9.0 s.u.		35 IAC 302.125
Total Suspended Solids				15	30	35 IAC 304.124
Benzene					0.05	40 CFR 125.3
Priority Pollutant PNA*					0.1	40 CFR 125.3

<sup>\*</sup> Priority Pollutant PNAs include the following compounds: Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) anthracene, Benzo (ghi) perylene, Benzo (k) fluoranthene, Chrysene, Dibenzo (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-cd) pyrene, Naphthalene, Phenanthrene, and Pyrene

The following explain the conditions of the proposed permit:

The special conditions serve to clarify requirements for flow reporting, pH limits and reporting, monitoring location, discharge monitoring reports (DMR), Operation of treatment by a Class K Operator, storm water pollution prevention requirements, priority pollutant PNAs, and monitoring frequency.

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Antidegradation Assessment for Marseilles Land and Water Company NPDES Permit No. IL0080066 LaSalle County

The subject facility has applied for an NPDES permit for the discharge of stormwater and groundwater associated with the dredging of silt from the North Raceway and the construction of the revitalized raceway. The dredging is related to the creation of a new hydroelectric power plant at the site, which formerly had such a plant. The dredged North Raceway will serve as a feed channel for the powerhouse. The North Raceway served a similar function for the previous hydro plant and silted-in after the former plant closed. Illinois EPA has issued a 401 Water Quality Certification for the dredging and wetland mitigation aspects of the hydropower project. The stormwater and groundwater that accumulates in the North Raceway during the dredging will be filtered through granulated carbon before discharge. A bag filter will also be used if the water is turbid. There will be two discharge locations, each to the Illinois River. Each will have a maximum daily flow rate of 0.1728 MGD. The discharges will occur for as long as the dredging and construction period lasts, which is said to be up to 180 days.

# Identification and Characterization of the Affected Water Body.

Outfalls 001 and 002 will discharge to the Illinois River. The Illinois River (segment code D-23) has a 7Q10 flow of 1,990 cfs and is a General Use water. The Illinois River is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption and primary contact uses. Causes of fish consumption use impairment are mercury and PCBs. The cause of primary contact use impairment is fecal coliform bacteria. Aquatic life use is fully supported. The Illinois River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication Integrating Multiple Taxa in a Biological Stream Rating System, nor is it given an integrity rating in that publication for this location. The Illinois River is designated as an enhanced water pursuant to the dissolved oxygen water quality standard at this location.

#### Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

Parameters that will increase in loading include total suspended solids and any contaminants that exist in the silt being disturbed and in groundwater infiltrating into the void. The adjoining land use is industrial. Groundwater monitoring indicates that benzene, naphthalene, and other PAHs and organic substances are present, some at levels above water quality standards or TACO Tier I action levels. Metals were not detected in concentrations approaching water quality standards.

#### Fate and Effect of Parameters Proposed for Increased Loading.

Carbon filtration will remove a large portion of the organic contaminants likely to be present in the water removed from the dredge area. The effluent will meet water quality standards. The groundwater contaminants are currently in contact with the Illinois River, so an overall decrease in loading may occur from this project. No adverse impact will result in the receiving stream.

# Purpose and Social & Economic Benefits of the Proposed Activity.

In order for the new hydroelectric power plant to be built, the feeder raceway must be cleared of silt. The project will create jobs and provide electric power for the local area.

## Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The applicant is providing the state-of-the-art treatment for the effluent in carbon filtration. Other methods of disposing of the wastewater may not provide this high level of treatment. This includes sending the water to a local POTW. Other options for treating the accumulating water during the dredging project would not lead to the high quality effluent produced by carbon filtration.

# Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

The Illinois Department of Natural Resources was consulted regarding threatened and endangered species issues for each discharge location via the EcoCAT system on May 15, 2014. Endangered or threatened species were initially identified in the general area of the discharges. Termination of consultation was provided in a letter dated May 20, 2014 citing the lack of likely adverse impacts.

# **Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the communities at large by allowing the hydroelectric project to proceed. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

New (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee: Facility Name and Address:

Marseilles Land and Water Company
919 Towne Centre Drive, Suite 210
San Diego, California 92122

Marseilles Land and Water Company
Marseilles Lock and Dam
150 E. Main Street

Marseilles, Illinois 61341 (LaSalle County)

Discharge Number and Name: Receiving Waters:

001Excavation DewateringIllinois River002Excavation DewateringIllinois River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

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# **Special Conditions**

# NPDES Permit No. IL0080066

# **Effluent Limitations and Monitoring**

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfalls: 001 and 002 Excavation Dewatering (DAF = 0.1728 MGD)

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCEN- LIMITS			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)	See Special Condition 1				*	
рН	See Special Condition 2				*	Grab
Total Suspended Solids			15	30	*	Grab
Benzene				0.05	*	Grab
Priority Pollutant PNAs	See Special Co	ndition 9		0.10	*	Grab

<sup>\*</sup>See Special Condition 12

#### **Special Conditions**

<u>SPECIAL CONDITION 1</u>. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the Discharge Monitoring Report.

<u>SPECIAL CONDITION 2</u>. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

<u>SPECIAL CONDITION 3</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 4</u>. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMR) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15<sup>th</sup> day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMR shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

<u>SPECIAL CONDITION 5</u>. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

<u>SPECIAL CONDITION 6</u>. No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.

<u>SPECIAL CONDITION 7</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

SPECIAL CONDITION 8. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 9. For the purpose of this permit, Priority Pollutant PNAs shall be analyzed for the following compounds:

Acenaphthene Chrysene Acenaphthylene Dibenzo (a

Dibenzo (a,h) anthracene

Fluoranthene Fluorene

Benzo (a) pyrene Indeno (1,2,3-cd) pyrene

Naphthalene Phenanthrene Pyrene

3,4 Benzofluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene

Benzo (a) anthracene

Anthracene

All samples shall be tested using test methods promulgated in 40 CFR 136, or other approved methods shall be utilized. The Agency may modify this permit during its term to incorporate additional monitoring requirements and limitations. Modification under this condition shall follow public notice and opportunity for hearing.

<u>SPECIAL CONDITION 10</u>. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and

## **Special Conditions**

determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

<u>SPECIAL CONDITION 11</u>. The requirements of this permit are limited to discharges from Outfalls 001 and 002 consisting of groundwater and stormwater generated from the dewatering activities occurring within the remediation area. All other discharges of storm water and clean groundwater associated with construction activities which are generated from outside the boundaries of the remediation area, should continue to be covered under NPDES Permit Number ILR105866. This permit does not allow the discharge of any waste stream associated with the operation of the hydroelectric plant.

<u>SPECIAL CONDITION 12</u>. Sampling of discharges covered under this permit shall be conducted according to the following sample frequency: During the first month of operation, the sample frequency shall occur weekly, and thereafter the frequency shall be once per month.