BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

NORAMCO-CHICAGO, INC.,	
Petitioner,	
v.	**PCB 16-22 (Variance-Water)**
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	
Respondent.	

ORIGINAL

PETITION FOR VARIANCE

Pursuant to Section 35(a) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/35(a), and Part 104 of Title 35 of the Illinois Administrative Code, 35 Ill. Admin. Code § 104.100 *et seq.*, Noramco-Chicago, Inc. ("Noramco") hereby petitions the Illinois Pollution Control Board ("Board") for a variance authorizing discharges from its Lemont warehouse facility (the "Lemont Facility") in accordance with the terms and conditions outlined in this Petition for Variance ("Petition").

In Docket 2008-009, the Board has been engaged in a rulemaking process regarding designated uses, effluent limitations and water quality standards for the Chicago Area Waterway System ("CAWS"). Subdocket D has involved the setting of water quality standards for the protection of aquatic life. The Board has now adopted final aquatic life water quality standards for the CAWS, effective July 1, 2015. (39 Ill. Reg. 9388, 9423, 9433 (July 10, 2015)) Included in that rulemaking are new standards for chlorides.

During the rulemaking, it was noted that most reaches of the CAWS are not currently meeting the new chlorides standards. Regulated parties pointed out that effluent limits based on the new standards may be difficult or impossible to meet, and the costs of installing

technological controls at their facilities would be enormous. Therefore, it was requested that the Board provide a delay in the application of the new standards, so stakeholders could convene and develop options for addressing these concerns while making progress in reducing chloride levels in the CAWS. The Board granted this request as to most of the CAWS during the winter months (December 1-April 30), specifying that the new winter chlorides standards would not apply until July 1, 2018.

At the request of Citgo Petroleum Corp., the Board set a separate standard for the Chicago Sanitary and Ship Canal (the "CSSC") for the winter months. Between December 1 and April 30, chloride levels in the CSSC cannot exceed 620 mg/L as a chronic water quality standard and 990 mg/L as an acute water quality standard. During the rest of the year, the chlorides standard for the CSSC is 500 mg/L. Unlike the winter water quality standard for the rest of the CAWS, the Board has not expressly delayed the application of the chlorides standard for the CSSC for three years.

As the Board is aware, applicable statutes provide that if a party wants to obtain a stay of the effectiveness of a Board rule, the party must apply for a variance within 20 days of the effective date of the rule. The effective date of the new chlorides standards for the CSSC is July 1, 2015, even though some of the chloride regulations do not apply until July 1, 2018. Noramco is in the process of completing a Storm Water Pollution Prevention Plan ("SWPPP") and submitting a Notice of Intent for coverage under the Illinois General NPDES Permit for Storm Water Discharges from Industrial Activities (the "General Permit") and wants to ensure that it can comply with the terms of the General Permit. As explained herein, the only way for Noramco to ensure that it can comply with the chlorides standards for the CSSC is to obtain a variance from the chlorides limits for the CSSC.

I. REQUIREMENTS FROM WHICH A VARIANCE IS SOUGHT

a) A statement describing the regulation, requirement, or order of the Board from which a variance is sought. If variance from a regulation is sought, the statement must include the Illinois Administrative Code citation to the regulation as well as the effective date of that regulation. If variance from a requirement or order of the Board is sought, the statement must include the citation to that requirement or order of the Board promulgating that requirement, including docket number;

As noted above, the Board has adopted new aquatic life standards for the CAWS, including for chlorides. These standards were adopted by an Opinion and Order of the Board in Docket R2008-09, Subdocket D, dated June 18, 2015. The final rules appeared in the Illinois Register on July 10, 2015 (30 Ill. Reg. 9388, 9423, 9433). The chlorides standards for the CSSC, are found in 35 Ill. Admin. Code §§ 302.407(g)(2) and (g)(3) and 35 Ill. Admin. Code § 303.449. The chlorides standards for the CSSC became effective on July 1, 2015.

II. ACTIVITY OF NORAMCO

b) A complete and concise description of the nature of petitioner's activity that is the subject of the proposed variance, including:

A. The location of, and area affected by, the petitioner's activity.

The address for the Lemont Facility is:

Noramco-Chicago, Inc.
12228 New Avenue
Lemont, Illinois 60439

B. The location of points of discharge, and, as applicable, the identification of the receiving waterway or land, or, if known, the location of the nearest air monitoring station maintained by the Agency.

The Lemont Facility has three stormwater outfalls that carry stormwater runoff that could contain chlorides. All three outfalls are located along the CSSC at the north end of the property. The nearest air monitoring station is unknown and not relevant for the requested variance.

C. An identification, including docket number, of any prior variance issued to the petitioner and, if known, the petitioner's predecessors, concerning similar relief.

There have been no variances issued to Noramco concerning similar relief.

D. An identification, including number, of the environmental permits held by petitioner for the activity which may be affected by grant of variance.

Noramco currently does not have any permit that that would be affected by the grant of this variance, but was preparing to apply for an NPDES stormwater discharge permit when the new chlorides standards became effective. Although Noramco does not believe an NPDES permit is required for this type of facility, the IEPA issued Violation Notices to Noramco and other parties who were storing materials at the Lemont Facility in 2014. The Violation Notices recommended that the parties obtain an NPDES stormwater permit for the facility. Noramco is in the process of preparing a Storm Water Pollution Prevention Plan for the Lemont Facility and intends to submit a Notice of Intent for coverage under the General Permit.

E. The number of persons employed by the petitioner's facility at issue and the age of that facility.

The Lemont Facility typically has 25-30 employees. The facility is at least 65 years old.

F. The nature and amount of the materials used in the process or activity for which the variance is sought and a full description of the particular process or activity in which the materials are used.

The Lemont Facility is a warehouse and storage facility for materials that are shipped to the Chicago area by barge. Noramco unloads and stores road salt at the Lemont Facility for one of its customers. The salt is unloaded from barges and transferred to either an indoor storage building or an outdoor, impermeable asphalt pad using front loaders and other heavy equipment. Salt is removed from the storage areas during the winter deicing season and placed in large

delivery trucks for distribution. The storage building is capable of holding 30,000 tons of salt and the asphalt pad can contain up to 120,000 tons of salt.

G. A description of the relevant pollution control equipment already in use.

Noramco has worked with its customer to install containment structures and implement best management practices to prevent precipitation from coming into contact with the salt and to contain stormwater runoff on the salt pad.

The first salt that is delivered to the Lemont Facility before the winter season is placed in the indoor storage building. When the building is full, salt is stored on the asphalt pad. The salt stored on the pad is stage tarped and remains covered until the salt begins to be distributed. Once salt starts to be taken off the pile, the tarp is only opened enough to allow salt to be removed from the working face. The tarp is placed over a set of large concrete blocks that surround the outside of the asphalt pad and is held in place by sand bags to ensure that any precipitation that hits the tarp rolls off and flows outside of the pad.

The asphalt pad is surrounded by a system of asphalt berms and concrete walls that were constructed inside of the concrete blocks. These containment structures keep stormwater that comes into contact with the salt on the pad and are designed to contain a 25-year, 24-hour storm event. Precipitation that lands on the pad either evaporates over time, is absorbed by the salt, or is pumped out of the pad for proper disposal.

The Lemont Facility also uses a series of other best management practices to limit contact between road salt and stormwater. The tarp covering the salt on the pad is inspected regularly for rips or tears and is repaired promptly if any damage is detected. Salt that escapes during the loading and unloading process is cleaned up promptly and the facility is swept regularly using a street sweeper. All equipment washing is done inside or at an appropriate off-site location.

H. The nature and amount of emissions, discharges or releases of the constituent in question currently generated by the petitioner's activity.

There is the potential for discharges of chlorides to occur at the Lemont Facility if salt that escapes during loading or unloading cannot be completely cleaned up before a rain or snow event occurs. The amount of any contaminated discharges would vary based on the frequency and quantity of precipitation and the amount of salt that escaped. Because of the proximity of the CSSC, the quantity of salt stored at the Lemont Facility, and the fact that a mixing zone is prohibited for at least certain discharges, there is the potential for discharges that violate the chlorides standards for the CSSC. Prior to the promulgation of these regulations, Noramco did not have occasion to test the stormwater discharges for the Lemont Facility for chlorides.

III. COMPLIANCE WITH THE REGULATION CANNOT BE ACHIEVED BY THE COMPLIANCE DATE

c) Data describing the nature and extent of the present or anticipated failure to meet the regulation, requirement, or order of the Board from which variance is sought and facts that support petitioner's argument that compliance with the regulation, requirement, or order of the Board was not or cannot be achieved by any required compliance date;

Sampling results from the CSSC during the period 2010 through 2014 (Exhibit 1) show that chloride levels are below the acute standard set by the Board and are generally less than the chronic standard. Because of the proximity of the CSSC, the quantity of salt stored at the Lemont Facility, and the fact that a mixing zone is prohibited for at least certain discharges, there is the potential for discharges that violate the chlorides standards for the CSSC. Mixing zones are not permitted "when the water quality standard for the constituent in question is already violated in the receiving water." 35 Ill. Admin. Code § 302.102(b)(9). Mixing also is not

allowed for purposes of complying with an acute toxicity standard. 35 Ill. Admin. Code § 302.102(c).

There are three ways that Noramco could reduce the potential for stormwater discharges that violate the chloride water quality standard for the CSSC: (1) installing a reverse osmosis ("RO") system, (2) implementing additional best management practices at the Lemont Facility, or (3) obtaining authorization for a mixing zone so that it would be permitted to discharge chlorides that exceed the water quality standards.

Installing an RO system is expensive, may be impractical and would take at least several months to design and construct. An initial estimate shows that an RO system for the Lemont Facility would cost $1.3 million to install and $100,000 per year to operate. The system would require a large retention pond to collect and hold stormwater during a large rain event so that any chlorides could be filtered out before the stormwater is discharged into the CSSC. Because of the depth to groundwater at the site, the retention pond would have to be fairly shallow and the site may not be large enough to accommodate it and still allow for salt storage. Finally, there is no way to design and construct an RO system prior to the effective date of the regulations because the regulations went into effect before they were published in the Illinois Register.

The second option to comply with the new regulations is to implement additional best management practices to prevent salt that is unloaded and stored at the Lemont Facility from coming into contact with stormwater. These additional best management practices might include adding more concrete or asphalt to the facility to aid in cleaning up spilled salt and/or increasing the frequency of street sweeping at the facility to potentially collect additional loose salt. While these improvements could further reduce the frequency and concentration of elevated chloride levels in the Lemont Facility's stormwater discharges, due to the nature of salt storage activity, it

is unlikely to eliminate completely discharges that exceed the water quality standards for the CSSC.

The cost of these best management practices will vary depending on which practices are found to be necessary to prevent potential releases of chlorides into the CSSC. Covering more of the facility with concrete or asphalt will cost between $200,000 and $600,000. Increasing the frequency of street sweeping may require an additional full-time employee or contractor during at least part of the year, which would cost approximately $25,000 to $50,000 per year.

Finally, allowing a mixing zone for discharges from the Lemont Facility, particularly when combined with additional best management practices, may be sufficient to enable the facility to comply with the chlorides water quality standards for the CSSC. The additional cost of complying with the mixing zone limits would be minimal. Noramco, however, needs additional time to see whether the CSSC is in compliance with the chlorides water quality standards set by the Board and to determine whether a mixing zone or zone of initial dilution ("ZID") is permissible for chloride discharges from the Lemont Facility. Noramco also needs a variance so that it can assess whether it can obtain permission for a mixing zone by requesting another variance or an adjusted standard from the Board or by asking IEPA for a ZID as part of the permitting process.

IV. EFFORTS NECESSARY TO ACHIEVE IMMEDIATE COMPLIANCE

d) A description of the efforts that would be necessary for the petitioner to achieve immediate compliance with the regulation, requirement, or Board order at issue. All possible compliance alternatives, with the corresponding costs for each alternative, must be set forth and discussed. The discussion of compliance alternatives must include the availability of alternate methods of compliance, the extent that the methods were studied, and the comparative factors leading to the selection of the control program proposed for compliance. The discussion of the costs of immediate compliance may include the overall capital costs and the annualized capital and operating costs;

The efforts that would be needed for Noramco to achieve immediate compliance with the new chlorides standards (and the efforts needed to achieve compliance within five years) are discussed above, along with the related compliance costs.

V. ARBITRARY OR UNREASONABLE HARDSHIP

e) Facts that set forth the reasons the petitioner believes that immediate compliance with the regulation, requirement, or order of the Board would impose an arbitrary or unreasonable hardship;

These standards impose an arbitrary and unreasonable hardship on Noramco because there is no waiting period before the chlorides water quality standards for the CSSC go into effect, and full and immediate compliance will be difficult, if not impossible. It will take time and expense for Noramco to implement the steps needed to ensure compliance with the new regulations. Some options for limiting the potential for releases of chlorides from the Lemont Facility are prohibitively expensive. To allow the important business of road salt storage and distribution to continue at the Lemont Facility, a variance is needed.

VI. COMPLIANCE PLAN AND SUGGESTED CONDITIONS

f) A detailed description of the compliance plan, including:

A. A discussion of the proposed equipment or proposed method of control to be undertaken to achieve full compliance with the regulation, requirement, or order of the Board.

Noramco will seek assistance from its salt storage customer and other appropriate consultants to evaluate additional best management practices ("BMP's") that can be implemented at the Lemont Facility to reduce potential releases of chlorides. When this evaluation is complete, additional BMP's will be implemented at the site. Noramco anticipates

that additional BMP's, along with a variance, adjusted standard or permit condition allowing for a mixing zone or ZID for any discharges containing chlorides, will enable the Lemont Facility to comply with the chlorides water quality standards.

B. A time schedule for the implementation of all phases of the control program from initiation of design to program completion.

Within 12 months of the date the variance is approved, Noramco will have a qualified engineer complete an evaluation of additional BMP's that could be implemented at the Lemont Facility.

Within 12 months of the date the variance is approved, Noramco will initiate an evaluation of whether a mixing zone or ZID is appropriate for the site and an assessment of how a mixing zone or ZID could be authorized.

Within 24 months of the date the variance is approved, Noramco will implement all appropriate BMP's that are found to be necessary to reduce chlorides releases.

Within 36 months of the date the variance is approved, Noramco will have a qualified engineer assess the effectiveness of any new BMP's.

Within 48 months of the date the variance is approved, Noramco will implement any additional measures that it determines are necessary to prevent chlorides discharges.

C. The estimated costs involved for each phase and the total cost to achieve compliance.

The initial evaluation and follow-up assessment of the measures needed to reduce chlorides at the Lemont Facility are estimated to cost $10,000 each. The other costs of compliance are discussed above. The precise costs of compliance will be determined by the results of the initial evaluation and follow-up assessment.

VII. ENVIRONMENTAL IMPACT

g) A description of the environmental impact of the petitioner's activity including:

1) The nature and amount of emissions, discharges, or releases of the constituent in question if the requested variance is granted, compared to that which would result if immediate compliance is required;

The environmental impact of any potential releases from the Lemont Facility is likely to be minimal. As shown on Exhibit 1, the sampling data from 2010 to 2014 indicate that chlorides in the CSSC were generally within the current acute and chronic limits throughout the five year period. During that time, Noramco was already storing salt at the Lemont Facility. Within the last year, additional containment structures have been installed around the salt pad, and salt storage was discontinued on another pad which lacked comparable containment. Stormwater discharges that contain elevated chlorides should be infrequent because salt generally remains covered and contained on the pad, spills are cleaned up promptly, and discharges only have the potential to occur when there is a storm event.

2) The qualitative and quantitative description of the impact of petitioner's activity on human health and the environment if the requested variance is granted, compared to the impact of petitioner's activity if immediate compliance is required. Cross-media impacts, if any, must be discussed; and

See response to item 1 above.

3) A statement of the measures to be undertaken during the period of the variance to minimize the impact of the discharge of contaminants on human, plant, and animal life in the affected area, including the numerical interim discharge limitations that can be achieved during the period of the variance;

The interim measures that would be taken during the period of the variance to address chloride issues are described in Section VI above.

h) Citation to supporting documents or legal authorities whenever they are used as a basis for the petition. Relevant portions of the documents and legal authorities other than Board decisions, reported state and federal court decisions, or state and federal regulations and statutes must be appended to the petition;

Supporting documents are attached as Exhibits 1-2.

i) If the requested variance involves an existing permit or a pending permit application, a copy of the material portion of the permit or permit application must be appended to the petition;

The requested variance does not involve an existing permit. Noramco is in the process of preparing a SWPPP and filing a Notice of Intent for coverage under the General Permit.

VIII. SUGGESTED CONDITIONS OF THE VARIANCE

j) Any conditions petitioner suggests for the requested variance;

The variance should be conditioned on Noramco completing the work described in Section VI above within four years from the date the variance is approved.

IX. BEGINNING AND END DATE OF THE VARIANCE

k) A proposed beginning and ending date for the variance. If the petitioner requests that the term of the variance begin on any date other than the date on which the Board takes final action on the petition, a detailed explanation and justification for the alternative beginning date;

The proposed beginning date for the variance will be the date that the variance is approved for the Lemont Facility. The term for the variance would be for a maximum of five years.

X. CONSISTENCY WITH FEDERAL LAW

l) A discussion of consistency with federal law, including an analysis of applicable federal law and facts that may be necessary to show compliance with federal law as set forth in Section 104.208 of this Part;

Under Title IX of the Act (415 ILCS 5/35-38), the Board is responsible for granting variances when a petitioner demonstrates that immediate compliance with the Board regulation(s) would impose an "arbitrary or unreasonable hardship" on the petitioner. 415 ILCS 5/35(a). The Board may grant a variance, however, only to the extent consistent with applicable federal law. *Id.*

Section 104.28(b) of the Board rules state the following with regard to consistency with federal law for all petitions for variances from the Board's water pollution regulations:

> (b) All petitions for variances from Title III of the Act, from 35 Ill. Adm. Code Subtitle C, Ch. I "Water Pollution", or from water pollution related requirements of any other Title of the Act or Chapter of the Board's regulations, must indicate whether the Board may grant the relief consistent with the Clean Water Act (CWA) (33 USC 1251 et seq.), USEPA effluent guidelines and standards, any other federal regulations, or any area-wide waste treatment management plan approved by the Administrator of USEPA pursuant to Section 208 of the CWA (33 USC 1288).

The requested variances in this matter will be consistent with federal law. More specifically, the variance must meet one or more of the conditions in 40. C.F.R. § 131.10(g) which provides:

> (g) States may remove a designated use which is not an existing use, as defined in Sec. 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:
>
> (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or
> (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
> (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 Act would result in substantial and widespread economic and social impact.

Under the circumstances here, there are natural conditions, man-caused conditions, hydrologic modifications, and physical conditions as to the CAWS that will prevent attainment of the use during the time period covered by this variance. Therefore, the variance would be justified pursuant to 131.10(g)(2), (g)(3),(g)(4), and (g)(5).

In addition, complying with the chlorides water quality standards would have a widespread economic and social impact. If Noramco does not receive a variance, storage of road salt in the Chicago area may be significantly impacted because there are very few alternative locations in the Chicago area where salt can be shipped by barge, unloaded and stored. The closure of one of the few bulk salt storage facilities in the area could lead to an increase in the price of road salt in Illinois or cause municipalities or private companies to be without this product during the winter season. Without road salt for deicing, it is difficult to maintain safe roads, bridges and parking lots. Other dischargers, both on the CSSC and other reaches of the CAWS, will likely face similar problems if they are immediately forced to reduce or eliminate salt use or salt storage to comply with the chlorides standards.

XI. AFFIDAVITS IN SUPPORT

m) An affidavit verifying any facts submitted in the petition

An affidavit from Michael Wetterich, President of Noramco, is attached as Exhibit 2.

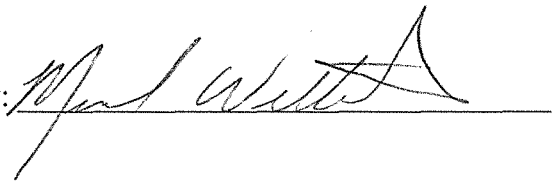
XII. WAIVER OF REQUEST FOR HEARING

n) A statement requesting or denying that a hearing should be held in this matter.

Noramco requests that a hearing be held in this matter.

Respectfully submitted,

NORAMCO-CHICAGO, INC.

By: 

July 21, 2015

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on July 21, 2015, Noramco-Chicago, Inc.'s Petition for Variance was served upon the following

by hand delivery:

John Therriault
Clerk
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601

by U.S. first class mail:

Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P. O. Box 19276
Springfield, Illinois 62794-9276

By: 

EXHIBIT 1

Comparison of Chicago Area Waterway System Chloride Concentrations During Winter Months* of 2010 Through 2014 With New Water Quality Standards

ID	Location Name	N[1]	E[2]	%Comp[4]	Year
35	Central Street, North Shore Channel	1	0	100.0	2010
		1	0	100.0	2011
		2	0	100.0	2012
		4	0	100.0	2010-2014
112	Dempster Street, North Shore Channel	1	0	100.0	2012
		3	1	66.7	2013
		2	0	100.0	2014
		6	1	83.3	2010-2014
102	Oakton Street, North Shore Channel	4	0	100.0	2010
		5	0	100.0	2011
		4	0	100.0	2012
		13	0	100.0	2010-2014
36	Touhy Avenue, North Shore Channel	4	1	75.0	2010
		5	1	80.0	2011
		5	1	80.0	2012
		4	0	100.0	2013
		5	0	100.0	2014
		23	3	87.0	2010-2014
101	Foster Avenue, North Shore Channel	5	1	80.0	2010
		5	1	80.0	2011
		4	1	75.0	2012
		14	3	78.6	2010-2014
37	Wilson Avenue, North Branch Chicago River	5	1	80.0	2010
		5	1	80.0	2011
		3	1	66.7	2012
		13	3	76.9	2010-2014
73	Diversey Parkway, North Branch Chicago River	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012
		5	0	100.0	2013
		5	1	80.0	2014
		25	1	96.0	2010-2014
46	Grand Avenue, North Branch Chicago River	5	0	100.0	2010
		5	0	100.0	2011
		4	0	100.0	2012
		14	0	100.0	2010-2014
74	Lake Shore Drive, Chicago River	4	0	100.0	2010
		5	1	80.0	2011

Comparison of Chicago Area Waterway System Chloride Concentrations During Winter Months* of 2010 Through 2014 With New Water Quality Standards

ID	Location Name	N[1]	E[2]	%Comp[4]	Year
35	Central Street, North Shore Channel	1	0	100.0	2010
		4	0	100.0	2012
		13	1	92.3	2010-2014
100	Wells Street, Chicago River	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012
		5	0	100.0	2013
		4	0	100.0	2014
		24	0	100.0	2010-2014
39	Madison Street, South Branch Chicago River	5	1	80.0	2010
		4	0	100.0	2011
		4	0	100.0	2012
		13	1	92.3	2010-2014
108	Loomis Street, South Branch Chicago River	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012
		5	0	100.0	2013
		5	0	100.0	2014
		25	0	100.0	2010-2014
99	Archer Avenue, South Fork South Branch Chicago River	5	0	100.0	2010
		5	0	100.0	2011
		5	1	80.0	2012
		3	0	100.0	2013
		4	2	50.0	2014
		22	3	86.4	2010-2014
40	Damen Avenue, Chicago Sanitary & Ship Canal	5	0	100.0	2010
		5	0	100.0	2011
		4	0	100.0	2012
		14	0	100.0	2010-2014
75	Cicero Avenue, Chicago Sanitary & Ship Canal	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012
		5	0	100.0	2013
		4	0	100.0	2014
		24	0	100.0	2010-2014
41	Harlem Avenue, Chicago Sanitary & Ship Canal	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012

Comparison of Chicago Area Waterway System Chloride Concentrations During Winter Months* of 2010 Through 2014 With New Water Quality Standards

ID	Location Name	N[1]	E[2]	%Comp[4]	Year
35	Central Street, North Shore Channel	1	0	100.0	2010
		5	0	100.0	2013
		4	0	100.0	2014
		24	0	100.0	2010-2014
42	Route 83, Chicago Sanitary & Ship Canal	5	0	100.0	2010
		5	0	100.0	2011
		4	0	100.0	2012
		14	0	100.0	2010-2014
48	Stephen Street, Chicago Sanitary & Ship Canal	5	0	100.0	2010
		5	0	100.0	2011
		5	0	100.0	2012
		5	0	100.0	2013
		4	0	100.0	2014
		24	0	100.0	2010-2014
92	Lockport Forebay, Chicago Sanitary & Ship Canal	19	0	100.0	2010
		20	0	100.0	2011
		21	0	100.0	2012
		21	0	100.0	2013
		21	0	100.0	2014
		102	0	100.0	2010-2014
49	Ewing Avenue, Calumet River	1	0	100.0	2010
		3	0	100.0	2011
		3	0	100.0	2012
		7	0	100.0	2010-2014
55	130th Street, Calumet River	3	0	100.0	2010
		3	0	100.0	2011
		4	0	100.0	2012
		10	0	100.0	2010-2014
86	Burnham Avenue, Grand Calumet River	1	0	100.0	2010
		3	0	100.0	2011
		4	0	100.0	2012
		2	0	100.0	2013
		3	0	100.0	2014
		13	0	100.0	2010-2014
56	Indiana Avenue, Little Calumet River	3	0	100.0	2010
		3	0	100.0	2011
		3	0	100.0	2012
		2	0	100.0	2013

Comparison of Chicago Area Waterway System Chloride Concentrations During Winter Months* of 2010 Through 2014 With New Water Quality Standards

ID	Location Name	N[1]	E[2]	%Comp[4]	Year
35	Central Street, North Shore Channel	1	0	100.0	2010
		3	0	100.0	2014
		14	0	100.0	2010-2014
76	Halsted Street, Little Calumet River	4	0	100.0	2010
		4	0	100.0	2011
		4	0	100.0	2012
		4	0	100.0	2013
		5	0	100.0	2014
		21	0	100.0	2010-2014
58	Ashland Avenue, Calumet Sag Channel	4	0	100.0	2010
		4	0	100.0	2011
		4	0	100.0	2012
		12	0	100.0	2010-2014
59	Cicero Avenue, Calumet Sag Channel	4	0	100.0	2010
		4	0	100.0	2011
		4	0	100.0	2012
		4	0	100.0	2013
		4	0	100.0	2014
		20	0	100.0	2010-2014
43	Route 83, Calumet Sag Channel	4	0	100.0	2010
		4	0	100.0	2011
		4	0	100.0	2012
		4	0	100.0	2013
		4	0	100.0	2014
		20	0	100.0	2010-2014

*Winter Months Include January - April and December

[1]N=Number of Observations.

[2]E=Number of Exceedance.

[3]Comp=Percent Compliance with 500 mg/L for all waterways except Chicago Sanitary and Ship Canal where it is 990 mg/L during December - April

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X[1]	Standard	Viol	Date
112	Dempster Street, North Shore Channel	391	500	0	04/14/14
		24		0	05/12/14
		15		0	06/09/14
		36		0	07/14/14
		15		0	08/11/14
		24		0	09/15/14
		16		0	10/13/14
		70		0	11/10/14
		80		0	12/08/14
36	Touhy Avenue, North Shore Channel	480	500	0	01/13/14
		391		0	02/10/14
		361		0	03/10/14
		196		0	04/14/14
		135		0	05/12/14
		107		0	06/09/14
		153		0	07/14/14
		128		0	08/11/14
		126		0	09/15/14
		129		0	10/13/14
		117		0	11/10/14
		80		0	12/08/14
73	Diversey Parkway, North Branch Chicago River	560	500	1	01/13/14
		273		0	02/10/14
		397		0	03/10/14
		271		0	04/14/14
		250		0	05/12/14
		142		0	06/09/14
		147		0	07/14/14
		119		0	08/11/14
		153		0	09/15/14
		149		0	10/13/14
		127		0	11/10/14
		132		0	12/08/14
100	Wells Street, Chicago River	277	500	0	01/21/14
		370		0	03/17/14
		204		0	04/21/14
		99		0	05/19/14
		18		0	06/16/14

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X^1	Standard	Viol	Date
		16		0	07/21/14
		72		0	08/18/14
		21		0	09/22/14
		41		0	10/20/14
		27		0	11/17/14
		107		0	12/15/14
108	Loomis Street, South Branch Chicago River	370	500	0	01/21/14
		230		0	02/18/14
		469		0	03/17/14
		290		0	04/21/14
		202		0	05/19/14
		122		0	06/16/14
		65		0	07/21/14
		50		0	08/18/14
		106		0	09/22/14
		117		0	10/20/14
		103		0	11/17/14
		164		0	12/15/14
99	Archer Avenue, South Fork South Branch Chicago River	505	500	1	01/21/14
		519		1	03/17/14
		293		0	04/21/14
		182		0	05/19/14
		116		0	06/16/14
		94		0	07/21/14
		90		0	08/18/14
		105		0	09/22/14
		80		0	10/20/14
		112		0	11/17/14
		137		0	12/15/14
75	Cicero Avenue, Chicago Sanitary & Ship Canal	521	990	0	01/21/14
		547		0	03/17/14
		286		0	04/21/14
		190		0	05/19/14
		111		0	06/16/14
		69		0	07/21/14
		93		0	08/18/14
		115		0	09/22/14
		106		0	10/20/14

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X^1	Standard	Viol	Date
		111		0	11/17/14
		134		0	12/15/14
41	Harlem Avenue, Chicago Sanitary & Ship Canal	601	990	0	01/21/14
		537		0	03/17/14
		268		0	04/21/14
		202		0	05/19/14
		143		0	06/16/14
		110		0	07/21/14
		121		0	08/18/14
		132		0	09/22/14
		117		0	10/20/14
		127		0	11/17/14
		143		0	12/15/14
48	Stephen Street, Chicago Sanitary & Ship Canal	550	990	0	01/21/14
		441		0	03/17/14
		267		0	04/21/14
		188		0	05/19/14
		151		0	06/16/14
		124		0	07/21/14
		126		0	08/18/14
		139		0	09/22/14
		106		0	10/20/14
		136		0	11/17/14
		144		0	12/15/14
92	Lockport Forebay, Chicago Sanitary & Ship Canal	640	990	0	01/08/14
		866		0	01/13/14
		546		0	01/21/14
		423		0	01/29/14
		409		0	02/03/14
		363		0	02/10/14
		299		0	02/18/14
		571		0	02/24/14
		429		0	03/03/14
		461		0	03/10/14
		440		0	03/17/14
		364		0	03/24/14
		340		0	03/31/14
		262		0	04/07/14

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X[1]	Standard	Viol	Date
		275		0	04/14/14
		278		0	04/21/14
		270		0	04/28/14
		242		0	05/05/14
		187		0	05/12/14
		195		0	05/19/14
		186		0	05/27/14
		173		0	06/02/14
		180		0	06/09/14
		141		0	06/16/14
		124		0	06/23/14
		148		0	06/30/14
		138		0	07/07/14
		73		0	07/14/14
		131		0	07/21/14
		139		0	07/28/14
		126		0	08/04/14
		122		0	08/11/14
		130		0	08/18/14
		98		0	08/25/14
		125		0	09/02/14
		134		0	09/08/14
		111		0	09/15/14
		138		0	09/22/14
		140		0	09/29/14
		96		0	10/06/14
		127		0	10/13/14
		103		0	10/20/14
		140		0	10/27/14
		134		0	11/03/14
		138		0	11/10/14
		135		0	11/17/14
		140		0	11/24/14
		123		0	12/01/14
		137		0	12/08/14
		157		0	12/15/14
		160		0	12/22/14
86	Burnham Avenue, Grand Calumet River	111	500	0	03/24/14

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X[1]	Standard	Viol	Date
		120		0	04/28/14
		81		0	05/27/14
		59		0	06/23/14
		92		0	07/28/14
		86		0	08/25/14
		107		0	09/29/14
		107		0	10/27/14
		120		0	11/24/14
		118		0	12/22/14
56	Indiana Avenue, Little Calumet River	199	500	0	03/24/14
		181		0	04/28/14
		164		0	05/27/14
		135		0	06/23/14
		136		0	07/28/14
		47		0	08/25/14
		97		0	09/29/14
		89		0	10/27/14
		108		0	11/24/14
		105		0	12/22/14
76	Halsted Street, Little Calumet River	304	500	0	01/29/14
		385		0	02/24/14
		303		0	03/24/14
		218		0	04/28/14
		188		0	05/27/14
		130		0	06/23/14
		126		0	07/28/14
		103		0	08/25/14
		124		0	09/29/14
		117		0	10/27/14
		136		0	11/24/14
		146		0	12/22/14
59	Cicero Avenue, Calumet Sag Channel	334	500	0	02/24/14
		276		0	03/24/14
		232		0	04/28/14
		203		0	05/27/14
		68		0	06/23/14
		145		0	07/28/14
		71		0	08/25/14

Table 2: Chloride Concentration Data at the Chicago Area Waterways in 2014

ID	Location Name	X[1]	Standard	Viol	Date
		128		0	09/29/14
		98		0	10/27/14
		144		0	11/24/14
		154		0	12/22/14
43	Route 83, Calumet Sag Channel	377	500	0	02/24/14
		257		0	03/24/14
		234		0	04/28/14
		191		0	05/27/14
		115		0	06/23/14
		141		0	07/28/14
		72		0	08/25/14
		128		0	09/29/14
		100		0	10/27/14
		169		0	11/24/14
		156		0	12/22/14

[1]X=Chloride Concentration.

EXHIBIT 2

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

NORAMCO-CHICAGO, INC.,	)	
	)	
Petitioner,	)	
	)	**PCB __ __**
v.	)	**(Variance-Water)**
	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

AFFIDAVIT OF MICHAEL WETTERICH

I, Michael Wetterich, upon my oath, declare as follows:

1. I am over the age of 21, of sound mind, and capable of making this affidavit.

2. I am the President of Noramco-Chicago, Inc. ("Noramco").

3. I hereby verify that the facts contained in the Petition for Variance submitted by Noramco in this matter are true and accurate to the best of my knowledge and belief.

Dated: July 21, 2015

MICHAEL WETTERICH

STATE OF Illinois)
) ss
COUNTY OF Cook)

On this 21st day of July, 2015, before me appeared Michael Wetterich, to me personally known, who being by me duly sworn, did state that the statements made in this Affidavit are true and accurate to the best of his knowledge and belief.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the City and State aforesaid, the day and year last above written.

Lucy E. Paul
Notary Public

My commission expires:
Sept. 3, 2018

OFFICIAL SEAL
LUCY E. PAUL
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires September 3, 2018

EXHIBIT
2