

NPDES Permit No. IL0002283
Notice No. MEL:12101201.bah

Public Notice Beginning Date: **July 10, 2013**

Public Notice Ending Date: **August 9, 2013**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued 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:

Chicago Department of Aviation
10510 West Zemke Road
Chicago, Illinois 60666

Name and Address of Facility:

Chicago O'Hare International Airport
10510 West Zemke Road
Chicago, Illinois 60666
(Cook 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 Mark E. Liska at 217/782-0610.

The applicant is engaged in the operation of a large international airport with a comprehensive range of facilities and services for airlines as well as for users (SIC 4581). Waste water is generated from the discharge of stormwater which may contain deicing chemicals during and subsequent to the deicing season. Plant operation results in an intermittent discharge of stormwater overflow from the South Detention Basin (SDB) and associated groundwater seepage from outfall 001, an intermittent discharge of stormwater from the SDB up to 16 MGD from outfall 002, and from outfall an intermittent discharge of stormwater from outfalls 097, 101, 114, 121, 205.

The following modifications are proposed: Lake O'Hare has been refitted and is now referred to as the SDB. Outfall 001 discharges groundwater seepage from the new underdrain system of the SDB and serves as an overflow for the basin during extreme weather events. Outfall 002 is new and discharges stormwater to the Des Plaines River. Outfalls 315, 370, A91, B91, 091, 441, and 471 have been eliminated. The sampling location for outfall 097 has changed.

Application is made for the new and existing discharge(s) which are located in Cook County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Crystal Creek	41° 29' 14" North	87° 53' 25" West	General Use	D
002	Des Plaines River	41° 57' 6" North	87° 51' 19" West	Secondary Contact	D
097	Willow-Higgins Creek	41° 59' 54" North	87° 54' 14" West	General Use	D
101	Willow-Higgins Creek	41° 59' 55" North	87° 53' 18" West	General Use	D
114	Willow-Higgins Creek	41° 59' 42" North	87° 52' 48" West	General Use	D
121	Willow-Higgins Creek	41° 59' 14" North	87° 52' 45" West	General Use	D
141	Crystal Creek	41° 57' 36" North	87° 53' 7" West	General Use	D
205	Des Plaines River	41° 58' 27" North	87° 52' 43" West	Secondary Contact	D

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

The stream segment F-15 receiving the discharge from outfall(s) 002 is on the 2012 303(d) list of impaired waters and is not a biologically significant stream on 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:

<u>Potential Cause</u>	<u>Designated Use</u>
Chloride, Dissolved Oxygen, Phosphorus (Total), Sedimentation/Siltation	Aquatic Life
Mercury, PCBs	Fish Consumption
Fecal Coliform	Primary Contact - Recreation

The stream segment GO-01 receiving the discharge from outfall(s) 097, 101, 114, and 121 is on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

<u>Potential Cause</u>	<u>Designated Use</u>
Phosphorus (Total)	Aquatic Life

The stream segment GN-01 receiving the discharge from outfall(s) 001 and 141 is not on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The stream segment G-28 receiving the discharge from outfall(s) 205 is on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

<u>Potential Cause</u>	<u>Designated Use</u>
Chloride, Phosphorus (Total)	Aquatic Life
Mercury, PCBs	Fish Consumption
Fecal Coliform	Primary Contact - Recreation

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

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall: 001							
Flow							35 IAC 309.146
pH						6.0-9.0	35 IAC 304.125
BOD ₅				10		20	35 IAC 304.120(c)
Tot. Suspended Solids				15		30	35 IAC 304.124
Ammonia Nitrogen (as N) Spring/Fall				1.5	3.8	6.9	35 IAC 355
Summer				1.7	4.3	14.2	
Winter				4.0		9.4	
	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall: 002							
Flow							35 IAC 309.146
pH						6.0-9.0	35 IAC 304.125
BOD ₅				20		40	35 IAC 304.120(b)
Oil and Grease				15		30	35 IAC 304.124
Ammonia Nitrogen (as N) Spring/Fall				1.5	3.8	6.9	35 IAC 355
Summer				1.7	4.3	14.2	
Winter				4.0		9.4	
				CONCENTRATION MINIMUM mg/L			
PARAMETER				30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	REGULATION
Dissolved Oxygen March-July				N/A	6	5.6	35 IAC 302.206
August-February				5.5	4	3.5	

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L			REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	
Outfall: 097							
Flow							35 IAC 309.146
pH						6.0-9.0	35 IAC 304.125
BOD ₅				20		40	35 IAC 304.120(b)
Oil and Grease				15		30	35 IAC 304.124
Ammonia Nitrogen (as N) Spring/Fall				1.5	3.8	6.9	35 IAC 355
Summer				1.7	4.3	14.2	
Winter				4.0		9.4	

The following explain the conditions of the proposed permit:

Special Conditions will require monthly DMR submission, require a Class K Operator, explain the Stormwater Pollution Prevention Plan, require that deicing use records be maintained, explain extra sampling requirements at other stormwater outfalls, and define the sampling locations.

The permittee has completed the majority of the construction of the O'Hare Modernization Plan. This plan included a reconfiguration of Lake O'Hare (now called the South Detention Basin, or SDB), the construction of a forcemain from the SDB to the Des Plaines River, the reconfiguration of the North Detention Basin, as well as other smaller projects to improve stormwater flow. The discharge of stormwater from the SDB to the Des Plaines River via the new forcemain is outfall 002 and has an intermittent discharge that is up to 16 MGD which is the maximum flow of the pumps (the anti-degradation analysis follows). The SDB has a separate groundwater seepage collection system which normally discharges to outfall 001 and has an alternate discharge to outfall 002. The groundwater seepage discharge was previously permitted and is not subject to an antidegradation analysis.

Antidegradation Assessment for O'Hare International Airport South Detention Basin
NPDES Permit No. IL0002283 Cook County

The airport has undergone extensive renovations to improve, among other things, stormwater management. The north side of the airport has a system where stormwater, often laden with high BOD deicing chemicals (potassium acetate for the runways and propylene glycol for aircraft), is collected in a basin and either sent to the sanitary sewer for treatment by MWRDGC, or, if BOD concentration allows, is discharged to a local receiving stream under an NPDES permit. The south side is now proposed to have a similar system. The South Detention Basin cannot discharge to nearby Crystal Creek because there are limits to the amount of water the creek can accommodate without causing flooding. Long-term retention is not feasible given the airport's need to reduce the area and timeframe for standing water on the property to discourage waterfowl. For the future, when effluent BOD allows, i.e., will meet the 304.120 effluent standard of 20 mg/L BOD on a monthly average basis and 40 mg/L BOD on a daily maximum basis, effluent will be discharged from the South Detention Basin through a force main to the Des Plaines River near Irving Park Road. The force main and outfall have already been constructed but have never been used. Deicer is flushed from the airport property by storm events. Concentrations are dependent on the time of last use of deicer, the severity of the previous winter, spring and summer rainfall patterns, etc. From the time of first deicer use in November/December through July, the effluent is usually high in BOD concentration and must be sent to MWRDGC for treatment. There will be times, occasionally in June and July and more so from August through November, when the effluent will meet the above BOD limits and may be discharged to the Des Plaines River.

While all South Detention Basin effluent regardless of BOD concentration is now sent to MWRDGC from the south side of the airport, this practice is under scrutiny. MWRDGC would prefer to not receive relatively clean water from the airport. This effluent is stormwater driven, meaning that it is most likely to be collected and discharged during wet weather events. MWRDGC wants to minimize the effluent it receives during these events so that it can better manage its deep tunnel stormwater system, i.e., make more capacity in its treatment plants available for incoming high flows during rainfall events. CSO events would then be minimized.

The discharge rate of the south airport effluent is a maximum of 16 MGD, which is the limit of the force main pumps. The storage capacity of the South Detention Basin is 490 million gallons. Antidegradation assessment information was provided by the applicant in documents titled Antidegradation Assessment for Chicago O'Hare International Airport, Huff & Huff, Inc., October 22, 2010; Water Quality Impact Assessment of O'Hare South Detention Basin Discharge to the Des Plaines River, CH2MHill, July 12, 2012, and Antidegradation Assessment for O'Hare South Detention Basin Discharge to the Des Plaines River, CH2MHill, July 12, 2012.

Identification and Characterization of the Affected Water Body.

The Des Plaines River (segment code G-15) will receive the effluent. The Des Plaines River at this location has a 7Q10 flow of approximately 78 cfs according to the Illinois State Water Survey and is a General Use water. The Des Plaines River is listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life, fish consumption and primary contact uses. The potential causes of aquatic life use impairment are given as chloride, dissolved oxygen (non-pollutant), total phosphorus and sedimentation/siltation. The causes of fish consumption use impairment are mercury and PCBs and the cause of primary contact use impairment is fecal coliform bacteria. The Des Plaines 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. The Des Plaines River is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

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

The effect of BOD on dissolved oxygen in the Des Plaines River is the water quality issue concern for this project. While the river is encountering a new point source, other sources are diminished elsewhere in the river system. Less discharge is produced at the MWRDGC sewage treatment plant when the airport discharges to the river. Less poorly treated CSO discharge is likely to occur due to the new river discharge. These offsets are important considerations in the evaluation of increased pollutant loading.

The applicant was required to model dissolved oxygen in the Des Plaines River to show the effects of the effluent discharge. Of the months when effluent quality is likely to be such that NPDES permit limits for BOD will be met (June through November although in June and July the effluent does not always meet the effluent limit and therefore non-compliant effluent may not be discharged to the river), the modeling found that conditions in the river created during a June or July effluent discharge caused an unacceptable diminishment of dissolved oxygen, causing dissolved oxygen to dip below the water quality standard of 5.0 mg/L during lower Des Plaines River stream flows. The modeling shows that if June and July effluent meets the BOD permit limit, discharges may be allowed only if the flow in the river is 400 cfs or above and the dissolved oxygen concentration in the effluent at the outfall is 5.6 mg/L or above. Under these conditions the dissolved oxygen water quality standard will be met in the river. In June and July a weekly average of 6.0 mg/L dissolved oxygen will also be imposed by the permit. Modeling for the other months when effluent BOD levels will meet the standard (August through November to the time of first deicer use) found that dissolved oxygen depletion does not occur to the level that the water quality standard would be exceeded at flow conditions down to 7Q10. No special restrictions must be met, however the usual dissolved oxygen permit limit of a daily minimum of 3.5 mg/L, a weekly average of 4.0 mg/L and a monthly average of 5.5 mg/L will be imposed by the permit. The effluent BOD standard cannot be met from first deicer use (November – December through at least May, so these months are excluded from discharge consideration.

Other chemical constituents in the effluent are not significant. Ammonia is low given the fact that deicers contain no nitrogen. Ammonia will be limited in the permit, but it is not a significant portion of the BOD in the effluent. Likewise, phosphorus is also not a component of the deicers and will therefore be found only at background concentrations.

Fate and Effect of Parameters Proposed for Increased Loading.

Dissolved oxygen modeling has shown that the BOD in the effluent will not cause dissolved oxygen levels in the Des Plaines River to fall below the water quality standard if the effluent is limited for BOD using the state effluent standard at 304.120 (20 mg/L as a monthly average and 40 mg/L as a daily maximum) and effluent discharge is allowed (when the BOD limits can be met) from June through the first use of deicer in November or December. Discharges may only be allowed in the months of June and July when the flow in the Des Plaines River at USGS gauge nearest upstream of the outfall location reads 400 cfs or more and dissolved oxygen in the effluent does not dip below 5.6 mg/L and averages 6.0 mg/L on a weekly basis. Given effluent BOD concentrations that are very high during the deicing season, discharges are feasible and thereby permitted by the permit only in the months of June through November (or whenever the first of the season use of deicers occurs at the airport). BOD will break down in the Des Plaines River through natural processes. No adverse impacts to uses of the river are anticipated.

Purpose and Social & Economic Benefits of the Proposed Activity.

Discharge of airport South Detention Basin stormwater to the Des Plaines River whenever possible has social benefits for the community. The airport will not have to pay usage fees to MWRDGC when the river discharge occurs. MWRDGC will no longer have to treat relatively clean water, thereby freeing capacity for treatment of flows associated with CSO events. Local water bodies will see a net improvement in water quality resulting in increased enjoyment by local residents.

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

The airport is converting the south side of the site to function as the north side has been operating for many years. This is a reasonable mix of sending high BOD storm water to MWRDCG for treatment while discharging low BOD storm water (when deicers have been largely flushed from the property) to a local receiving stream. While further on-site treatment has been explored, creation of a full-fledged treatment plant on airport property is not feasible given space constraints and the desire to minimize the presence of standing water. Minimization of the use of deicers and optimization of the kind of deicers to use to reduce impacts has been studied. The airport authorities believe that the new airport configuration and management procedures have reached near maximum efficiency pertaining to the use, kind, collection and transport of deicers. Alternatives such as land application of effluent are not feasible given the urban location of the site and the fact that deicers affect approximately 80% of the site already. No feasible alternatives exist to the planned discharge.

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 via the EcoCAT system on June 22, 2012. It was immediately determined that no threatened or endangered species reside in the receiving stream. Consultation was not terminated immediately because of a near-by prairie site. IDNR further evaluated this fact and determined in a June 26, 2012 letter that no adverse impact to this site was likely and terminated consultation.

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 stream 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 community at large by reducing clean water discharges to the local sewage treatment plant thereby freeing capacity to treat storm water related flows and reducing incidences of CSO discharges. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0002283

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

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Chicago Department of Aviation
10510 West Zemke Road
Chicago, Illinois 60666

Facility Name and Address:

Chicago O'Hare International Airport
10510 West Zemke Road
Chicago, Illinois 60666
(Cook County)

Discharge Number and Name:

001 - South Detention Basin Groundwater Seepage and
Emergency SDB Stormwater Overflow
002 - South Detention Basin Stormwater and Groundwater
Seepage
097 - North Detention Basin Stormwater
101 - Stormwater
114 - Stormwater
121 - Stormwater
141 - Stormwater
205 - Stormwater

Receiving Waters:

Crystal Creek
Des Plaines River
Willow-Higgins Creek
Willow-Higgins Creek
Willow-Higgins Creek
Willow-Higgins Creek
Crystal Creek
Des Plaines 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

SAK: MEL:12101201.bah

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:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L				
PARAMETER	30 DAY AVERAGE	DAILY MAX	30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001:	Groundwater Seepage (Intermittent Discharge) Emergency South Detention Basin Overflow Stormwater (Intermittent Discharge)						
Flow	See Special Condition 1					Measure When Discharging	Single Reading
pH	See Special Condition 2					1/Month*	Grab
BOD ₅			10		20	Daily**	Composite
Total Suspended Solids			15		30	1/Month*	Grab
Ammonia Spring/Fall			3.4	3.8	14.7	Daily**	Composite
Summer			2.0	4.3	15.0	Daily**	Composite
Winter			5.0		13.7	Daily**	Composite
<p>*The Permittee shall sample once per month during normal discharges (Groundwater Seepage only) and once per day when discharging SDB overflow stormwater.</p> <p>**The Permittee shall sample for BOD₅ and Ammonia on a daily basis only during discharges of Emergency SDB Overflow Stormwater. If there is no discharge of Emergency SDB Overflow stormwater during the calendar month, the Permittee may write “No SDB discharge” on the DMR form for those parameters.</p> <p>***Spring/fall consists of March-May and September-October, Summer consists of June-August, Winter consists of November-February.</p>							

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:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L				
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 002:	Stormwater from South Detention Basin* (Intermittent Discharge, up to 16 MGD, No Discharge from 1 st use of Deicer until at least June 1) South Detention Basin Groundwater Seepage (Alternate Discharge to Outfall 001) – Intermittent Discharge						
Flow	See Special Condition 1					Measure When Discharging	Single Reading
pH	See Special Condition 2					5/Week*	Grab
BOD ₅			20		40	5/Week*	Composite
Oil and Grease			15		30	5/Week*	Grab
Ammonia Spring/Fall**			3.4	3.8	14.7	5/Week*	Composite
Summer**			2.0	4.3	15.0	5/Week*	Composite
Winter**			5.0		13.7	5/Week*	Composite
			CONCENTRATION MINIMUM mg/L				
PARAMETER			30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Dissolved Oxygen (mg/L) March-July			N/A	6	5.6	5/Week*	Grab
Aug.-Feb.			5.5	4	3.5		

*The Permittee may only discharge June 1 – July 31 if flow in the Des Plaines River near Des Plaines (USGS 05529000) is at or above 400 cfs and dissolved oxygen in the effluent is at or above 5.6 mg/L. The permittee may discharge from August 1 until the first use of deicing chemicals in November or December. The Permittee may not discharge from the first use of deicing chemicals in winter until June 1 of the following year unless it can be shown that the effluent is below 20 mg/L BOD₅. During the time that the Permittee is not allowed to discharge, the Permittee shall write "No discharge" on the DMR form.

**Spring/Fall consists of March-May and September-October, Summer consists of June-August, Winter consists of November-February.

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:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L				
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 097:	Stormwater from North Detention Basin (Intermittent Discharge)						
Flow	See Special Condition 1					Measure When Discharging	Single Reading
pH	See Special Condition 2					Daily*	Grab
BOD ₅			20		40	Daily*	Composite
Oil and Grease			15		30	Daily*	Grab
Ammonia Spring/Fall**			3.4	3.8	14.7	Daily*	Composite
Summer**			2.0	4.3	15.0	Daily*	Composite
Winter**			5.0		13.7	Daily*	Composite
*The Permittee shall sample once per week during the non-deicing season and once per day during the deicing season when discharging.							
**Spring/Fall consists of March-May and September-October, Summer consists of June-August, Winter consists of November-February.							

Outfalls 101, 114, 121, 141, and 205 – Stormwater Runoff (Intermittent Discharge)

See Special Conditions 7 and 10

Special Conditions

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

SPECIAL CONDITION 2. 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.

SPECIAL CONDITION 3. 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. A discharge from Outfall 097 shall occur only when water is pumped from the Willow-Higgins Flood Control Reservoir to Willow-Higgins Creek. The sampling location for this discharge shall be at the Willow-Higgins Creek Flood Control Pumping Station.

SPECIAL CONDITION 4. 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.

SPECIAL CONDITION 5. 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 (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/edmr/index.html>.

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

Permittees not using eDMRs 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

SPECIAL CONDITION 6. The use or operation of the North Detention Basin or the South Detention Basin shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 7. The permittee shall maintain and update the previously approved stormwater pollution prevention plan. The stormwater pollution prevention plan and spill prevention, control and countermeasure plan shall be amended, as necessary, when airport operations or activities change and are not specifically covered under the existing plan. The amended plan shall be submitted to this Agency for review and approval.

The following items shall be considered, but shall not be limited to these items, when developing the stormwater pollution prevention plan and spill prevention, control and countermeasure plan:

A. Contaminated Water

1. Efforts shall be made to prevent deicing chemicals from entering Waters of the State from runways, taxiways, maintenance roads, hanger areas and terminal areas. New runways, taxiways, hanger areas, terminal areas and other areas that will receive deicing chemicals shall be designed to drain to the collection Basins. Airfield deicers shall not be used for purposes other than their intended use.
2. Snow Dumps
 - a. Location of contaminated snow dumps shall be in areas that do not discharge directly to surface waters.
 - b. Contaminated snow dumps shall be made as small as practicable to assist melting and reduce the time period

Special Conditions

associated with contaminated snowmelt.

3. Unpermitted Discharges

The Permittee shall, maintain and enforce, as necessary, the existing mechanism to prohibit the introduction of pollutants into surface waters from unpermitted discharges or contamination of stormwater. The mechanism shall include but not be limited to the following items:

- a. Carry out independent inspection and monitoring procedures at least once per year which will determine whether each tenant is in compliance with the mechanism;
- b. Perform an evaluation at least once every three years to determine whether each tenant needs to prepare their own spill prevention, control and countermeasure plan;
- c. Investigate instances of non-compliance, collect and analyze samples and compile other information with sufficient care and quantity so as to produce evidence admissible in enforcement proceedings, including judicial action;
- d. Obtain appropriate remedies for non-compliance including the development, as necessary, of compliance schedules by each tenant for the installation of control measures to prevent unpermitted discharges to surface waters or contamination of stormwater.

B. Clean Stormwater

Clean stormwater introduced into detention Basins that hold contaminated stormwater shall be minimized so as not to cause an increase in the discharge of contaminated stormwater from the detention Basins.

C. Fuel and Chemical Storage Areas and Loading Areas

Fuel and chemical storage areas and loading areas shall be operated to prevent the introduction of pollutants to stormwaters. Spills, leaks or other losses of fuels or chemicals shall be contained and cleaned up so as to prevent contamination of stormwater.

D. Aircraft and Vehicle Maintenance Areas

Aircraft and vehicle maintenance areas shall be operated to prevent the introduction of pollutants to stormwaters. Spills, leaks or other incidental losses of potential pollutants shall be contained and cleaned up so as to prevent the contamination of stormwater.

E. Car Rental Area

The car rental area shall be operated to prevent the introduction of pollutants to stormwaters. Spills, leaks or other incidental losses of potential pollutants shall be contained and cleaned up so as to prevent the contamination of stormwater.

F. Odor Control

1. The airfield drainage system shall be maintained in such a manner as to prevent the long term surface ponding of contaminated waters that may result in the odor production.
2. Contaminated stormwater shall be retained for as limited a time as is practicable so as to prevent odors. Should these time periods be exceeded, odor controls shall be implemented to reduce or mitigate odor production.

SPECIAL CONDITION 8. Records shall be maintained of the following information:

- A. The date of the first deicing event for a deicing season;
- B. The date of the last deicing event for a deicing season;
- C. Amounts of deicers used, the different types of deicers used and the dates and location of deicer use;
- D. Amount of snowfall/freezing rain, duration and dates associated with deicer use;
- E. Amount of rain, duration and dates when deicers are not utilized; and

Special Conditions

- F. Dates, amounts and quality of water pumped to the Metropolitan Water Reclamation District of Greater Chicago from the North and South Detention Basins.

This information shall be submitted to the Agency with an annual compliance status report due by June 15. The compliance status report shall indicate for each numbered item in the compliance schedule, a) the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date. This report shall be submitted to the following addresses:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
1021 North Grand Ave. East
Post Office Box 19276
Springfield, Illinois 62794-9276

and

Illinois EPA - DWPC Region 2
9511 West Harrison
Des Plaines, IL 60016

SPECIAL CONDITION 9. The provisions contained in 40 CFR 122.41(m) and (n) apply to this permit.

SPECIAL CONDITION 10. The permittee shall sample outfalls 101, 114, 121, 141, and 205 twice per deicing season and analyze said samples for pH, BOD₅, and ammonia nitrogen (as N). Analytical results shall be submitted with the May DMR submittal as a report. Sampling of all outfalls for the same storm event is not required. It is permissible to rotate sampling locations for different storm events. The date of sampling each outfall shall be identified in the report. A reasonable attempt to estimate flow shall be made and submitted with report.

SPECIAL CONDITION 11. The effluent limits contained in this permit shall not apply to clean stormwater. Stormwater is considered clean after the deicing season (as defined on page 3 of the permit) and the effluent BOD₅ remains below the daily limit for 7 discharge days in a row. The water shall be considered clean and not subject to effluent limits until after the deicing season starts and the BOD₅ daily limit is reached. However, for the computation of the annual average BOD₅ from the South Detention Basin, all data collected during the calendar year shall be used.

SPECIAL CONDITION 12. The permittee shall, within 90 days from the effective date this permit, update the water quality sampling plan which was previously approved. The plan, once updated and approved, shall be implemented immediately. The sampling plan should demonstrate what impacts airport deicing operations have on the receiving streams. The water quality sampling plan shall include, at a minimum, the upstream and down stream sampling locations, sampling method, sampling duration and sampling frequency. Sample frequency shall be no less than once per month and daily during time periods when the Basins are discharging during the deicing season. Samples shall be analyzed for pH, temperature, ammonia nitrogen (as N), BOD₅ and dissolved oxygen. Analytical results shall be submitted in report form with the monthly DMR's as required under Special Condition 5. If there is a change in stormwater flow due to construction at the facility, the permittee shall update the water quality sampling plan within 30 days of the change and submit the change to the Agency for approval.

4302 N. Main St., Rockford, IL 61103 (815) 987-7760
595 S. State, Elgin, IL 60123 (847) 608-3131
2125 S. First St., Champaign, IL 61820 (217) 278-5800
2009 Mall St., Collinsville, IL 62234 (618) 346-5120

9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000
5407 N. University St., Arbor 113, Peoria, IL 61614 (309) 693-5462
2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601 (312) 814-6026