

National Pollutant Discharge Elimination System (NPDES) Permit Program

FACT SHEET

Regarding NPDES Permit to Discharge to State Waters

Ohio Environmental Protection Agency
P.O. Box 1049
122 South Front Street
Columbus, Ohio 43216-1049
(614) 644-2001

Public Notice No.: 13-10-034
Public Notice Date: October 23, 2013

Name and Address of Applicant:

NASA Glenn Research Center
21000 Brookpark Road, MS 21-2
Brook Park, OH 44135

Name and Address of Facility
Where Discharge Occurs:

NASA Glenn Research Center
2100 Brookpark Road
Brook Park, OH 44135
Cuyahoga County

Receiving Water: Rocky River and Abram Creek

I. Location of Discharge

The above named applicant has applied for an NPDES permit, which will be issued by the Ohio Environmental Protection Agency, to discharge into the designated receiving water. A description and/or sketch of the location of the discharge is appended as Attachment I.

II. Description of Existing Discharge

A quantitative description of the existing discharge in terms of significant effluent parameters is appended as Attachment II.

III. Determinations

The Ohio Environmental Protection Agency has examined the application and has made the determination to issue the permit subject to certain effluent limitations and other mandatory conditions.

Derivation and calculation of specific effluent limitations are accomplished in accordance with standard engineering practices and applicable guidelines, standards and documents. Justification of specific characteristics is appended as Attachment III.

General Mercury Variance Coverage

The National Aeronautics and Space Administration John H. Glenn Research Center at Lewis Field permit was modified in May 2011 to include a mercury variance, and variance-based limits for mercury. Based on the monitoring results from May 2011 through August 2013 and the new application information, the permittee has determined that the facility will not meet the 30-day average permit limit of 1.3 nanograms per liter (ng/l). However, the effluent data shows that the permittee has met the mercury annual average value of 12 ng/l. The permittee's application has also demonstrated to the satisfaction of Ohio EPA that there is no readily apparent means of complying with the WQBEL without constructing prohibitively expensive end-of-pipe controls for mercury. Based upon these demonstrations, the NASA Glenn Research Center is eligible for the mercury variance under Rule 3745-33-07(D)(10)(a) of the Ohio Administrative Code (OAC).

The permittee submitted information supporting the renewal of the variance. The PMP schedule developed from the original variance continues to be implemented, and further reductions in mercury may be possible.

Ohio EPA has reviewed the mercury variance application and has determined that the application meets the requirements of the OAC. As a result, the variance is proposed to be issued as a condition in Part II of the NPDES permit, and the following requirements have been incorporated into the draft permit:

- a monthly average mercury effluent limits of 37.1 ng/l, which is developed from sampling data submitted by the permittee;

- a requirement that the permittee make reasonable progress to meet the water-quality-based effluent limit for mercury by implementing the plan of study which has been developed as part of the pollutant minimization program;
- effluent monitoring for mercury;
- a requirement that the average annual effluent concentration for mercury is less than or equal to 12 ng/l;
- a requirement for the permittee to use the most sensitive analytical method approved by U.S. EPA; and
- a requirement that the permittee submit a certification to Ohio EPA stating that all required permit conditions for the plan of study have been satisfied once these have been completed. In addition, the certification must state that compliance with the WQBEL for mercury has not been achieved.

IV. Procedures for the Formulation of Final Determinations

The determination shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the public notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting or hearing is to obtain additional evidence. Statements concerning the issues raised by the party requesting the hearing are invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

Requests for public meeting should be addressed to:

Legal Records Section
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this public notice. Deliver or mail all comments to:

Ohio Environmental Protection Agency
Division of Surface Water
Permits Processing Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

The Ohio EPA permit number and public notice numbers should appear next to the above address on the envelope and on each page of any submitted comments. All comments received no later than 30 days after the date of this public notice will be considered.

The application, fact sheets, permit including effluent limitations, special conditions, comments received, and other documents are available for inspection and may be copied at a cost of 5 cents per page at the Ohio Environmental Protection Agency at the address shown on page one of this public notice any time between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Copies of the public notice are available at no charge at the same address.

Pursuant to Revised Code 3745.07, Ohio EPA maintains a mailing list of persons or groups who annually subscribe for notifications of all proposed actions, issuances, denials, modifications, revocations, and renewals of permits, licenses, variances, verified complaints, and all hearings and public meetings to be conducted. Subscriptions to the WEEKLY REVIEW are available for an annual fee of \$70.00, by writing to the Legal Records Section at the address above.

Persons or groups may request to be included on a mailing list pertaining to specific applications, to receive notices, fact sheets, permits and related documents by writing the Surface Water Permits Processing Unit at the address above. Such requests must provide the following information: County of interest, entity of interest (please provide permit number, if known) and documents requested.

V. The receiving water is classified for Warm Water Habitat.

The following water quality standards and effluent standards and limitations were applied to the discharge: Ohio Water Quality Standards (WQS), Ohio EPA Agency Policy (OEPA AP, and Existing Permit (EP).

The terms and conditions of the permit will comply with the requirements of Ohio Administrative Code Chapter 3745-33, and Ohio Revised Code Section 6111.03(J).

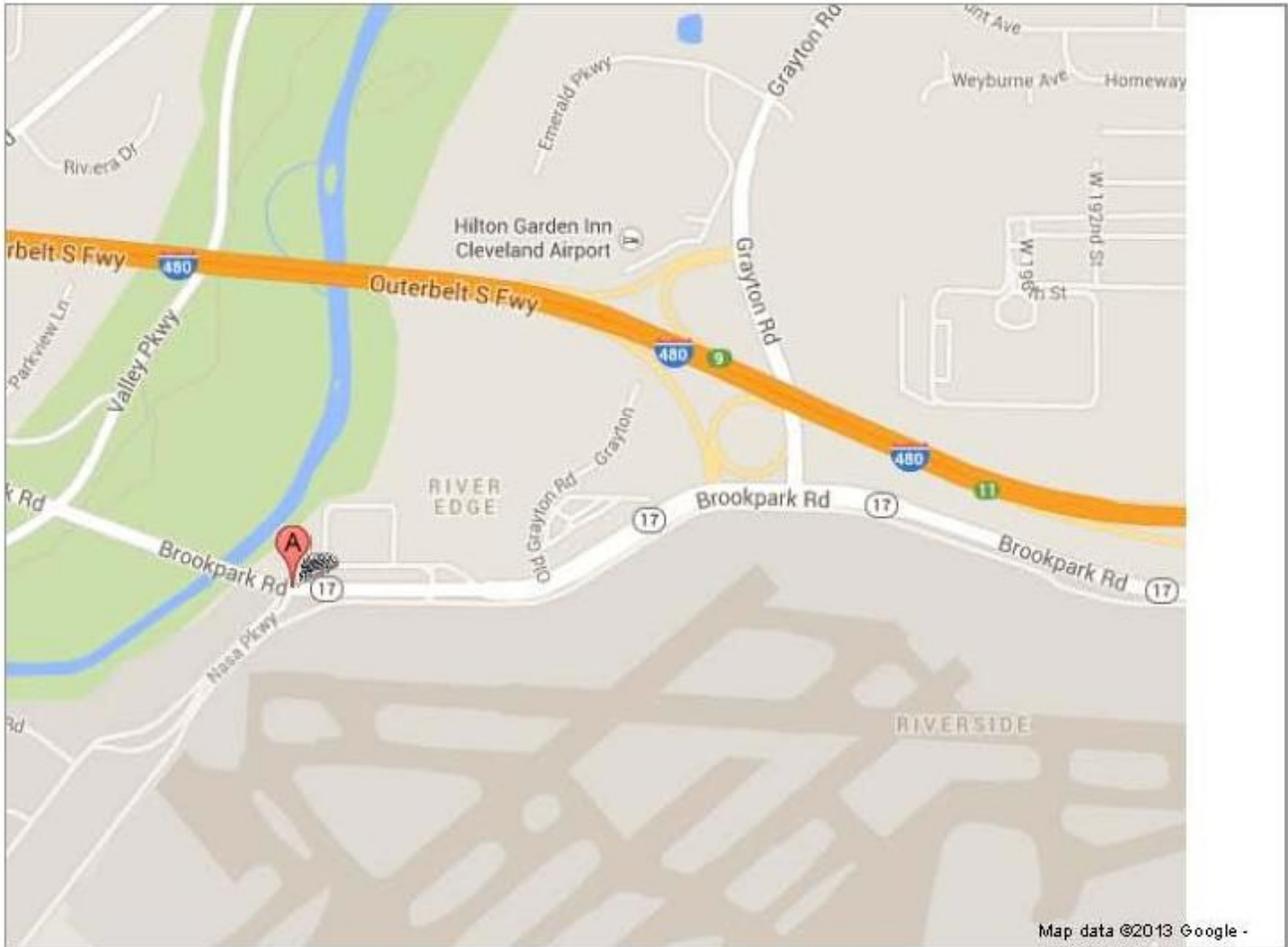
VI. Average Flows and Temperature, if significant

The discharge from this facility into waters of the state is as follows:

<u>Discharge Point</u>	<u>Average Monthly Flows (GPD)</u>
001	270,000

ATTACHMENT I

This facility is located in Cuyahoga County. The facility is located at 21000 Brookpark Road, Brook Park, OH 44135. The discharge from the facility enters Rocky River and Abram Creek.



Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 3IO00001001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly				
00095 - Specific Conductance at 25 Degrees C - Umho/cm	-	-	-	-	-	-	-	1/Week	Grab	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	1/Week	Grab	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Week	24hr Total	All
50060 - Chlorine, Total Residual - mg/l	0.019	-	-	-	-	-	-	1/Week	Grab	All
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	37.1	-	-	-	1/Month	Grab	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All

Notes for Station Number 3IO00001001:

- This discharge is limited to stormwater runoff, air conditioner condensate, and non-contact cooling water free from process wastes and other contaminants.

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH:

- 1) eDMR users should select the "No Discharge" check box on the data entry form and enter "No discharge during the month" in the Remarks Section. PIN the eDMR.
- 2) Permittees reporting on paper should report "AL" in the first column of the first day of the month on the 4500 Form. Sign the form.

- Total residual chlorine - See Part II, Item H.

- Mercury variance - See Part II, Items I, J and K.

ATTACHMENT III

JUSTIFICATION OF SPECIFIC CHARACTERISTICS

Final Table Outfall: 3IO00001 001

<u>Characteristic</u>	<u>Justification</u>
Flow Rate	OEPA AP
pH	WQS
Chlorine Residual, Total	WQS
Total Mercury (Low Level)	EP, Mercury Variance

Abbreviations: **ABS** (Antibacksliding); **AD** (Antidegradation); **AP** (Administrative Policy); **AT Report** (Advanced Treatment Report); **AWS** (Agricultural Water Supply); **BADCT** (Best Available Demonstrated Control Tech.); **BAT** (Best Available Technology); **BCT** (Best Conventional Pollutant Control Technology); **BEJ** (Best Engineering Judgement, P.L. 95-217, Section 402(a)(1)); **BPJ** (Best Professional Judgment); **BPT** (Best Practicable Control Technology); **CWH** (Cold Water Habitat); **CWQR** (Comprehensive Water Quality Report); **EEC** (Existing Effluent Characteristics); **EEQ** (Existing Effluent Quality, OAC 3745-33-04(B)(3)); **EWH** (Exceptional Warmwater Habitat); **EP** (Existing Permit); **FEG** (Federal Effluent Guidelines); **IJC** (International Joint Commission, 1978 Great Lakes Water Quality Agreement); **IMZM** (Inside Mixing Zone); **IWS** (Industrial Water Supply); **LP** (Lagoon Policy); **LRW** (Limited Resource Water); **MO** (Monitor Only); **MWH** (Modified Warmwater Habitat); **NSPS** (New Source Performance Standards); **OEPA AP** (Ohio EPA Agency Policy); **ORC** (ORSANCO); **PCR** (Primary Contact Recreation); **PD** (Plant Design); **PDL** (Prohibited Discharge Limitation); **PLER** (Permit Limitation Evaluation Report); **RPA** (Reasonable Potential Analysis); **SCR** (Secondary Contact Recreation); **SDP** (Small Discharges Policy); **SEC** (Secondary Treatment); **SEC FEG** (Secondary Federal Effluent Guidelines); **SLP** (State Lakes Policy); **SWR** (State Resource Water); **SS** (Secondary Standards); **TMDL** (Total Maximum Daily Load); **WET** (Whole Effluent Toxicity); **WLA** (Waste Load Allocation); **WQBEL** (Water Quality Based Effluent Limits Report); **WQS** (Ohio Water Quality Standards); **WWH** (Warmwater Habitat).