NPDES Pretreatment Compliance Sampling Inspection Report

Newburg Egg Processing Corporation
17 Novogrodsky Road
Woodridge, New York

NYP009823

March 15-16, 2023

Report Prepared by:

ROBERT MORRELL
Digitally signed by ROBERT MORRELL
Date: 2023.05.10 12:05:39 -04'00'

Robert Morrell, Geologist
Monitoring Operations Section

Date: _____

Report Approved by:

Cocuzza, Phil
Digitally signed by Cocuzza, Phil
Date: 2023.05.10 13:03:13 -04'00'

Philip Cocuzza, Supervisor
Monitoring Operations Section

Date: _____

1.0 OBJECTIVE

On March 15-16, 2023, at the request of the Water Compliance Branch, the United States Environmental Protection Agency (USEPA) conducted a National Pollutant Discharge Elimination System (NPDES) Pretreatment Compliance Sampling Inspection (CSI) at Newburg Egg Processing Corporation in Woodridge, New York. The objective of the CSI was to gather information necessary to determine compliance with the general pretreatment requirements of 40 CFR Part 403 and the industrial user permit issued by the Village of Woodridge Wastewater Treatment Plant (WWTP). In addition, two stormwater outfalls were sampled for benchmark pollutants permitted under Multi-Sector General Permit (MSGP) sector U (Food and Kindred Products).

2.0 KEY PARTICIPANTS

Listed below are key inspection participants and contact information, grouped by organization.

U.S. Environmental Protection Agency
Robert Morrell, Geologist, Lead Inspector
Morrell.robert@epa.gov, 732-906-6804
Thuan Tran, Physical Scientist
Tran.thuan@epa.gov, 732-321-4455

Newburg Egg Processing Corporation
Joel Halpert, Plant Manager
yoli@newburgegg.com, 845-434-8115 ext. 118
Chiam Weiss, Chief Operator

3.0 FACILITY DESCRIPTION

3.1 General Information

Newburg Egg Processing Corporation is located at 17 Novogrodsky Road in Woodridge, New York. The facility is a manufacturer of egg products, including hard boiled eggs and liquid egg products. The company is categorized as Standard Industrial Classification (SIC) Code 2015 (Poultry Slaughtering and Processing), which includes the drying, freezing, and breaking of eggs. The plant operates 24 hours per day, 5 days per week. The wastewater treatment plant operates 24 hours per day, 6 days per week. The plant started its manufacturing operations in the 1980's and currently has approximately 200 employees.

3.2 Process Information

Shell eggs are delivered to the facility on pallets. Approximately two million eggs are processed each day. The eggs are directed to one of two process lines: liquid and hard boiled.

For the liquid product line, the shell eggs are received and immediately refrigerated. The eggs are then subjected to washing, breaking, separating, combining (whole eggs), sniffing, and straining. The liquid eggs are then chilled before being conveyed to the mixing tank, where water and dry ingredients are added. The liquid product is then stored in the raw holding tank at 40°F. The liquid product is then conveyed to the pasteurizer, a critical control point, where the temperature is maintained at greater than 140°F. After pasteurization, the product is stored in the pasteurized product holding tank. From here, the final product is shipped in bulk by tank truck or packaged and stored in the finished product storage area.

For the hard boiled product line, the raw eggs are received and immediately refrigerated. The eggs are then subjected to washing, pricking, and cooking, which is a critical control point. During cooking, the temperature is maintained at 165°F – 190°F. The cooked eggs are then transferred to primary cooling, where the temperature is lowered to 55°F – 60°F. After cooling, the eggs are peeled and conveyed to secondary cooling, where the temperature is lowered to less than 40°F. The eggs are placed in buckets with brine and are transferred to the finished product storage room. After draining, the eggs are vacuum sealed in pouches and labeled. The final product passes through a metal detector before being stored in the finished product storage room at less than 40°F. The finished product is then shipped to the customer.

Process water for the facility is provided by the Village of Woodridge. Potable water is used for the mixing tank on the liquid product line and the brine tank on the hard boiled product line. Process wastewater is generated from the clean-in-place (CIP) caustic solution that is used for cleaning the batch product tanks and lines.

Raw process wastewater is collected at a pump station, where it is pumped to one of two 30,000-gallon storage tanks. The wastewater from the storage tanks is conveyed to two 30,000-gallon aerated equalization tanks, where sulfuric acid is added to lower the pH. The wastewater flows into a mixing tank, where caustic and ferric are added to further adjust the pH to around 6.5. The wastewater is conveyed to two dissolved air floatation (DAF) tanks in series, where a polymer is added. Finally, the treated wastewater flows into the effluent monitoring chamber and is discharged through Outfall 001 to the Village of Woodbridge Wastewater Treatment Plant.

Sludge from the DAF tanks is collected in a holding tank and dewatered using a filter press. The dewatered sludge is shipped off-site for disposal.

3.3 Facility Self-Monitoring Information

Pretreatment wastewater samples are collected weekly by the Village of Woodridge WWTP personnel. 24-hour composite samples are collected for the analysis of 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), total phosphorus, total kjeldahl nitrogen (TKN), and oil and grease. Grab samples are collected weekly for pH. Flow is monitored continuously. Ultimate oxygen demand (UOD) is calculated using BOD_5 and TKN.

4.0 EPA SAMPLING/INSPECTION ACTIVITIES

4.1 Sampling Activities

On March 15, 2023, an automatic composite sampler was set up at the effluent monitoring chamber for Outfall 001. The sampler was programmed to collect an aliquot of the effluent wastewater every 15 minutes for 24 hours. After 24 hours, the automatic composite sampler was disassembled, and the composite sample jug was mixed thoroughly before filling the sample containers. The 24-hour composite sample was analyzed for BOD_5, TSS, total phosphorus, and TKN. During the 24-hour sampling survey, three grab samples were also collected at Outfall 001 for oil and grease. A grab sample for pH was collected and analyzed in the field. The 24-hour flow was recorded from the totalizer.

On March 16, 2023, two stormwater outfalls were observed to be flowing into the adjacent wetland due to snow melting in the facility's paved parking lot. Outfall 003 was sampled by directly filling the sample containers at the end of the discharge pipe. This grab sample was analyzed for TSS, TKN, total phosphorus, and chemical oxygen demand (COD). Outfall 002 was sampled by directly filling the sample containers at the end of the discharge pipe. This grab sample was also analyzed for TSS, TKN, total phosphorus, and COD. The discharge from Outfall 003 was clear and the discharge from Outfall 002 was slightly turbid.

All sample containers, preservation techniques, and holding times were in accordance with U.S. EPA requirements specified in 40 CFR Part 136. All samples were placed in a cooler with wet ice and transported to the U.S. EPA Region 2 Laboratory in Edison, New Jersey.

Split samples were collected and given to the facility representative.

5.0 ANALYTICAL RESULTS

Newburg Egg Processing Corporation Pretreatment CSI – Outfall 001
March 15-16, 2023

Parameter	Discharge to POTW	Local Discharge Limit – Daily Maximum	Local Discharge Limit- Monthly Average (lb/day)
pH (su)	7.19	6.0 – 9.0 (range)	--
Flow (gpd)	157,572	100,000	--
BOD_5 (mg/l)	242 (318 lb/day)	380	317
TSS (mg/l)	17.0 (22 lb/day)	210	175
Phosphorus (mg/l)	0.521 (0.68 lb/day)	Monitor only	Monitor only
TKN (mg/l)	28.8 (38 lb/day)	45	38
UOD (mg/l)	492.6 (647 lb/day)	775	646
Oil and Grease - Grab #1 (mg/l)	Not detected	50	42
Oil and Grease – Grab #2 (mg/l)	Not detected	50	42
Oil and Grease – Grab #3 (mg/l)	Not detected	50	42

Newburg Egg Processing Corporation – Stormwater Outfall 002
March 16, 2023

Pollutant	Outfall 002	Benchmark – MSGP Sector U
COD (mg/l)	Not detected	120
TSS (mg/l)	Not detected	100
Phosphorus (mg/l)	0.0696	2
TKN (mg/l)	0.580	6

Newburg Egg Processing Corporation – Stormwater Outfall 003
March 16, 2023

Pollutant	Outfall 003	Benchmark – MSGP Sector U
COD (mg/l)	Not detected	120
TSS (mg/l)	Not detected	100
Phosphorus (mg/l)	Not detected	2
TKN (mg/l)	0.460	6

6.0 FINDINGS

6.1 Sampling Result Findings

Total flow for the 24-hour sampling period was 157,572 gpd, which exceeds the daily maximum flow of 100,000 gpd in the industrial user permit.

Analytical results indicate that all parameters (except flow) did not exceed daily maximum discharge limitations in the industrial user permit during the 24-hour sampling survey.

Using the EPA analytical results for Outfall 001 and the flow data provide by the facility, the calculated loadings for BOD_5 and UOD slightly exceeded the monthly average limitations of 317 lb/day and 646 lb/day, respectively.

Oil and grease samples are currently listed as 24-hour composite samples in the industrial user permit issued by the Village of Woodridge. Oil and grease samples should be collected as grab samples.

Analytical results indicate that the pollutant benchmarks for Sector U of the MSGP were not exceeded at stormwater outfalls 002 and 003 on the day of sampling.

7.0 ATTACHMENTS

Photographs (#1 - #3)
Laboratory Data Report
Chain of Custody / Field Data Form

Photo #1: View of the pretreatment discharge location for Outfall 001.

Photo #2: View of stormwater Outfall 002.

Photo #3: View of stormwater Outfall 003.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory
2890 Woodbridge Avenue
Edison , New Jersey 08837
732-906-6886 Phone
732-906-6165 Fax

April 04, 2023

Bob Morrell
Monitoring & Assessment Branch
LSASD/MAB
Edison, NJ 08837

RE: Newburg Egg Processing Corp. - 2303018

Enclosed are the results of analyses for samples received by the laboratory on 03/16/2023. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 2303018 and contact the laboratory.

Sincerely,

John R. Bourbon
Chief, LSASD/LB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Newburg Egg Processing Corp. - 2303018

Project Number: 2303018

Project Narrative:

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

Condition Comments

None

Comment(s):

The "Sample Analysis Date and Time" is included in the results section for any analyte with a prescribed holding time of 72 hours or less.

Data Qualifier(s):

U- The analyte was not detected at or above the Reporting Limit.
J- The identification of the analyte is acceptable; the reported value is an estimate.
K- The identification of the analyte is acceptable; the reported value may be biased high.
L- The identification of the analyte is acceptable; the reported value may be biased low.
NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Final Report

Project: Newburg Egg Processing Corp. - 2303018

Project Number: 2303018

Reporting Limit(s):

The Laboratory was able to achieve the appropriate limit for each analyte requested.

SUMMARY REPORT FOR SAMPLES

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall001-Grab#1	2303018-01	Aqueous	03/15/2023 11:17	03/16/2023 14:45
Outfall001-Grab#2	2303018-02	Aqueous	03/15/2023 15:21	03/16/2023 14:45
Outfall001-Grab#3	2303018-03	Aqueous	03/16/2023 10:25	03/16/2023 14:45
Outfall001-24 Hr. Comp.	2303018-04	Aqueous	03/16/2023 10:57	03/16/2023 14:45
Outfall003-Grab	2303018-05	Aqueous	03/16/2023 11:21	03/16/2023 14:45
Outfall002-Grab	2303018-06	Aqueous	03/16/2023 11:25	03/16/2023 14:45

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Final Report

Project: Newburg Egg Processing Corp. - 2303018

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SUMMARY REPORT FOR METHODS

Analysis	Method	Certification	Matrix
Biochemical Oxygen Demand	SM 5210B SOP C-21 Rev 2.8	NELAP	Aqueous
Chemical Oxygen Demand	EPA 410.4 SOP C-53 Rev 2.8	NELAP	Aqueous
Nitrogen, Total Kjeldahl	EPA 351.2 SOP C-40 Rev2.8	NELAP	Aqueous
Oil & Grease	EPA 1664A SOP C-126 Rev 1.7	NELAP	Aqueous
Phosphorus	EPA 365.1 SOP C-68 Rev 2.8	NELAP	Aqueous
Residue, Non-Filterable	SM 2540D SOP C-33 Rev 3.8	NELAP	Aqueous

Final Report

Project: Newburg Egg Processing Corp. - 2303018

Project Number: 2303018

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
Field ID: Outfall001-Grab#1			**Sample ID: 2303018-01**			
GC - Sanitary						
Oil & Grease	---	U	6.10	mg/L	B303080	
Field ID: Outfall001-Grab#2			**Sample ID: 2303018-02**			
GC - Sanitary						
Oil & Grease	---	U	6.10	mg/L	B303080	
Field ID: Outfall001-Grab#3			**Sample ID: 2303018-03**			
GC - Sanitary						
Oil & Grease	---	U	6.30	mg/L	B303080	
Field ID: Outfall001-24 Hr. Comp.			**Sample ID: 2303018-04**			
Sanitary						
Biochemical Oxygen Demand	242		2.00	mg/L	B303053	03/22/2023 07:41
Nitrogen, Total Kjeldahl	28.8		1.00	mg/L	B303067	
Phosphorus	0.521		0.0500	mg/L	B303055	
Total Suspended Solids	17.0		10.0	mg/L	B303054	
Field ID: Outfall003-Grab			**Sample ID: 2303018-05**			
Sanitary						
Chemical Oxygen Demand	---	U L	20.0	mg/L	B303060	
Nitrogen, Total Kjeldahl	0.460		0.100	mg/L	B303067	
Phosphorus	---	U	0.0500	mg/L	B303055	
Total Suspended Solids	---	U	10.0	mg/L	B303054	
Field ID: Outfall002-Grab			**Sample ID: 2303018-06**			
Sanitary						
Chemical Oxygen Demand	---	U	20.0	mg/L	B303060	
Nitrogen, Total Kjeldahl	0.580		0.100	mg/L	B303067	
Phosphorus	0.0696		0.0500	mg/L	B303055	
Total Suspended Solids	---	U	10.0	mg/L	B303054	

Final Report

Project: Newburg Egg Processing Corp. - 2303018

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GC - Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B303080									
Blank (B303080-BLK1)									
Oil & Grease	--- U	5.00	mg/L						
LCS (B303080-BS1)									
Oil & Grease	35.8	5.00	mg/L	40.00		90	78-114		
LCS Dup (B303080-BSD1)									
Oil & Grease	37.5	5.00	mg/L	40.00		94	78-114	5	20
Matrix Spike (B303080-MS1)	**Source: 2303018-01**								
Oil & Grease	48.1	5.00	mg/L	40.00	1.80	116	78-114		
Matrix Spike (B303080-MS2)	**Source: 2303014-09**								
Oil & Grease	49.2	5.00	mg/L	40.00	5.00	110	78-114		

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Final Report

Project: Newburg Egg Processing Corp. - 2303018

Project Number: 2303018

Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B303053									
Blank (B303053-BLK1)									
Biochemical Oxygen Demand	--- U	2.00	mg/L						
LCS (B303053-BS1)									
Biochemical Oxygen Demand	170		mg/L	198.0		86.0	84.6-115.4		
LCS (B303053-BS2)									
Biochemical Oxygen Demand	175		mg/L	198.0		88.3	84.6-115.4		
LCS (B303053-BS3)									
Biochemical Oxygen Demand	179		mg/L	198.0		90.3	84.6-115.4		
Duplicate (B303053-DUP1)		**Source: 2303018-04**							
Biochemical Oxygen Demand	309	2.00	mg/L		242			24.2	25
Matrix Spike (B303053-MS1)		**Source: 2303018-04**							
Biochemical Oxygen Demand	564	2.00	mg/L	396.0	242	81.2	75-125		
Matrix Spike Dup (B303053-MSD1)		**Source: 2303018-04**							
Biochemical Oxygen Demand	611	2.00	mg/L	396.0	242	93.1	75-125	8.00	200
Batch B303054									
Blank (B303054-BLK1)									
Residue, Non-Filterable	--- U	10.0	mg/L						
LCS (B303054-BS1)									
Residue, Non-Filterable	54.0	10.0	mg/L	55.10		98.0	85-115		

Final Report

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Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B303054									
LCS Dup (B303054-BSD1)									
Residue, Non-Filterable	55.0	10.0	mg/L	55.10		99.8	85-115	1.83	20
Duplicate (B303054-DUP1)		**Source: 2303018-04**							
Residue, Non-Filterable	18.0	10.0	mg/L		17.0			5.71	20
Batch B303055									
LCS (B303055-BS1)									
Phosphorus	8.50	0.250	mg/L	8.450		101	90-110		
LCS Dup (B303055-BSD1)									
Phosphorus	8.57	0.250	mg/L	8.450		101	90-110	0.8	20
Matrix Spike (B303055-MS1)		**Source: 2303014-01**							
Phosphorus	1.13	0.0500	mg/L	1.000	0.0806	105	90-110		
Matrix Spike (B303055-MS2)		**Source: 2303018-04**							
Phosphorus	1.50	0.0500	mg/L	1.000	0.521	98	90-110		
Batch B303060									
Blank (B303060-BLK1)									
Chemical Oxygen Demand	--- U	20.0	mg/L						
Blank (B303060-BLK2)									
Chemical Oxygen Demand	--- U	20.0	mg/L						

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Final Report

Project: Newburg Egg Processing Corp. - 2303018

Project Number: 2303018

Sanitary - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B303060									
LCS (B303060-BS1)									
Chemical Oxygen Demand	207	40.0	mg/L	194.0		107	90-110		
LCS Dup (B303060-BSD1)									
Chemical Oxygen Demand	198	40.0	mg/L	194.0		102	90-110	4	20
Matrix Spike (B303060-MS1)	**Source: 2303018-05**								
Chemical Oxygen Demand	50.6	20.0	mg/L	50.00	16.4	68	90-110		
Batch B303067									
Blank (B303067-BLK1)									
Nitrogen, Total Kjeldahl	--- U	0.100	mg/L						
Blank (B303067-BLK2)									
Nitrogen, Total Kjeldahl	--- U	0.100	mg/L						
LCS (B303067-BS1)									
Nitrogen, Total Kjeldahl	13.7	0.200	mg/L	12.40		110	90-110		
LCS Dup (B303067-BSD1)									
Nitrogen, Total Kjeldahl	13.4	0.200	mg/L	12.40		108	90-110	2	20
Matrix Spike (B303067-MS1)	**Source: 2303014-08**								
Nitrogen, Total Kjeldahl	14.7	0.500	mg/L	4.000	10.2	112	90-110		
Matrix Spike (B303067-MS2)	**Source: 2303018-04**								
Nitrogen, Total Kjeldahl	33.6	1.00	mg/L	4.000	28.8	120	90-110		

US EPA REGION 2 LABORATORY

CHAIN OF CUSTODY/ FIELD DATA FORM

SURVEY NAME & LOCALITY Newburg Egg Processing Corp. PROJECT LEADER Bob Morrell

PROGRAM: SF ☐ : SITE ID _____ OPERABLE UNIT _____ PROGRAM RESULTS CODE _____

Decision Unit Code	Y206	RCRA ☐ D210	RCRA ENF ☐ D307	NPDES ☑ B304	SDWA ☐ C215	AM ☐ B224	CAA ☐ A305	TSCA ☐ L306	OD ☐ B253	FIFRA ☐	CRIMINAL ENF ☐

Permit #: NYP009823

LAB ID/ FIELD ID	# OF CONT'ERS	MATRIX	CHECK IF SPLIT SAMPLE	DESCRIPTION & INSTRUCTIONS INCLUDING LOCATION, ESTIMATED CONCENTRATIONS, SPECIAL REPORTING LIMITS,	Res CL Checked	Preservative (circle)	Collection Time (24hr clock) Begin	Collection Time (24hr clock) End	Collection Date mm/dd/yy
Outfall 001-Grab #1	3	A	☑	3 1-liter glass jars for O&G	☐	0 1 2 3 4 5 6 7 8 9 10		1117	03/15/23
Outfall 001-Grab #2	1	A	☑	1 1-liter glass jar for O&G	☐	0 1 2 3 4 5 6 7 8 9 10		1521	03/15/23
Outfall 001-Grab #3	1	A	☑	1 1-liter glass jar for O&G	☐	0 1 2 3 4 5 6 7 8 9 10		1025	03/16/23
Outfall 001.24 Hr. Comp	4	A	☑	2 1-liter plastic jars for BODs	☐	0 1 2 3 4 5 6 7 8 9 10	1057		03/15/23
			☑	1 500-ml plastic jar for TSS	☐	0 1 2 3 4 5 6 7 8 9 10		1057	03/16/23
			☑	1 250-ml plastic jar for TKN/Total Phosphorus	☐	0 1 2 3 4 5 6 7 8 9 10			
Outfall 003-Grab	2	A	☑	1 250-ml plastic jar for TSS	☐	0 1 2 3 4 5 6 7 8 9 10		1121	03/16/23
			☑	1 250-ml plastic jar for TKN/Total Phosphorus/COD	☐	0 1 2 3 4 5 6 7 8 9 10			
Outfall 002-Grab	2	A	☑	1 250-ml plastic jar for TSS	☐	0 1 2 3 4 5 6 7 8 9 10		1125	03/16/23
			☑	1 250-ml plastic jar for TKN/Total P/COD	☐	0 1 2 3 4 5 6 7 8 9 10			

COMMENTS & SPECIAL REQUIREMENTS:

Preservative Added & Checked

0=ice
1=H_2SO_4 pH<2
2=HNO_3 pH<2
3=HCl pH<2
4=$Na_2S_2O_3$
5=NaOH pH>9
6=Ascorbic Acid
7=FAS
8=ZnAc
9=NaOH pH>12
10=NH_4Cl

	Time	Date
Person Assuming Responsibility for Sample(s): Robert A. Morrell	1125	3/16/23
Relinquished By: Robert A. Morrell Jr. / Received By:	14:45	3/16/23
Relinquished By: / Received By:		
Relinquished By: / Received By:		

Matrix:

A=aqueous
B=aqueous (chlorinated)
C=soil
D=sediment
E=sludge
F=multiphasic
G=solvent
H=biota
I=oil
J=other

Survey Complete? Y ☑ N ☐

Direct from Sampling, chilled & titrated. 3/16/23