



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

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SECRETARY'S ASSESSMENT REPORT OF A COASTAL ZONE ACT PERMIT APPLICATION

FujiFilm Imaging Colorants, Inc.
Printer Ink Manufacturing Facility
233 Cherry Lane, New Castle, DE 19720
CZA-441P

INTRODUCTION

Under subsection 8.5.3 of 7 *DE Admin. Code* 101 *Regulations Governing Delaware's Coastal Zone* ("Regulations"), the Secretary of the Department of Natural Resources and Environmental Control (DNREC) shall provide a written assessment of any application for a Coastal Zone Act permit, including the proposed project's likely impact on the criteria listed in subsection 8.1, as well as a preliminary determination of the sufficiency of the offset project under section 9.0 of the Regulations. The completion of this assessment acknowledges the application submitted by FujiFilm Imaging Colorants, Inc. ("FujiFilm") is administratively complete. The fact that DNREC considers the application to be administratively complete does not constitute its position as to whether a permit should be issued or denied. That decision will be made after a public hearing is held and any comments are reviewed.

PROPOSED PROJECT OVERVIEW

FujiFilm is proposing to construct a new manufacturing plant within an existing building at its New Castle Facility at 233 Cherry Lane, New Castle, DE 19720. The new plant (L44) would enable FujiFilm to increase manufacturing capacity for existing products and allow the manufacturing of new products.

FujiFilm currently purchases and imports some of its raw materials. The L44 plant would allow for the production of raw materials for high-performance aqueous pigment dispersions, which are currently manufactured at the company's Grangemouth, Scotland facility. L44 would use the same technology used at the Grangemouth site.

L44's unit operations would involve the dispersion of pigment into polymer, the use of bead mills to reduce the particle size of the pigment, stabilization of the particles with the addition of a stabilizer, centrifugation of the stabilized material, purification of the material using membrane filtration, and sterilization of the final product.

The applicant submitted a request for confidentiality, pursuant to 29 *Del. C.* §10002(1)(2) for the purpose of financial security. The merit of this request was reviewed by a Deputy Attorney General, within Delaware's Department of Justice, according to DNREC's Freedom of Information Act (FOIA) regulations (8 *DE Admin. Code* 900). The request was granted by the DNREC Secretary and, as such, a redacted version of the application will be available for public comment.

APPLICATION ASSESSMENT

An application must consider the potential effect on the criteria set forth in 7 *Del. C.* §7004(b) and subsection 8.1 of the Regulations:

1. Direct and cumulative environmental impacts
2. Economic effects
3. Aesthetic effects
4. Number and type of supporting facilities and their anticipated impacts
5. Effect on neighboring land uses
6. Compatibility with county and municipal comprehensive plans

1. DIRECT AND CUMULATIVE ENVIRONMENTAL IMPACTS

AIR EMISSIONS

The proposed project would result in air emissions associated with the operation of two boilers and an HVAC system.

Two high efficiency low NO_x direct fired hot water boilers would be installed in a new boiler building adjacent to L44. Each boiler is rated at 4.6 MMBTU/hour natural gas input. The boilers would recirculate hot water to the equipment inside L44 in a closed system for process heating.

A new HVAC system would be installed for comfort heating and cooling of L44. The system has a natural fired heating system that is rated at 1.95 MMBTU/hour natural gas input.

Other equipment installed would not result in the generation of air emissions. A 30HP air compressor and dryer would be installed in an existing room attached to L44.

There is no anticipated change in air emissions associated with mobile sources. The traffic increase associated with the delivery of raw ingredients to be used in the manufacture of raw materials onsite will be offset by the elimination of traffic delivering those raw materials from Scotland.

Current emissions were calculated and compared to emissions associated with the proposed operation of L44 to demonstrate the net increase in emissions. The table below shows the net increase of emissions associated with the operation of L44.

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	
Nitrogen Oxides (NO _x)	1.424	0.260	5.276	0.963	6.700	1.2228	371%
Carbon Monoxide (CO)	0.783	0.143	11.950	2.181	12.733	2.3240	1525%
Carbon Dioxide (CO ₂)	1708	311.8	26074	4758.4	27782	5070.2	1526%
Lead	0.000007	0.000001	0.00011	0.00002	0.00012	0.00002	1526%
Nitrous Oxide (N ₂ O)	0.031	0.006	0.140	0.026	0.172	0.031	448%
Particulate Matter (PM) PM Total	0.108	0.020	1.651	0.301	1.760	0.321	1526%
PM Condensable	0.081	0.015	1.238	0.226	1.320	0.241	1526%
PM Filterable	0.027	0.005	0.413	0.075	0.440	0.080	1526%
Sulfur Dioxide (SO ₂)	0.009	0.002	0.130	0.024	0.139	0.025	1526%
Total Organic Compounds (TOC)	0.157	0.029	2.390	0.436	2.547	0.465	1526%
Methane	0.033	0.006	0.499	0.091	0.532	0.097	1526%
Volatile Organic Compounds (VOC)	0.078	0.014	1.195	0.218	1.273	0.232	1526%

WATER USE AND DISCHARGE

The New Castle County Department of Public Works currently authorizes FujiFilm to discharge up to 200,000 gallons per day of treated wastewater to the New Castle County Sewer System. The addition of L44 would not result in any exceedance of the amount of wastewater permitted to be discharged onsite.

Current discharges were calculated and compared to discharges associated with the proposed operation of L44 to demonstrate the net increase in discharges. The table below shows the net increase of water discharges associated with the operation of L44.

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge (ppm)	Current Discharge		Net Increase/Decrease		New Total Emissions		Current Permitted Emissions
			Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	lbs/day
Ammonia	0.60	6.6	0.35	0.06	0.55	0.10	0.90	0.16 (increase of 166%)	600
Biochemical Oxygen Demand (BOD)	70.250	608.000	18.200	3.320	50.870	9.1400	69.070	7.75 (increase of 64.9%)	3000
Total Suspended Solids, TSS	51.50	200	25.74	4.70	16.73	3.05	42.47	12.46 (increase of 275%)	1250
Arsenic (As)	<0.03	Not expected*	0.00	0.00	-	-	0	0	0.225
Cadmium (Cd)	<0.005	Not expected*	0.00	0.00	-	-	0	0	0.175
Cyanide (CN)	<0.01	Not expected*	0.00	0.00	-	-	0	0	0.817
Chromium (Cr)	<0.015	Not expected*	0.00	0.00	-	-	0	0	0.125
Copper (Cu)	0.34	1.9	0.11	0.02	0.16	0.03	0.27	0.05 (increase of 150%)	3.753
Lead (Pb)	<0.01	Not expected*	0.00	0.00	-	-	0	0	0.123
Mercury (Hg)	0.00	Not expected*	0.00	0.00	-	-	0	0	0.0008
Molybdenum (Mo)	<0.01	Not expected*	0.00	0.00	-	-	0	0	0.00
Nickel (Ni)	0.05	Not expected*	0.00	0.00	-	-	0	0	2.502
Selenium (Se)	<0.05	Not expected*	0.00	0.00	-	-	0	0	1.626
Zinc (Zn)	0.79	Not expected*	0.25	0.05	-	-	0.25	0.05	8.732

*Not expected from the raw materials used

STORMWATER

The proposed project would occur within an existing building with no increase in impervious surfaces. The new activity would not generate an increase in stormwater runoff.

LAND EROSION

The proposed project would operate within an existing building and would not impact land erosion.

SOLID AND HAZARDOUS WASTE

The operation of L44 will produce both Non-Routine and Routine solid wastes. FujiFilm uses Waste Technology Services for its solid waste disposal services.

FujiFilm is a registered Small Quantity Hazardous Waste Generator and employs licensed hazardous waste haulers for disposal needs. The proposed project has the potential to generate small amounts of flammable hazardous materials (acetone and methanol) and caustic waste materials such as sulfuric acid when raw materials are out of specification or out of shelf life. This waste generation would not exceed that which is allowed for a Small Quantity Hazardous Waste Generator.

Waste materials are collected in designated areas to hold until a load is generated for pickup. All waste storage complies with Hazardous Waste Regulations for storage and management. Waste would be disposed of at permitted hazardous waste treatment and disposal facilities outside of the Delaware Coastal Zone.

WETLANDS OR HABITAT FOR FLORA AND FAUNA

The proposed project would operate within an existing building and would not impact wetlands or habitat for flora and fauna. Industrial operations have taken place on this footprint since 1937 and there is no proposed filling, dredging, or draining of wetlands or waterways as part of this project.

GLARE, HEAT, NOISE, VIBRATION, RADIATION, ELECTROMAGNETIC INTERFERENCE, OBNOXIOUS ODORS

The proposed project would not generate glare, heat, noise, vibration, radiation, electromagnetic interference, or obnoxious odors outside of the existing building.

THREATENED OR ENDANGERED SPECIES

Operations for the proposed project would occur entirely inside the existing building. The project location is not known to DNREC Division of Fish & Wildlife to have any threatened or endangered species present.

POTENTIAL TO POLLUTE

The proposed project operations would be entirely inside an existing building. All vessels would be fitted with an overflow to prevent over or under pressurization of the tanks. Any liquid overflow would be collected in the L44 building sump where it would be pumped to the onsite wastewater pretreatment system.

2. ECONOMIC EFFECTS

Improvements expended locally are estimated to be \$3,000,000 to \$5,000,000 with services such as engineering, general construction, electrical, plumbing, and HVAC upgrades.

The proposed project would employ 75-100 total workers throughout the project construction life cycle. Thirty-five to 50 workers would be hired in Delaware. Total weekly construction payroll is estimated to be \$15,000 to \$75,000, depending on the construction phase.

Twenty-one new employees are projected to be hired to directly support the operation of the new plant.

Taxes attributable to this project:

State corporate income taxes	\$365,184
County Tax Projection	\$32,603
School Tax Projection	\$93,083

3. AESTHETIC EFFECTS

The operation within an existing building does not impact the aesthetics of the area.

4. NUMBER AND TYPE OF SUPPORTING FACILITIES IMPACTS

One new boiler building is proposed. All other supporting infrastructure will be provided by FujiFilm within the existing footprint of the property.

5. EFFECT ON NEIGHBORING LAND USES

The project would be constructed on an existing industrial site zoned Heavy Industrial and will be compatible with neighboring uses. The nearest year-round residence to the FujiFilm site is the Collins Park neighborhood, 933 feet from the first house in the neighborhood. There would be no interference with the public's use of existing public or private recreational facilities or resources.

6. COMPATIBILITY WITH COUNTY AND MUNICIPAL COMPREHENSIVE PLANS

A New Castle County Building Official confirmed that the proposed project is consistent with county and municipal planning.

OFFSET PROPOSAL

Subsection 9.1.1 of the Regulations states that offset proposals must “more than offset the negative environmental impact associated with the proposed project of activity requiring a permit.”

As indicated by the assessment, the negative environmental impacts of the proposed project, under normal operating conditions, are limited to air emissions.

FujiFilm proposes the purchase of three tons of emission reduction credits (ERCs) from the Delaware Division of Small Business, and the completion of an offset project onsite to more than offset 4.325 tons of annual emissions.

The company plans to purchase a total of three ERCs, two NO_x and one VOC (accounting for TOC emissions), from the Delaware Division of Small Business. ERCs come from the *7 DE Admin. Code 1134 Emissions Banking and Trading Program* and are parsed into ozone season and non-ozone season for NO_x and VOCs.

FujiFilm will offset 1.392 tons per year of CO emissions by eliminating the use of five existing propane-operated forklifts. These forklifts would be removed from service and from the premises by the commencement of L44 operations. FujiFilm would instead utilize two electric forklifts and three electric powered pallet jacks for onsite operations.

The total emissions offset by the purchase of three ERCs and the completion of the above referenced offset project is 4.392 tons per year, which is more than the required 4.325 tons per year.

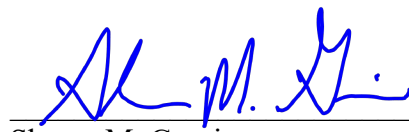
SUFFICIENCY STATEMENT AND CONCLUSION

The application by FujiFilm addresses the questions of the permit application form and the criteria required to be reviewed under 7 *Del. C.* §7004 and subsection 8.1 of the Regulations.

The applicant proposes purchasing three tons of emission reduction credits from the Delaware Division of Small Business and would complete an offset project to more than offset the project's 4.325 tons of annual emissions.

DNREC conducted a thorough review of this CZA permit application, including supplemental information, and considers it administratively complete and sufficient to proceed to public hearing.

Approved:



Shawn M. Garvin
Secretary

Date:

April 28, 2021