

STATEMENT OF BASIS for MARCAL MANUFACTURING LLC

TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 02102 / Permit Activity Number: BOP190002

I. FACILITY INFORMATION

Marcal Manufacturing LLC is located at 1 Market St, Elmwood Park, Bergen County, NJ 07407 and consists of a manufacturing facility for paper products. The facility is owned and operated by Marcal Manufacturing LLC.

The facility is classified as a major facility based on its potential to emit 53 tons per year of volatile organic compounds, 217 tons per year of nitrogen oxides, and 185 tons per year of carbon monoxide.

This permit allows individual hazardous air pollutants to be emitted at a rate not to exceed: 0.00008 tons per year of total HAPs emissions from insignificant sources. Total HAPs emissions from insignificant sources are estimated values and are not speciated.

II. AREA ATTAINMENT CLASSIFICATION

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>.

III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility includes: two boilers used to heat buildings at the facility using natural gas and #2 fuel oil; two paper machines, with combustion units firing natural gas and #2 fuel oil; manufacturing equipment used to process paper slush feedstock, pulp, fibers, and by-products; and converting lines used to process dry paper into finished products. Particulate emissions from the facility's No. 11 paper machine are controlled by a cyclone and a scrubber which have a combined 98% control efficiency.

Table 1 - Operating Permit Revision History (located at the end of this document) provides a summary of all the changes that have been incorporated into the operating permit through seven-day notice changes, administrative amendments, minor modifications, or significant modifications since the approval of the initial operating permit or the most recent renewal thereof. Please refer to the attached explanation sheet for the structure and configuration of conditions of approval, included in the Facility Specific Requirements section of this permit.

The only HAPs emissions at this facility are from "Insignificant Sources". The rule at N.J.A.C. 7:27-22.6 requires that the permit application only provides an estimate of the total emissions from all insignificant source operations combined. Therefore, the permit does not include emissions data for each insignificant source operation and health risk assessment for HAPs emissions from these sources was not conducted.

This is a Permit Renewal and includes the following changes:

Deleted U24, U25, U26, U27, and U49 due to fire destroying significant part of facility. Deleted U18 boilers which had been permitted for #4 fuel oil. Deleted E4802. Deleted orphan equipment E2101, E2102, CD5, and CD6.

Updated U1-OS0 to show stack testing only for NO_x and CO on Natural Gas and TSP and PM₁₀ for Fuel Oil. Updated U1-OS1 - OS4 likewise.

Added U1-OS0, Ref. #3 specifying next stack test deadline.

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Updated Insignificant Source Inventory

Listed PM2.5 as equal to PM10 throughout.

Updated applicable requirements of 40 CFR Part 63, Subpart JJJJJJ.

Updated permit terminology throughout the permit.

Added new Ref. #26 to the Permit Text's General Provision. Stack testing is now every 5 years instead of referencing the permit renewal because each permit renewal is now for a full 5 years from approval instead of expiring 5 years from the previous permit expiration.

The changes made during this permitting action result in allowable annual emissions changes as follows:
Listed PM2.5 as equal to PM10 throughout.

IV. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and
2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit.

For the two boilers in U1, the facility monitors fuel use as the surrogate for the long-term (TPY) emission limits for VOC, NOx, CO, SO2, TSP, PM-10 and PM-2.5. Surrogate monitoring for the short-term (lb/hr) emission limits are combustion process adjustment for NOx and CO, and fuel oil sulfur content for SO2.

For manufacturing and materials handling equipment throughout the facility, the facility monitors the total material transferred (TPY) as the surrogate for the long-term (TPY) emission limits for TSP, PM-10, and PM-2.5. Raw materials and total material transferred (lb/hr) are monitored as surrogates for the short-term (lb/hr) emission limits for TSP, PM-10, and PM-2.5. Additionally, periodic monitoring of visible emissions at the U41 Towel Line stack is required.

Venturi Scrubber (CD201) is monitored by pressure drop and flow rates. Additionally, periodic monitoring of visible emissions at the stack is required.

Cyclone (CD202) is monitored by pressure drop instrumentation continuously. Additionally, periodic monitoring of visible emissions at the stack is required.

3. In some cases, direct periodic monitoring of emissions and/or surrogate parameters is not required due to one or more of the following:
 - Equipment size and capacity limitations,
 - Subject equipment being permitted at the maximum rated capacity,
 - There is no specific state or Federal standard that applies to this piece of equipment,
 - Not a pollutant of concern for this piece of equipment,
 - Agreements with EPA on the frequency of testing and monitoring for combustion sources.

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Based on the above criteria, there is no direct or surrogate monitoring for the remaining pieces of equipment.

V. APPLICABLE STATE AND FEDERAL RULES

The facility is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at:

<http://www.nj.gov/dep/aqm/rules27.html>

The facility is also subject to Federal regulations listed below:

40 CFR Part 60, Subpart A: General Provisions

40 CFR Part 60, Subpart IIII: Stationary Compression Ignition Internal Combustion Engines

40 CFR Part 63, Subpart A: General Provisions

40 CFR Part 63, Subpart JJJJJ: Industrial, Commercial, and Institutional Area Source Boilers

The Greenhouse Gas (GHG) emissions from this facility are 73,100 TPY CO₂e and there is no GHG emissions increase. This renewal is not subject to PSD rules at 40 CFR 52.21

VI. FACILITY'S COMPLIANCE STATUS

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

The facility has submitted a timely and complete application to renew their operating permit and an application shield is in effect.

This operating permit also includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Also, prior to the expiration of the five-year period, the facility will be required to apply for a renewal of this operating permit, at which time the Department will evaluate the facility and issue a public notice with its findings.

VII. EXEMPT ACTIVITIES

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.

Table 1 - Operating Permit Revision History

Permit Activity Number	Type of Revision	Description of Revision	Final Action Date
BOP220001	Minor Modification	<p>Add the following equipment:</p> <p>From Elmwood Power LLC PI #02624/BOP210001:</p> <ul style="list-style-type: none"> - U1/E1/PT1 - IS1, IS2, IS3, IS6 & IS7 <p>To Marcal Manufacturing PI #02102/BOP220001 as:</p> <ul style="list-style-type: none"> - U60/E6000/PT6000 - IS60-IS64 	4/27/23
BOP210001	Administrative Amendment	Change the Responsible Official to Stacy Lee and update the Air Permit Information Contact and Fees/Billing Contact to Michael Breen.	4/13/21
BOP190001	Minor Modification	<p>Marcal Manufacturing LLC is submitting this minor modification application to request the incorporation of the following language into the General Provisions and Authorities section of the facility's operating permit:</p> <p>A Permittee may seek the approval of the Department for a delay in testing required pursuant to this permit by submitting a written request to the appropriate Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.18(k). A Permittee may also seek advanced approval for a longer period for submittal of a source emissions test report required by the permit by submitting a request to the Department's Regional Enforcement Office in accordance with N.J.A.C. 7:27-22.19. [N.J.A.C. 7:27-22.18(k) and N.J.A.C. 7:27-22.19]</p>	7/8/19
P170002	Minor Modification	<p>Marcal Manufacturing, LLC (Marcal), facility ID 02102, is submitting a minor modification application to update the U9 Fiber Division. Changes in the product line over the years have resulted in a need to update this emission unit due to the fact that the operating scenarios / equipment have become more interchangeable. As part of this change, some equipment has been removed and a new item has been added. Marcal is requesting the throughput limits of FD1 and FD4 (320 dry tons per day each) are combined to yield a Fiber Division limit of 640 dry tons per day. This combination will result in an increase of the VOC potential to emit as a result of these changes.</p> <p>This modification application includes the changes to emission unit U9 listed as listed below.</p> <ul style="list-style-type: none"> -Removal of OS4 (FD1 Cook) and corresponding equipment E904. -Removal of OS11 (FD1 Bauer 2) and corresponding equipment E911. -Removal of OS12 (FD1 Bauer 3) and corresponding equipment E912. -Removal of OS13 (FD1 Bauer 4) and corresponding equipment E913. 	4/3/18

		<p>-Addition of equipment E957 (FD Reject#3) which is a tertiary fine screens reject chest.</p> <p>-Change the name from "Fiber Divisions FD1 & FD4" to "Fiber Division".</p> <p>-Update all mentions of "FD1" or "FD4" to now state "FD".</p> <p>The current permit contains a limit of 320 dry tons/day each for the FD1 and FD4 process. With this modification, Marcal is requesting a production rate of 640 dry tons/day for the FD process. As a result, the VOC emissions will be increased from 0.745 tons per year to 1.479 tons per year. Short-term TSP/PM10 emission levels for each piece of equipment are estimated at 0.01 lb/hr based on the currently permitted emission levels and are assumed not to increase the currently permitted levels of "de minimis" (equivalent to 0.05 lb/hr) due to minor increases in production over currently permitted production values.</p>	
BOP170001	Minor Modification	<p>Marcal Manufacturing, LLC (Marcal), facility ID 02102, is submitting minor modification application to update their Title V operating permit (BOP140002) for a replacement in kind of the paper winder permitted as U24 OS3 JRT-1, equipment ID E2408. This replacement is being made to bring in a wider machine which will allow for use of larger parent rolls in order to increase efficiency. Marcal is not requesting any changes to the throughput, operational hours, emission points/parameters or pollutant emissions currently permitted as this machine will operate in the same manner as the one being replaced.</p> <p>The replacement winder will be listed as E2409 in the permit and E2408 will be removed from the permit with this modification application.</p> <p>Per NJDEP guidance, Marcal has only included items that have changed in this RADIUS file.</p>	5/15/17

FACILITY NAME (FACILITY ID NUMBER)
BOP050001

Activity Number assigned
by the Department

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit Number
assigned by the Facility

Brief description of
emission unit

Emission Unit: U40 Sewage Sludge Incinerators
Operating Scenario: OS Summary

OR

OS2 Fluidized Bed Incinerator

OS Summary lists all rules and requirements
that apply to an emission unit. An emission unit
may contain one or more pieces of equipment
and corresponding operating scenarios.

OSX denotes the operating scenario number and lists the rules
and requirements that apply to a scenario. An operating
scenario represents various ways (or scenarios) a piece of
equipment is permitted to operate.

Item
Number

Description of applicable
requirement

Monitoring method to
ensure compliance

Recordkeeping to show
facility's compliance

Actions and submittals
required for the facility

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change. [40 CFR 62.16000(a)]	Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a). [40 CFR 62.16000(a)].	Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [40 CFR 62.16025(e)].	Submit a report: Annually to the Administrator and to the Department. The permittee shall submit an annual compliance report as specified in 40 CFR 62. [40 CFR 62.16000(d)]

Rule citation for
applicable requirement

Rule citation for
monitoring requirement

Rule citation for
recordkeeping requirement

Rule citation for submittal/
action requirement

Explanation Sheet for Facility Specific Requirements