

CONSTRUCTION PERMIT SUMMARY REPORT

Company Name: Dunlap Stone File Number: 77-0020 EPS Initials: JLH
Permit Number(s): 979146 (479146) Source Point Number(s): 01
Application Received (date): 6/18/2021 Application Complete (date): 7/30/2021
Air Quality Analysis Performed? Yes ☐ No ☒

Briefly describe the project: (new source, modifications) (what the process is) (type controls proposed) (emissions expected, qualitative) (replacing what sources) (background information)

This batch mix asphalt plant operation (Source 01) is an existing air contaminant source that processes asphalt cement, crushed aggregates, and reclaimed asphalt pavement (RAP) material for producing hot mix asphalt (HMA). The asphalt plant involves the use of natural gas, No. 2 Fuel Oil, and No. 5 Fuel Oil as fuel sources in order to generate the necessary heat required to obtain the final HMA design for processing asphalt production. Baghouse emission control is a control device that involves an assembly of fabric filter bags used for controlling emissions while the asphalt plant is in operation. The asphalt plant does not operate without the use of the emission control device. Dunlap Stone agrees to a maximum production limitation of 144,000 tons during any period of 12 consecutive months. The asphalt plant operates as a conditional major source due to its potential-to-emit (PTE) of Particulate Matter (PM), Carbon Monoxide (CO), and Nitrogen Oxides (NO_x) exceeding the major source applicability threshold each at the time of application. The asphalt plant has facility-wide limitations for PM limitation of 21.91 tons, CO limitation of 33.80 tons, and NO_x limitation of 13.64 during any period of 12 consecutive months each under maximum operating conditions. These emission limitations allow the asphalt plant to operate below the major source applicability thresholds. This modification to the source is due to the increase in the design capacity based on current manufacturer and operating information.

RULES ANALYSIS

Title V ☐ Cond. Major ☒ Minor ☐ Source category listed in 1200-03-09-.01(4)(b)1.(i)? (PSD) Yes ☐ No ☒

Reason for PSD:	New source above ____ TPY	<input type="checkbox"/>	Sig. increase in ____ emissions	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NSPS:	40 CFR Part 60, Subpart ____	<input type="checkbox"/>	State Rule 1200-3-16-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 61, Subpart ____	<input type="checkbox"/>	State Rule 1200-3-11-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 63, Subpart ____	<input type="checkbox"/>	State Rule 1200-3-31-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

Other Applicable State Rules

PM Emissions:	1200-03-	<u>07</u>	-.	<u>.08(5)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	NO _x Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
SO ₂ Emissions:	1200-03-	<u>14</u>	-.	<u>03(5)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	Lead Emissions:	1200-03-	____	-.	____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
CO Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	____ Emissions:	1200-03-	____	-.	____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
VOC Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	____ Emissions:	1200-03-	____	-.	____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

Visible Emissions from	<u>Source</u>	not to exceed	<u>20</u>	% opacity per Method	<u>9</u>	Rule 1200-03-	<u>05</u>	-.	<u>01(1)</u>
Visible Emissions from	<u>Roads/Parking</u>	not to exceed	<u>10</u>	% opacity per Method	<u>1</u>	Rule 1200-03-	<u>08</u>	-.	<u>03</u>
Visible Emissions from	____	not to exceed	____	% opacity per Method	____	Rule 1200-03-	____	-.	____

Comments: _____

EMISSIONS REQUIREMENTS AND EMISSION SUMMARY

SOURCE NUMBER: 77-0020-01 **NONATTAINMENT:** **ATTAINMENT:** **X** **PERMIT NUMBER:** 979146 (479146)

PERMIT STATUS: NEW **X** **RENEWAL** **RELOCATION** **PREVIOUS PERMIT NUMBER:** **CONSTRUCTION:** **OPERATING:** 476977

IDENTIFY IF ONLY A PART OF THE SOURCE IS SUBJECT TO THIS REQUIREMENT	POLLUTANT	APPLICABLE REQUIREMENT(S): TN AIR POLLUTION CONTROL REGULATIONS, 40 CFR, PERMIT RESTRICTIONS, AIR QUALITY BASED STANDARDS	LIMITATION	MAXIMUM ACTUAL EMISSIONS			MAXIMUM ALLOWABLE EMISSIONS	
				UNITS	POUNDS / HOUR	TONS / YEAR	POUNDS / HOUR	TONS / YEAR
Drum Mix Asphalt	PM	1200-03-07-.08(5) 1200-03-09-.02(11)(a)	144,000 tpy in production		51.20	19.40	51.20	19.40
	SO ₂	1200-03-14-.03(5)	144,000 tpy in production		22.53	6.34	22.53	6.34
	CO	1200-03-07-.07(2) 1200-03-09-.02(11)(a)	144,000 tpy in production		102.40	33.80	102.40	33.80
	VOC	1200-03-07-.07(2)	144,000 tpy in production		2.10	0.59	2.10	0.59
	NO _x	1200-03-07-.07(2) 1200-03-09-.02(11)(a)	144,000 tpy in production		30.72	13.64	30.72	13.64
				Source of data based the application dated June 18, 2021, and the agreement letter dated July 12, 2021, from the permittee.				

IF THIS IS NOT A TITLE V SOURCE, IS THIS A SOURCE (SUBJECT TO NSPS OR NESHAPS) OR A SYNTHETIC MINOR SOURCE? IF THE ANSWER IS YES, EXPLAIN: The asphalt plant is a conditional major source due to its potential to emit (PTE) for Particulate Matter (PM), Carbon Monoxide (CO), and Nitrogen Oxides (NO_x) each exceeding the major source applicability threshold at the time of application. Allowable VOC emissions includes HAPs (0.55 tons). Emissions from insignificant sources are expected not exceed 5 tons and are added to the facility-wide PM emissions (21.91 tons), CO emissions (33.80 tons), and NO_x emissions (13.64 tons) during any interval of 12 consecutive months each. This is based on the application dated June 18, 2021, and the agreement letter dated July 12, 2021, from the permittee.

PERMITTING PROGRAM: JLH **DATE:** 11/19/2021