## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

P035557037

FACILITY: KAR NUT PRODUCTS COMPANY (Kar's Nuts)		SRN / ID: P0355
LOCATION: 1200 E 14 MILE ROAD, MADISON HTS		DISTRICT: Warren
CITY: MADISON HTS		COUNTY: OAKLAND
CONTACT: Harvey J. Loveland , Engineering Manager		<b>ACTIVITY DATE:</b> 10/28/2020
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY2021 scheduled inspection (on-site) of Kar Nut Products Company LLC ("Kar's Nuts" or "the company")		
RESOLVED COMPLAINTS:		

Kar Nut Products Company, LLC (Kar's Nuts) (P0355) 1200 E 14 Mile Road Madison Heights, MI 48071-1421

**Complaints:** Kar Nut Products Company LLC ("Kar's Nuts") was source of oily foul odor complaints about 2014. The odors were prevalent in 14 Mile, Dequindre and John R Roads area. While Kar's Nuts called it fragrance, the complainants called it foul odor.

On October 28, 2020, I conducted a level-2 **FY2021 scheduled inspection (on-site)** of Kar Nut Products Company LLC ("Kar's Nuts" or "the company"), located at 1200 E 14 Mile Road, Madison Heights, MI 48071-1421. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environment, Great Lakes & Energy, Air Quality Division (EGLE-AQD) administrative rules.

During the FY 2021 inspection, Mr. Harvey J. Loveland (Ph: 248-655-7580; Fax: 248-588-1902; Cell: 248-514-3721; E-mail: hLoveland@KarsNuts.com), Engineering Manager, assisted me.

Mike Zborowski (Cell: 313-727-0642 Ph: 248-588-1903 E-mail: mZborowski@karsnuts.com), Sanitation Supervisor and Safety Coordinator, separated from the company.

The purpose of the inspection was to follow up on the past complaints and, also, Kar's Nuts has not been inspected before.

Founded in 1933, headquartered in Madison Heights, Michigan, Kar's Nuts is a manufacturer of nut and snack products that are distributed nationally in the United States. Kar's Nuts has about 140 total employees across all its US locations and generates ≈\$120 million in sales (USD). There are 13 companies in the Kar Nut Products Company, LLC corporate family. Kar's Nuts is principally nut and trail mix snack business: cashews, almonds, peanuts, etc. Only oil roasting is performed and no dry roasting. Madison Hts. facility produces nuts for the entire country.

Two hot oil roasters (Heat & Control Inc. (1-800-227-5980) food processing and packaging equipment) are present. The nuts are placed on a conveyer belt of the roaster and a weir

curtain of hot (325 °F) sunflower oil is poured. Hot oily air flow is towards the nuts on the belt. As some oil is absorbed by the nuts (edible sunflower oil consumption) make-up sunflower oil is added. Each roaster has its own dedicated heat exchanger (HE) and furnace. i.e., in all, two HEs and two furnaces. Heat is transferred to the oil from hot natural gas combustion products using heat exchanger. Edible sunflower oil serves as heat transfer fluid. Each HE is served by 2 MM BTU per hour natural gas fired furnace. Hot oil circulating in the roasters transferring heat and some oil via weir oil curtain to nuts conveyed on the belt in an enclosed area. There are two (2) combustion and (6) ventilation stacks; in all (8) stacks.

Each roaster is equipped with a stainless-steel mesh mist eliminator; two mist eliminators in all are present. Each greasy SS mesh (2) is cleaned on a weekly basis. On a quarterly basis, all stacks (8 stacks: two combustion and six ventilation) are cleaned. Heat & Control Inc. designed both roasters and SS mesh mist eliminators. I asked Mr. Loveland to install additional finer mesh at downstream of the existing mesh mist eliminator to minimize outside ambient air odor.

Kar's Nuts produces about twenty (20) million pounds of roasted nuts. All materials and equipment must be approved by FDA for food safety.

## Conclusion

AQD has not receive any recent complaint. Previously (2014), AQD (Elmouchi) determined that Rule 201 permit was not required.

NAME ISM nanahalt.

DATE February 24, 2021 SUPERVISOR