

STATE OF OHIO
OFFICE OF THE INSPECTOR GENERAL

RANDALL J. MEYER, INSPECTOR GENERAL

**REPORT OF
INVESTIGATION**



**AGENCY: OHIO DEPARTMENT OF TRANSPORTATION
FILE ID NO.: 2012-CA00112
DATE OF REPORT: FEBRUARY 11, 2014**

The Office of the Ohio Inspector General ... The State Watchdog

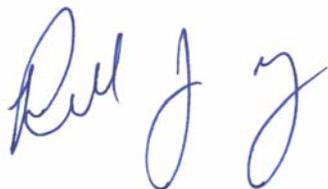
“Safeguarding integrity in state government”

The Ohio Office of the Inspector General is authorized by state law to investigate alleged wrongful acts or omissions committed by state officers or state employees involved in the management and operation of state agencies. We at the Inspector General’s Office recognize that the majority of state employees and public officials are hardworking, honest, and trustworthy individuals. However, we also believe that the responsibilities of this Office are critical in ensuring that state government and those doing or seeking to do business with the State of Ohio act with the highest of standards. It is the commitment of the Inspector General’s Office to fulfill its mission of safeguarding integrity in state government. We strive to restore trust in government by conducting impartial investigations in matters referred for investigation and offering objective conclusions based upon those investigations.

Statutory authority for conducting such investigations is defined in *Ohio Revised Code §121.41* through *121.50*. A *Report of Investigation* is issued based on the findings of the Office, and copies are delivered to the Governor of Ohio and the director of the agency subject to the investigation. At the discretion of the Inspector General, copies of the report may also be forwarded to law enforcement agencies or other state agencies responsible for investigating, auditing, reviewing, or evaluating the management and operation of state agencies. The *Report of Investigation* by the Ohio Inspector General is a public record under *Ohio Revised Code §149.43* and related sections of *Chapter 149*. It is available to the public for a fee that does not exceed the cost of reproducing and delivering the report.

The Office of the Inspector General does not serve as an advocate for either the complainant or the agency involved in a particular case. The role of the Office is to ensure that the process of investigating state agencies is conducted completely, fairly, and impartially. The Inspector General’s Office may or may not find wrongdoing associated with a particular investigation. However, the Office always reserves the right to make administrative recommendations for improving the operation of state government or referring a matter to the appropriate agency for review.

The Inspector General’s Office remains dedicated to the principle that no public servant, regardless of rank or position, is above the law, and the strength of our government is built on the solid character of the individuals who hold the public trust.



Randall J. Meyer
Ohio Inspector General



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RANDALL J. MEYER, INSPECTOR GENERAL

REPORT OF INVESTIGATION

FILE ID NUMBER: 2012-CA00112

SUBJECT NAME: Kokosing Materials Inc.

POSITION: State Contractor

AGENCY: Ohio Department of Transportation

BASIS FOR INVESTIGATION: Agency Referral

ALLEGATIONS: False Billing

INITIATED: October 19, 2012

DATE OF REPORT: February 11, 2014

INITIAL ALLEGATION AND COMPLAINT SUMMARY

On October 17, 2012, Ohio Department of Transportation (ODOT) District 3¹ engineering staff contacted the ODOT Office of Investigative Services regarding asphalt work being conducted on a project in Morrow County. Specifically, the ODOT staff suspected a Kokosing Materials Inc. (KMI)² employee had exchanged asphalt cores³ used for density testing with cores extracted from a previously tested location. This was a concern to ODOT as density testing is used to determine if a payment penalty will be applied to a vendor if the density does not fall within an acceptable range as outlined in the vendor contract. The ODOT Office of Investigative Services immediately contacted the Office of the Ohio Inspector General and an investigation was opened on October 19, 2012.

BACKGROUND

Ohio Department of Transportation

The Ohio Department of Transportation is responsible for overseeing and maintaining the state's highways and rail, aviation, and public transportation systems. The department has 12 districts along with a central office located in Columbus, Ohio. The director, who serves as the agency's chief executive officer, is appointed by the governor and confirmed by the Ohio Senate. The majority of ODOT's funding comes from federal and state taxes on motor fuels.⁴

The Ohio General Assembly enacted Ohio Revised Code §121.51, effective July 3, 2007, which created the deputy inspector general of the Ohio Department of Transportation. This statute designated the position "shall investigate all wrongful acts or omissions that have been committed or are being committed by employees of the department" and provides the deputy inspector general the same powers and duties regarding matters concerning the department as those specified in sections 121.42, 121.43, and 121.45 of the Ohio Revised Code.

¹ District 3 covers Ashland, Crawford, Erie, Huron, Lorain, Medina, Richland, and Wayne counties.

² KMI is a subsidiary of Kokosing Construction Company.

³ According to ODOT's Construction Manual of Procedures (2009), a core is "a cylinder of concrete cut from pavement with a hollow drill. Cores are four inches in diameter and are used to check the thickness and strength" of the material used.

⁴ Source: <http://www.dot.state.oh.us/>

Morrow County Project

On September 23, 2011, ODOT received three bids for a proposed widening project of Interstate Route 71 (I-71) in Morrow County (project number 3011-11). The widening would include 7.3 miles of I-71 from a point just south of State Route 95 and end near the Richland County line. Kokosing Construction Company received the contract with a winning bid of \$42,036,977 and listing Kokosing Materials Inc. as one of the subcontractors on the project. The project was expected to be completed by October 15, 2013.

Asphalt

Asphalt is a combination of aggregate (various types of rock and sand) and a crude oil by-product known as bitumen, which is proportionally mixed at high temperatures at a hot-mix asphalt facility. Asphalt is considered a flexible pavement that is prone to air voids and varying densities, which can affect its quality and effectiveness when applied to roadways. A mix that is very high in density (98 percent or above) is susceptible to long-term rutting, which refers to a deformation, depression, and/or trenching of the asphalt. Conversely, a mix that is very low in density (89 percent or below) negatively affects the durability of the road, causing cracking and potholes.

Asphalt Specifications

The ODOT Construction and Material Specification Manual, Item 446 Asphalt, establishes specific requirements for asphalt concrete in regard to mixture, paving, and testing. This section obligates contractors to develop specific job mix formulas within set limits for both composition and characteristics of the mixtures and requires the mixtures to be confirmed by laboratory tests. This is accomplished through core sampling. From the asphalt specifications established by ODOT, the vendor is paid by ODOT using a graduated payment system which is based on the quality and density of the asphalt:

- If the density of the asphalt is too low, the contractor forfeits a percentage of the contract amount.
- If the density meets the designated standards, the contractor is paid the full contract amount.

- If the asphalt exceeds the density expectations, the contractor is awarded with bonus compensation.

Core Sampling Process

Core sampling involves the drilling and extracting of a cylindrical piece of asphalt from a pavement area. The cylindrical piece is then subjected to laboratory testing to determine its density.

According to ODOT's Construction and Materials Specification Manual (as of January 1, 2010), Item 446.05, contractors are to take 10 core samples for testing by ODOT to determine if the density of the material used meets ODOT's specifications. The samples are to be extracted within 48 hours for each lot. A lot "consists of an area of pavement placed during a production day, including the shoulders." The ODOT engineer divides the lots into five equal sub-lots and two random samples are to be extracted from each sub-lot location. Contractors are not to be notified until the end of the day as to where the samples will specifically be extracted. Contractors are also able to take "sister" core samples for their own testing. These "sister" cores are to be extracted "longitudinally from and within four inches of the random core."

Pursuant to ODOT's Construction Inspection Manual of Procedures (2009), section 446, ODOT engineers are to physically mark the core locations using aerosol paint. The manual recommends the engineer mark the middle of the area from which the sample is to be extracted with a small circle and an "X," or other marking. Contractors are to then cut the core from within the circle, ideally with the "X" or other marking on the top center of the core. The sample number, corresponding to the location numbers, is marked on the sample by the contractor.

As a practice, ODOT typically uses core boxes to organize extracted core samples. A core box is divided into 10 compartments. This design is used to protect the individual cores for damage and to ensure the location from which the samples were pulled. For example, core sample one is inserted into compartment one, core sample two is inserted into compartment two, and so forth. The samples and the core box are later handed over to ODOT once all the samples are extracted from the lot or by the end of the production day. The ODOT project engineer is responsible for

delivering the samples at the end of the production day to the district testing facility for asphalt density testing.

INVESTIGATIVE SUMMARY

After receiving the complaint from the ODOT Office of Investigative Services, the Office of the Ohio Inspector General (OIG) traveled to the construction site in Morrow County on October 19, 2012. Investigators observed the locations where the core samples had been taken by Kokosing Materials Inc. employee Steve McKenzie on October 17, 2012. According to ODOT Inspector Sue Walters, she had laid out 10 locations for core samples to be taken which were marked with silver paint and were on the paving section completed the previous night, referred to as Lot 9.

Walters indicated she was also monitoring ongoing paving work and left the area after marking the 10 core locations. When she returned, cores 1 thru 4 had already been extracted by McKenzie and had been placed into the core box. Walters then observed McKenzie extract cores 5 and 6 before he left to drive to the restroom with the core box in the bed of his truck. Upon McKenzie's return, Walters noticed differences in cores 5 and 6, which had the ODOT paint markings covered over. When asked to explain the use of a marker to cover the original paint markings, McKenzie replied he needed to mark out the paint to put a better number on the cores. Walters also observed that core 4's paint markings did not appear to correspond to the markings remaining on the pavement. Walters observed the extraction of cores 7 thru 10 and then called the ODOT project engineer to relay her concerns.

The Office of the Inspector General observed as the sample cores in question (cores 4, 5, and 6) were placed back into the holes from which they were allegedly extracted. It was evident the cores did not originate from those particular locations. In addition, cores 1 and 2 appeared to have been extracted from the opposite locations than what was indicated on the sample. A subsequent visit to the construction site on November 21, 2012, was able to determine where the cores in question might have originated.

The following are pictures of the cores in question:

Core 1



Core 1 is shown fitting into the extraction site for core 2 based on the paint markings.

Core 2



Core 2 is shown fitting into the extraction site for core 1 based on the paint markings.

Core 4



This picture shows core 4 allegedly extracted by McKenzie in Lot 9 fits into the location of core 8 in Lot 8. Paint markings also appear to correspond.

Core 5



This picture shows core 5 does not match the Lot 9, core 5 extraction site.

Core 5



This picture shows the same core 5, but this time the sample is shown fitting into Lot 8, core 5's location.

Core 6



This picture shows core 6 fitting into an extraction area in Lot 9 but near where the extraction site for core 1 is located.

The Office of the Ohio Inspector General observed several locations on Lot 9 where it appeared additional core samples had been extracted by KMI. These locations were not within the 4 inches of the main core location sites as marked by the ODOT inspector. The ODOT engineers determined there was no pattern as to where or when these samples had been extracted. It could also not be determined if the samples were intended to be “sister” samples of the main core locations.

On October 18, 2012, prior to the visit by the Office of the Ohio Inspector General, ODOT extracted 10 “sister” cores within the four-inch requirement from Lot 9. These 10 “sister” cores as well as the 10 main cores were taken by the Office of the Ohio Inspector General to the ODOT Central Laboratory Facility in Columbus for testing. While the samples met the asphalt specifications, the ODOT testing engineer determined comparisons between the main and “sister” samples were suspicious. The testing engineer explained if the density between the original and “sister” samples differed by 0.5 percent or more, the likelihood that they were extracted from different locations is highly probable. The differences between six main and “sister” core samples as identified by ODOT were as follows:

Density Differences between Samples

Sample #	Percentage Difference
3	1.8%
4	0.6%
5	2.7%
6	4.9%
7	0.8%
8	1.1%

McKenzie and Steve Thompson, McKenzie’s supervisor, were interviewed by the Office of the Ohio Inspector General on November 27, 2012. Also present during the interview was Mike Currie, general counsel for Kokosing Construction Company. During the interview, Currie voiced some concerns and the Kokosing employees left the room. Several minutes later Currie returned and stated McKenzie and Thompson would be obtaining their own legal counsel and the Office of the Ohio Inspector General terminated the interviews.

The Office of the Ohio Inspector General made numerous attempts to arrange interviews with McKenzie and Thompson through their legal counsel. On June 28, 2013, investigators were informed the employees would not be made available for interviews.

CONCLUSION

The Ohio Department of Transportation expressed concerns regarding the core sampling process related to a road construction project in Morrow County. ODOT employees believed a Kokosing Materials Inc. employee, Steve McKenzie, had switched asphalt core samples extracted from Lot 9 of the project. Contractors are paid on a graduated pay schedule based on the density of the asphalt tested. Earlier in the same project, core samples tested by ODOT found Kokosing did not meet the density requirements and forfeited a percentage of the contract amount. Samples taken on June 26, 2012, and July 12, 2012, were at 88 percent density and based on the amount of asphalt in the contract forfeited \$8,340 and \$7,440 respectively, for a total of \$15,780.

Switching core samples is enough of a concern to ODOT that they have outlined the concern in their Construction Inspection Manual of Procedures, stating:

There have been isolated incidents where cut cores have been “switched out” with other cores that presumably would provide better density test values. Project personnel must provide thorough oversight of the core cutting operation such that the cores being testing for payment are from the locations selected by the project through the random selection process. Substitution of cores by cutting in other locations or by replacing cut cores with others is absolutely prohibited and cannot be tolerated.

Current practice by ODOT is for inspectors or engineers to observe the taking of the core samples but does not require the employees to observe the placing of the samples into the core sample box. The box itself is also not secure. There is no evidence tape or other tamper-resistant measures are in place to ensure once all the cores are placed into the boxes, they have not been replaced prior to testing.

Inspection of the construction site and the cores extracted by McKenzie noted several variances. The core marked “1” was actually extracted from the core 2 location as evidenced by the paint

markings, and vice versa. Other cores marked has having been extracted from Lot 9 were either taken from Lot 8 or at another location within Lot 9.

Testing of the questionable cores compared to “sister” cores extracted by ODOT the following day found the asphalt met the density requirements. However, ODOT found that the main cores had a significant composition difference from the “sister” cores. This would mean that the main cores could not have come from the same locations as the “sister” cores.

Accordingly, the Office of the Ohio Inspector General finds reasonable cause to believe a wrongful act or omission against Kokosing occurred in this instance.

Additional core samples had been taken by Kokosing in various locations throughout Lot 9. ODOT requirements state that if “sister” cores are to be taken by the contractor they are to be within four inches of the original marked location. If Kokosing intended these extractions to be sister cores, they did not meet these requirements. These cores were not submitted to ODOT for testing and it is unknown why Kokosing took these extra samples.

Accordingly, the Office of the Ohio Inspector General finds reasonable cause to believe a wrongful act or omission occurred in this instance.

RECOMMENDATION(S)

The Office of the Ohio Inspector General makes the following recommendations and asks the Ohio Department of Transportation to respond within 60 days on how the recommendations will be implemented. The Ohio Department of Transportation should:

- 1) Determine if the contract with Kokosing Construction Company allows for any remedies regarding the submission of the suspect core samples to ODOT for testing.
- 2) Revise their procedures to ensure that ODOT inspectors and/or engineers not only physically observe the extraction of the cores but that they physically observe the placement of the cores into the core box.

- 3) Ensure the core box is secured with evidence tape or another tamper-resistant method after the cores have been placed in the box.
- 4) Consider revising the policies and procedures regarding the taking of additional core samples, not considered “sister” cores, by the construction company, including the possibility of prohibiting such action or specifying the locations where such extractions can occur.



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RANDALL J. MEYER, INSPECTOR GENERAL

NAME OF REPORT: Ohio Department of Transportation

FILE ID #: 2012-CA00112

KEEPER OF RECORDS CERTIFICATION

This is a true and correct copy of the report which is required to be prepared by the Office of the Ohio Inspector General pursuant to Section 121.42 of the Ohio Revised Code.

Jill Jones
KEEPER OF RECORDS

CERTIFIED
February 11, 2014

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