



Clean Water Act Section 404: Site Visit/Case Development

For inspections authorized pursuant to Clean Water Act sections 308 and 404 (33 U.S.C. §§ 1318 and 1344)

This report includes only factual information gained by documentation, onsite observations, and/or onsite interviews.

Inspector Name(s)	Delia Garcia, Ph.D.	Time In	9:23 AM	Start Date	12/9/2021
		Time Out	12:07 PM	End Date	12/9/2021
Inspector's Organization	U.S. Environmental Protection Agency, Region 7				
Organization Requesting Inspection (if different)					
Inspection Type	Evaluation	Inspection Status	Original		
Site Name	Partridge Sand and Gravel				
Site Address*	29182 State Highway 413				
City*	Galena	County*	Stone	State*	MO
				Zip Code*	65656
Mailing Address*	P.O. Box 1376				
City*	Kimberling City	County*	Stone	State*	MO
				Zip Code*	65686
Latitude*	36.794050		Longitude*	-93.460810	
Estimated Size of Site (acres)	Approximately 78 acres	Is there a home on the site?	☐ Yes ☒ No		
Inspector Signature	DELIA GARCIA Digitally signed by DELIA GARCIA Date: 2022.02.02 09:11:12 -06'00'			Date	
Supervisor Signature	NICOLE MORAN Digitally signed by NICOLE MORAN Date: 2022.02.02 09:28:59 -06'00'			Date	

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Site Name	Partridge Sand and Gravel	Start Date	12/9/2021
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Inspection Purpose	Initial site visit		
Opening Conference			
☐ Presentation of Inspector Credentials Name and Title (Use N/A if owner/operator not available to join the inspection) N/A			
☐ Opening Conference Name of person authorizing access if applicable N/A			
Notes from Opening Conference No opening conference took place, Mr. Partridge was out of town.			
☒ Access Issues if Any Describe Conducted inspection under the impression that the Missouri Department of Natural Resources (MDNR) had notified the property owner that EPA would also be conducting an inspection. At site arrival MDNR informed us that the owner would not be present during the inspection but that he had been notified of inspections and was okay with us conducting inspections. It was not until the end of the inspection that MDNR representative informed us that he had not told the owner that personnel from the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (COE) would also be present.			
Inspection Observations and Sample Collection			
Site Owner/Site Operator/Responsible Party (Name, title and contact information) Partridge Sand and Gravel Inc./Westley Partridge, President, PO BOX 1376 Kimberling City, MO 65696, Wespartridge@gmail.com			
Additional Persons Present at Inspection Rocky Presley, Project Manager, U.S. Army Corps of Engineers, Little Rock District Chris Ray, Environmental Specialist, MDNR Bill Zeaman, Industrial and Metallic Minerals Section Chief, MDNR Ashely Harrison, Environmental Specialist, MDNR Kristi Savage-Clarke, Water Pollution Compliance and Enforcement Section Chief, MDNR Erin Meyer Heidolph, Environmental Specialist, MDNR			
General Site Characteristics (layout of property, etc.) The property owned by Partridge Sand and Gravel, Inc. encompasses approximately 78 acres and is located in Section 7, Township 24 North, Range 23 West in Stone County, Missouri (see Attachment 1). The quarry is bordered on the north by Railey Creek and a railroad embankment, on the east by private property, and on the south and east by Highway 413. Railey Creek enters the site from the east and flows in a northwestern direction through the site before flowing into the James River. The James River enters Table Rock Lake, a reservoir on the White River.			

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Partridge Sand and Gravel constructed a dam within Railey Creek just downstream of a diversion channel they had excavated to divert water from Railey Creek to feed their gravel wash plant (Attachment 3). It had been partially breached, and based on vegetation growing on it had been in place since at least this growing season. The dam spanned across the width of the channel, and was approximately 50 feet long and width varied from 2-4 feet. The dam was constructed from gravel, sediment, and concrete debris.

A second dam approximately 825 feet upstream from the first dam was constructed across Railey Creek (Attachment 3). This dam had also been partially breached, but appeared to be newer in construction based on the equipment tracks that were clearly visible on gravel and sediment (Attachment 2, photos 9, 11, and 18). The dam's width ranged from 4-8 feet, and the dam spanned the width of the channel.

Gravel stockpiles were also present within Railey Creek (Attachment 2, photos 9, 11, 18, and 19)

Purpose and Need for Discharge of Dredged and/or Fill Material

Facility representatives were not present, so information on purpose or need was not provided. The downstream dam, however, might have been built to assist with the diversion of water flow into the diversion channel that feeds the gravel wash plant.

Site Overview (Past inspections, site description, permits, etc.)

Partridge Sand and Gravel has a land reclamation permit from MDNR which authorizes both in stream and open pit mining along Railey Creek. They had an industrial stormwater permit (MOG500048) up until April 8, 2019 when it was terminated by MDNR for failure to maintain compliance with the Missouri Clean Water Law and the Missouri Clean Water Commission Regulations. Partridge Sand and Gravel had been issued a land disturbance permit for a topsoil removal operation, but the permit expired and was not renewed.

MDNR has conducted multiple land reclamation and water protection inspections in the past. Prior to this inspection, the last MDNR water protection inspection was conducted on October 9, 2019. During that inspection, MDNR determined that Partridge Sand and Gravel was operating their wash plant which intermittently discharges into Railey Creek without an industrial stormwater permit. The prior land reclamation inspection was conducted on September 28, 2021 by MDNR. Multiple violations were noted including stockpiling of gravel within the stream, excavating gravel below the water level, not maintaining required buffer between excavation area and water's edge, and not confining vehicles or equipment to removal sites or existing crossings.

Partridge Sand and Gravel has had a long history of placing fill material within Railey Creek and altering its course. On July 16, 2009, MDNR inspector noted that the facility had built three stream crossings and a dam within Railey Creek. During a re-inspection of the facility on September 25, 2009, the MDNR inspector noted that the two stream crossings and a dam that had been placed within Railey Creek had been washed away due to high flows. He also noted that they had excavated through a section of the stream bank in an effort to re-route the flow into their sediment basin to augment the water they use for gravel washing purposes. During its March 15 and April 7, 2017 industrial stormwater inspections MDNR noted two dams had been installed within Railey Creek. MDNR's land reclamation inspections have also documented stockpiling of gravel piles within Railey Creek on multiple occasions.

MDNR shared two documents that detail the migration of Railey Creek over the years (Attachments 4 and 5). According to their measurements, the length of Railey Creek as it flows through the site decreased from 2670 feet in 1997 to 1870 feet in 2019. A loss of 800 linear feet, which they attribute to channelization that occurred as a result of their gravel mining practices.

Scope of Inspection (Areas inspected or not inspected)

Field observations were made of Railey Creek from where it enters the site along the east property line to the western most edge of the sediment basin. We also toured the area around the gravel wash plant, the sediment traps that capture the initial discharge from

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the gravel wash plant, the diversion channel from Railey Creek, the path of the gravel wash water into the sediment basin, and the potential discharge path from the basin into Railey Creek.			

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Environmental Conditions (e.g., wind, rain, smoke, dust, temperature, snow)			
Ambient temperature was in the 60s and sunny.			
Field Work Conducted			
FINDINGS AND OBSERVATIONS This was a joint inspection with staff from the MDNR Water Protection Program, the MDNR Land Reclamation Program, and the U.S. Army Corps of Engineers. The purpose of this inspection was to determine compliance with Section 404 of the Clean Water Act. This report presents my findings and observations made during the inspection. The other agencies have or will be reporting their findings and observations in their own reports. Following introductions we agreed to begin our observations on the east side of the property where Railey Creek enters the site. We crossed Railey Creek near a dam located just downstream of a diversion channel (Attachment 2, photos 2, 5, 6, 23). MDNR staff indicated that it had been built to force water into the diversion channel that flows into the sediment basin (water in the sediment basin is utilized to run the gravel wash plant). This dam was noted during an MDNR land reclamation inspection on September 28, 2021. The dam spanned across the width of the channel and was approximately 50 feet long. The dam's width varied from 2-4 feet. The dam was constructed from gravel, sediment, and concrete debris. Vegetation was growing on the dam and the dam had been partially breached. A schools of fish was observed swimming just upstream of the dam. As we continued walking toward the east property line we also came across areas within Railey Creek where heavy equipment tracks were visible within stream (Attachment 2, photos 7-8). The stream bed gravel in the vicinity was completely covered in sediment. We also saw gravel being stockpiled within the stream (Attachment 2, photos 7-9, 11, 18-19). Gravel stockpiles within Railey Creek crated a second dam just west of the property line (Attachment 2, photos 8-9, 11, 18). This dam also spanned the width of Railey Creek, but water was flowing through an opening approximately five feet in width located towards the right bank of the stream. Dam width ranged from 4-8 feet across. Gravel within the stream bed located downstream of this dam was completely covered in sediment. We continued walking towards the property line, and noted an immediate change in the morphology of the stream. The stream width at this location was approximately 10-15 feet wide and the stream bed was free of sediment deposits (Attachment 2, photo 13). The stream bed consisted of larger sized gravel, almost cobble sized. Gravel mining activities has caused a headcut to migrate upstream, Railey Creek is deeply incised and the upland banks are badly eroding (Attachment 2, photo 13). We then turned around and headed downstream along Riley Creek, stopping to take a closer look at the water quality issues caused by the heavy machinery that had recently been in the stream. Sediment fines were observed migrating downstream from the area and contributing to the sediment deposition on the stream bed (Attachment 2, video 14). MDNR personnel expressed their concern with all the water quality issues given that Railey Creek flows into the James River, which they informed me supports a cold water sports fishery. As one of the MDNR inspector's made her way downstream, she created a sediment plume behind her (Attachment 2 photo 19). After completing our observations upstream, we then headed towards the gravel processing area and MDNR pointed out the gravel wash water pathway as it makes it way through two sediment traps (Attachment 2, photos 25-26) and then overland into the diversion channel which flows into the sediment basin (Attachment 2, photo 31). The gravel wash plant was not in operation, but MDNR indicated that it had been recently used based on gravel stockpiles and saturated soil in the sediment traps. We walked over to Railey Creek and noted an area located just north of the sediment basin in which gravel excavation had recently taken place within the stream channel (Attachment 2, photo 33). Heavy equipment tracks where visible in the stream, and the			

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stream bed was covered by a layer of sediment deposits. Just past this area, we also noted an area in which larger riprap had been placed for bank stabilization purposes below the railroad tracks (Attachment 2, photos 34, 36). The area encompassed approximately 120 linear feet of the right stream bank. Based on its location, Rocky Presley with the U.S. Army Corps of Engineers speculated that the work was probably done under the direction of the railroad. The work could have been done under a Section 404 Clean Water Act Nationwide Permit 13 which authorizes bank stabilization if certain conditions are met.

Finally, we headed over to the western edge of the sediment basin to take a look at the berm surrounding the sediment basin. The berm has a large scour hole that has formed in the northwest corner, and there is concern that heavy rain/flood waters could further compromise the scour hole and lead the berm to fail allowing sediment to discharge into Railey Creek (Attachment 2, photo 37).

Closing Conference

Documents Received and/or Requested During the Inspection

N/A

Compliance Assistance Provided (If any)

Facility representative not present during inspection.

Observations Relayed to Site Owner/Operator

Facility representative not present during inspection.

Actions Taken by Owner/Operator During the Inspection (If any)

N/A

Potential Issues of Concern Including Regulatory Citations

Section 301(a) of the CWA, 33 U.S.C. 1311(a), prohibits the discharge of pollutants except in compliance with, inter alia, Section 404 of the CWA, 33 U.S.C. 1344. Section 404 of the CWA, 33 U.S.C. 1344, specifically requires a person to obtain a permit from the Secretary of the Army acting through the Chief of Engineers, commonly referred to as the United States Army Corps of Engineers, for any discharge of "dredged or fill material" into the "navigable waters" of the United States. Partridge Sand and Gravel, Inc. did not apply for or receive a Section 404 permit prior to the placement of fill within regulated waters. The discharge of fill material into Railey Creek was done without authorization.

Attachments*

☒ Maps and Sketches

☒ Photographs (including location) and Photo Log

☒ Other (SSIP, Wetlands Delineation Forms, etc.)

Attachment 1: Maps (3 pages)

Attachment 2: December 09, 2021 Photo Log and Photographs (38 pages)

Attachment 3: Facility Layout (1 page)

Attachment 4: Stream Migration 1997 to 2019 (15 pages)

