

REPORT OF CONSTRUCTION STORMWATER COMPLIANCE EVALUATION INSPECTION (CEI)

**Twin Oaks Subdivision
Near Ranchero Rd and Butterfield Rd
Hudson, IA 50643
NPDES NO: IA32925-32629**

October 24-27, 2022

**by U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7: Enforcement and Compliance Assurance Division (ECAD)**

INTRODUCTION

I performed a Compliance Evaluation Inspection (CEI) at the Twin Oaks residential development in Hudson, Iowa on October 24 through 27, 2022. The inspection was authorized by Section 308(a) of the Federal Water Pollution Control Act, as amended. I conducted this inspection in accordance with the procedures described herein and followed all applicable EPA Region 7 Standard Operating Procedures (SOPs). This narrative report presents the findings of the inspection.

PARTICIPANTS

Echo Development (also associated with Panther Builders, Cedar Falls):

Kevin Fittro, Operator (319) 768-7235 (not present during inspection but spoke on the phone)

Email: kevin.fittro@pantherhomebuilders.com

Mason Williams, Site Contact (815) 821-5065

Email: mason.williams@pantherhomebuilders.com

U.S. Environmental Protection Agency (EPA):

Hannah Lewis, Life Scientist (Lead Inspector) (913) 551-7679

Email: lewis.hannah@epa.gov

Caitlin Dix, Physical Scientist (913) 551-7109

Email: dix.caitlin@epa.gov

INSPECTION PROCEDURES

I contacted Kevin Fittro on October 25, 2022. He stated on the phone that he was out of town, but Mason Williams could meet me. I called Mr. Williams and scheduled to meet him at 2:30pm that day. While discussing the Storm Water Pollution Prevention Plan (SWPPP) and related documents, Mr. Williams stated he did not bring those items with him but would send them electronically. We completed the site tour the following day at approximately 5:30pm.

Prior to entering the site, I conducted a visual reconnaissance of the facility, searching for areas of concern observable from the public roads such as discharges, drainage patterns, flow directions, distance and direction of nearest perennial waters, visual condition of perennial

waters, facility location, and layout on October 24, 2022. During the reconnaissance, I noted dirt work being conducted at the east ditch while it was raining (photo 1).

Twin Oaks Subdivision is located near the corner of Butterfield Road and Ranchero Road in Hudson, Iowa. Storm water generally flows east to a ditch along the west side of Butterfield Road. This ditch flows north to a detention basin which is owned by the City of Hudson. The City of Hudson does have a municipal separate storm sewer permit. Discharge from the detention basin flows east through a culvert under Butterfield Road to an unnamed tributary. The unnamed tributary joins another unnamed tributary before reaching Black Hawk Creek. The unnamed tributaries are designated as intermittent streams by the United States Geological Survey (USGS). The USGS has designated Black Hawk Creek as a perennial stream. The detention basin outfall is approximately 1.13 miles from Black Hawk Creek. Photos were taken on October 27, 2022, at the detention basin outfall and further downstream at the unnamed tributary crossing at Dewitt Road (photos 34-36). The detention basin was not discharging at the time of the inspection.

Upon arrival, I presented my identification and explained the scope and purpose of the inspection. I also informed Mr. Williams that I would be performing a complete Construction Stormwater inspection. I explained to Mr. Williams that I would be conducting the construction storm water inspection under the authority of Section 308(a) of the Federal Water Pollution Control Act to evaluate the facility's compliance status with the requirements of the Clean Water Act and with the National Pollution Discharge Elimination System (NPDES) permit. The Iowa Department of Natural Resources (IDNR) authorized the discharge of storm water from the site by approving the Notice of Intent (NOI) for NPDES General Permit No. 2 on May 8, 2018 (attachment 5). I explained that the inspection would consist of a review of required records, SWPPP, and a visual inspection of the facility. I stated that I would document my findings and observations by making photocopies, taking photographs and/or videos, and obtaining statements from facility staff. At that time, Mr. Williams stated he did not bring any documentation with him but would provide it electronically.

I completed the visual inspection on October 26, 2022. I summarized the findings of the visual inspection with Mr. Williams during the exit briefing of the inspection. A Notice of Preliminary Findings (NOPF) was given to Mr. Williams during the exit briefing. I realized I did not include a pertinent finding on the October 26th NOPF, so a second NOPF was emailed to Mr. Williams and Mr. Fittro on October 27, 2022, along with a copy of the first NOPF (attachment 3). See attachment 2 for the digital photographs, photo log, and photo locations map.

FACILITY DESCRIPTION

Facility Operations

The Twin Oaks Subdivision is a residential home development located near the intersection of Butterfield Road and Ranchero Road in Hudson, Iowa. The development covers approximately 62 acres. At the time of the inspection, homes along Ranchero Road were complete and had established sod. Home lots on Post Oak Drive west of Fast Lane were stabilized with vegetation with no active construction. At least half of the lots along Post Oak Drive (east of Fast Lane) and Willow Oak Drive have either finished structures or concrete foundations in place. The three newest roads (Twin Oaks Ln, Live Oak Dr, and unnamed road) were being built between Willow

Oak and Ranchero. This entire area between Willow Oak and Ranchero was disturbed except the roads which had base-layer aggregate (photos 13-27). According to Mr. Williams, lots are either built for Panther Home's clients or sold to other developers. No documentation was provided by Mr. Williams or Mr. Fittro to show transfer of permit coverage or agreement with a co-permittee.

As stated previously, storm water from the site generally flows east via storm sewers or surface runoff to a city-owned detention basin or to the Butterfield Road ditch which flows north to the city-owned detention basin. Storm sewer infrastructure was installed and complete on Post Oak and Willow Oak Drives (photos 3-5, 7-9). Major storm sewer infrastructure along the two new roads like culverts and drainageways had been constructed, but inlets along the road had not been installed (photos 13-27). During the pre-inspection reconnaissance on October 24, 2022, I noted a front-end loader moving soil downslope towards and around a culvert outfall at the ditch along Butterfield Road while it was raining (photo 1).

Regulatory History

Twin Oaks Subdivision was originally permitted for an approximate 67-acre area under IDNR's NPDES General Permit No. 2 authorization number IA32925-32629. Aerial imagery shows the entire site disturbed in early 2019. Historical aerial imagery also shows evidence of poor site management similar to the findings in this report. In the summer of 2022, Matthew McGeough purchased a roughly 5-acre area in the northeast corner of the site to build Twin Oaks Apartments complex. Mr. McGeough obtained coverage under IDNR permit IA41370-40997 on July 1, 2022, for the 5-acre area. So, the Twin Oaks Subdivision now includes about 62 acres. At the time of the inspection, approximately 28 acres was disturbed. The remaining acreage was stabilized with structures, roadway base material, asphalt, or well-established vegetation.

FINDINGS AND OBSERVATIONS

The following findings were noted during the visual inspection and record review. A summary is provided in the NPDES Storm Water Worksheet (Construction) (attachment 1). The visual inspection findings were discussed with Mr. Williams during the exit meeting. The weather conditions at the time of the inspection were partly cloudy and windy (45°F). The most recent rain event was approximately one inch on October 24, 2022, according to the High Plains Regional Climate Center's CLIMOD website. It was raining during the pre-inspection visual reconnaissance on October 24, 2022.

Storm Water Pollution Prevention Plan (SWPPP)

The NPDES permit requires the facility to develop and implement a SWPPP. I requested a copy of the SWPPP, SWPPP site inspections, and any other related documentation in-person with Mr. Williams on October 25 and 26, 2022 and via email on October 25, 2022. During the inspection, Mr. Williams showed me only a copy of a site map that was marked up from an inspection conducted by City of Hudson and stated that he would provide the requested documents (NOPF 4). However, I did not receive any documents from Mr. Williams or Mr. Fittro. As an additional attempt to obtain records, I sent an email to Mr. Fittro requesting documentation on November 23, 2022. Documents were sent electronically by Mr. Williams on November 30 and December 1, 2022 (NOPF 7).

I reviewed the SWPPP for completeness and noted that the SWPPP is incomplete (attachment 4) (NOPF 4 & 10). Portions of the SWPPP have template blocks that are blank. The SWPPP does not identify the site contact, contractors/subcontractors, or their contact information. The SWPPP does not include a signed certification statement. The site map does not include the locations of best management practices (BMPs) included in the SWPPP that are to be implemented or installed.

The SWPPP has not been updated since May 2018. The site contact, contractors, and subcontractors are missing, while the site map and stated project area are inaccurate (NOPF 9).

Site inspections were not conducted every seven days which is required by the NPDES permit (NOPF 6). Site inspections were not conducted between October 25, 2019 and April 21, 2021. Site inspections were also not conducted in 2022 during the following days: June 23, July 21, July 28, August 11, August 25, August 31, September 15, and September 29. Many of the site inspection reports during 2022 only cover BMPs on specific residential lots, not the entire site.

Erosion and sediment control BMPs included in the SWPPP were not implemented (NOPF 8). Stockpiles were not covered or stabilized within 14 days of inactivity. Also, once a stockpile was established, silt fencing was not installed immediately. Storm sewer inlet protection devices were not installed immediately after the storm sewer was installed allowing sediment and construction waste to enter the sewer (photos 3, 4, 7, 8, 32). Temporary and permanent erosion control measures were not maintained in good working order (photos 5, 9-11, 13, 17, 28, 33).

Good housekeeping practices were not implemented according to the SWPPP requirements (NOPF 8). Trash and construction debris were not deposited into a dumpster but instead were discarded on the ground (photos 4, 12, 28). Construction waste and trash were also found inside storm sewer inlets (photos 6, 8). Concrete was discarded on the ground at one residential lot with no BMPs to minimize contact with storm water (photo 2).

Other Observations

During the inspection, I observed activities across the site. BMPs were not installed or implemented according to the SWPPP or NPDES permit requirements (NOPF 8 and NOPF 1). Many areas needed pollution control measures or maintenance to the measures that were present. Evidence of pollutant deposits in the storm sewers was also noted (NOPF 3).

Pollution control measures were not present on all the home lots (NOPF 1). Photos 2 and 29 show a lack of measures to prevent pollutant discharges into the road. Photos 3, 4, 7, and 8 show unprotected storm sewer inlets along Post Oak Drive and resulting construction waste and sediment deposits in the storm sewer. Photo 32 shows an unprotected inlet on Willow Oak Drive with debris on top of the grate. Also, storm inlet protection measures that were present needed maintenance or replacement (photos 5, 9, 33).

Two trash dumpsters were present on Willow Oak Drive. Site personnel were not utilizing a method to minimize exposure of construction waste and trash to precipitation and storm water; instead, construction waste and trash were on the ground (photos 6, 28) (NOPF 2). Also, construction waste such as detached or degraded silt fencing and straw wattles were on the ground, not disposed of properly (photos 10-13) (NOPF 2).

Large areas of unstabilized ground did not have sediment or erosion controls (NOPF 5). Photo 12 shows an access road about 140 feet long between the home lots and Butterfield ditch. The sediment along the access road has eroded away from the sod stabilized yard creating a noticeable ledge. Along the west boundary, approximately 0.3 acres was unstabilized and covered with either very sparse vegetation or unsprouted seed (photos 32 & 33). Runoff from this 0.3-acre area flows northeast to a well vegetated drainageway, but there were not any structural controls within or around the unstabilized area. Land disturbance activities along the south side of Live Oak Drive (between Live Oak Drive and Rancher Rd) did have effective silt fencing and some vegetated strips along the south and west boundaries; however, stabilization efforts or structural controls within the unstabilized area were not present (photos 14, 20, 22-24, 27). Many of the pollution controls that were present downslope of the unstabilized soils needed maintenance or replacement (photos 13, 17-19). Also, stabilization efforts such as tarp covering or mulching have not been taken to stabilize the stockpiles (photos 13, 14, 17, 18, 20-23, 26, 27).

SUMMARY

The site was in various stages of construction: grading, building construction, and individual lot final stabilization. The following potential findings were identified and included on the October 26 or 27 NOPF:

- 1) Not installing or maintaining effective pollution prevention measures: Part III.C.5. of the NPDES permit
- 2) Not utilizing methods to minimize exposure of construction waste and trash to precipitation and storm water: Part III.C.5.B. of the NPDES permit
- 3) Pollutant deposits inside storm sewer: Part I.B.2.C. of the NPDES permit
- 4) Not providing a copy of a complete SWPPP: Part V. of the NPDES permit
- 5) Not stabilizing disturbed areas: Part III.C.3. of the NPDES permit
- 6) Site inspection reports are not made or retained: Part IV.D.4. of the NPDES permit

The following potential findings were made after the inspection was complete and are in addition to the findings listed above:

- 7) The SWPPP was not provided by the permittee within 3 hours of the request: Part V.B. of the NPDES permit
- 8) The permittee did not implement the provisions of the SWPPP: Part V. of the NPDES permit
- 9) The SWPPP is inaccurate and needs to be updated: Part IV.C. of the NPDES permit
- 10) The SWPPP does include the permit-required components: Part IV.D. of the NPDES permit

The permittee has not submitted a response specifically addressing either of the NOPFs dated October 26 or October 27, 2022.

Hannah Lewis
Life Scientist

Nicole Moran
Section Chief

ATTACHMENTS:

1. NPDES Storm Water Worksheet (Construction) (6 pages)
2. Photo Locations Map, Photo Log and Photos #1-36 (20 pages)
3. NOPFs (3 pages)
4. SWPPP (58 pages)
5. IDNR NPDES General Permit No. 2 (59 pages)