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DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail – Return Receipt Requested

February 17, 2011

Mr. Jim Dawson, Owner
Firewheel Casting
3404 Stanford
Albuquerque, NM 87107

Re: Industrial Storm Water, SIC 3369, NPDES Compliance Evaluation Inspection, Firewheel Casting, NMU001709, February 15, 2011

Dear Mr. Dawson,

Enclosed please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report and required to correct any problems noted during the inspection and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify, in writing, both USEPA (Marcia Gail Bohling, USEPA (6EN-WC), 1445 Ross Ave., Dallas, Texas 75202) and NMED (at above address) regarding modifications and compliance schedules.

The NPDES Storm Water Multi-Sector General Permit for Industrial Activities (MSGP-2008) was reissued on September 29, 2008. The MSGP, fact sheet and other information on the industrial storm water program can be downloaded at <http://cfpub2.epa.gov/npdes/stormwater/msgp.cfm>.

Thank you for the cooperation and assistance that you provided during my visit to your site. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 222-9587.

Sincerely,
/s/ Sarah Holcomb
Sarah Holcomb
Environmental Scientist/Specialist
Surface Water Quality Bureau

Cc: Marcia Gail Bohling, USEPA (6EN-AS) via e-mail
Samuel Tate, USEPA (6EN-AS) via e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) via e-mail
Diana McDonald, USEPA (6EN-WM) via e-mail
Jennifer Ickes, NMED District I Manager (via e-mail)
Kathy Verhage, City of Albuquerque DMD (via e-mail)

**Compliance Evaluation Inspection
Firewheel Casting, Sector F
NPDES Permit #NMU001709, February 15, 2011**

Further Explanations

Introductions

On February 15, 2011, a Compliance Evaluation Inspection was conducted at the Firewheel Casting facility (Standard Industrial Classification 3369) located in Albuquerque, New Mexico by Sarah Holcomb of the State of New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB). The purpose of this inspection was to document the operator's status regarding the NPDES multi-sector general storm water permit (MSGP) for industrial activities (this facility has industrial activities being conducted on-site that meet the description of industrial activities in Sector F) and stormwater regulations at **40 Code of Federal Regulations (CFR) Part 122.26**.

Firewheel Casting has been in business since 2000 and is engaged in the casting of various resin and silicone parts. A silicone mold is formed by combining a two part silicone system including a curing agent to create rubber molds. Once those molds are produced, they are used to cast resin figures. The resins are quick setting. Once the figures have hardened, depending on the customer's order, the figures are then fired, painted and/or finished via grinding off excessive resin to smooth the surface of the object. All processes are conducted indoors, as well as material storage. The only time that materials may get outside is during the summer when doors are opened to facilitate ventilation, and dust from the grinding processes may escape.

Storm water from this facility discharges to the Albuquerque MS4, thence to the Rio Grande in 20.6.4.106 NMAC of the Rio Grande Basin (*State of New Mexico Standards for Interstate and Intrastate Surface Waters*). Designated uses of the Rio Grande in this section are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

The inspector arrived at the facility at 1230 hours. The inspector conducted an entrance interview with Mr. Jim Dawson, Owner, during which the inspector made introductions, presented her credentials and discussed the purpose of the inspection. Mr. Dawson accompanied the inspector on a tour of the entire facility and explained processes and waste management measures already in place.

This report is based on verbal information reported by the facility representative, on-site observations made by NMED personnel, and records maintained by NMED and the USEPA.

Findings:

Section 301(a) of the Federal Water Pollution Control Act (a.k.a. Clean Water Act) states that "Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful."

40 Code of Federal Regulations Part 122.21(a) Duty to apply (1) states: "Any person who discharges or proposes to discharge pollutants...must submit a complete application to the Director in accordance with this section and part 124 of this chapter."

This facility did not have NPDES permit coverage on the date of this inspection. Storm water discharges from this facility can be regulated by either an individual NPDES permit or the Storm Water Multi-Sector General Permit for Industrial Activities (MSGP). This type of facility is covered under Section F – Primary Metals – under SIC 3369.

A Storm Water Pollution Prevention Plan (SWPPP) had not been prepared in written form, was not available at the site for inspection, and was not being implemented on site. A SWPPP should include the following information:

- **A description of potential pollutant sources** – includes a site map, an identification of the types of pollutants that are likely to be present in storm water discharges, an inventory of the types of materials handled at the site that potentially may be exposed to precipitation, a list of significant spills and leaks of toxic or hazardous pollutants, sampling data, a narrative description of the potential pollutant sources from specific activities at the facility, and identification of specific potential pollutants; and
- **A description of appropriate measures and controls** – includes the type and location of existing and proposed non-structural and structural BMPs (Best Management Practices) selected for each of the areas where industrial materials or activities are exposed to storm water. Non-structural and structural BMPs to be described and implemented include such things as good housekeeping, preventive maintenance, spill prevention and response procedures, periodic inspections, employee training, record keeping, non-storm water evaluations and certifications, sediment and erosion control, as well as implementation/maintenance of traditional storm water management practices, where appropriate.

Activities at this nonferrous casting facility can result in the creation of various pollutant sources that include, but are not limited to, the following:

- **Raw Material Storage and Handling:** These activities can be a source of pollutants such as TSS (Total Suspended Solids), residual or protective oil and grease, metals, COD (Chemical Oxygen Demand) and organics. These pollutants can come from sources such as outdoor storage or handling of fluxes, storage piles, bins, or material handling of coke or coal, and storage or handling of casting sand or refractory.
- **Waste Materials – Handling, Storage and Disposal:** These activities can be a source of pollutants such as pH, TSS, misc. “wet” sand additives, and oil and grease. These pollutants can come from sources such as slag or dross stored or disposed of outside in piles or drums, fly ash, particulate emissions, dust collector sludges and solids, baghouse waste, storage and disposal of waste sand or refractory rubble in piles outside, machining waste – fines, turnings, oil, borings, gates, sprues, scale, obsolete equipment stored outdoors, and landfilling or open pit disposal of wastes outside.
- **Furnace Operations and Pollution Control Equipment:** These activities can be a source of pollutants such as TSS, particulates, metals, volatiles, and pH. These pollutants can come from sources such as losses during charging of coke ovens or sintering plants and from particulate emissions, particulate emissions from blast furnaces, electric arc furnaces, induction furnaces, fugitive emissions from poorly maintained or malfunctioning baghouses, scrubbers, electrostatic precipitators, cyclones, and wastewater treatment operations exposed to precipitation.
- **Rolling, Casting and Finishing Operations:** These activities can be a source of pollutants such as oil and grease, pH, TSS, metals, COD, and solvents. These pollutants can come from sources such as exposure of wastewater used for cooling or descaling related to rolling, storage of products outside after painting, pickling, or cleaning operations, casting cooling or shakeout exposed to precipitation or wind, and losses of particulate matter from machining operations (grinding, drilling, boring, cutting) through deposition or storage of products outside.
- **Plant Yards:** These activities can be a source of pollutants such as TSS. These pollutants can come from sources such as areas of the facility with unstabilized soils subject to erosion.
- **Illicit Discharges:** These activities can be a source of pollutants depending on the source. Improper connection of floor, sink or process wastewater drains can contribute to this type of discharge.

If not properly managed or treated in accordance with an NPDES permit, activities associated with the activities at this facility could be a potential threat to water quality through storm water discharges.

Site Inspection Summary

The MSGP was reissued in 2008.

On the day of the inspection, some pollutant sources observed on site that were exposed outside and could potentially come into contact with storm water included: 1) pallets stored outside of the building.

For additional information on BMPs and SWPPPs for Sector F, please refer to pages 50877-50888 in the document entitled *Final NPDES Storm Water Multi-Sector General Permit for Industrial Activities (Federal Register/Vol. 60, No. 189, Friday, September 29, 1995)*. This document can be downloaded from “Storm Water Archived Publications” at: https://cfpub2.epa.gov/npdes/docs.cfm?view=archivedprog&program_id=6&sort=date_published. This is an older, discontinued permit (1995 MSGP) but contains helpful background information that was not carried over to either the 2000 or 2008 MSGP.

An exit interview to discuss the preliminary findings of this inspection was conducted on-site with Mr. Dawson at approximately 1245-1250 hours. The inspector informed the facility representative of the requirements under the NPDES storm water program regarding permitting requirements, preparation of a SWPPP, and installation of appropriate storm water runoff control practices (per the SWPPP).

After returning to the office, the inspector sent Mr. Dawson an email with information on the permitting process, including links to the permit, an example Storm Water Pollution Prevention Plan, guidance documents, Best Management Practices and how to file for coverage using the eNOI system. Information was also included on the No Exposure Certification, since the activities at this business appeared to be conducted completely indoors. The inspector also left a business card with Mr. Dawson in case there were questions at a later time.