New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control

FACT SHEET

Masterfile #: Varies **PI #:** Varies

This fact sheet sets forth the principal facts and the significant factual, legal, and policy considerations examined during preparation of the draft permit. This action has been prepared in accordance with the New Jersey Water Pollution Control Act and its implementing regulations at N.J.A.C. 7:14A-1 et seq. - The New Jersey Pollutant Discharge Elimination System (NJPDES).

PERMIT ACTION: Scrap Metal Processing and Recycling Industrial Stormwater General Permit, NJ0163261

1 Name and Address of the Applicant:

Varies - Statewide

2 Name and Address of the Facility/Site:

Varies – Statewide

3 Description of Permit History:

The objective of this regulatory action is to issue a **new** NJPDES general permit, namely the **Scrap Metal Processing and Recycling Industrial Stormwater General Permit**, under **NJ0163261 (Category SM2)**. This category of facilities is currently covered under the Department's Scrap Metal Processing and Recycling General Permit (NJ0107671). Upon finalization of this new general permit, any facilities currently authorized under NJ0107671 that meet the eligibility criteria described in Item 4. below, will be authorized under this general permit NJ0163261 and the individual authorizations under NJ0107671 will be revoked.

Below is a chronology of the Scrap Metal Processing and Recycling General Permit NJ0107671:

February 1, 1995 – The 1995 Scrap Metal Processing and Recycling General Permit was initially issued and authorized the discharge of stormwater to surface water for facilities that engage in Standard Industrial Classification (SIC) Code 5015 (Used Motor Vehicle Parts) and SIC Code 5093 (Scrap and Waste Materials).

December 1, 1999 – The Scrap Metal Processing and Recycling General Permit was renewed where the scope was expanded to regulate stormwater discharges to groundwater in addition to discharges to surface water. This permit required group monitoring.

February 1, 2005 – The Scrap Metal Processing and Recycling General Permit was issued without significant change with the exception of the temporary suspension of stormwater monitoring. This permit expired on January 31, 2010.

The Scrap Metal Processing and Recycling General Permit NJ0107671 was developed with the concept that both the scrap metal recycling industry and vehicle recycling industry are similar in industrial activity, waste production and environmental impact. As part of the current permit renewal process for NJ0107671, the New Jersey Department of Environmental Protection (hereafter "the Department") has determined that it is beneficial to segregate those facilities engaged in vehicle recycling only under a separate permit document. As a result, the Department issued the Vehicle Recycling Industrial Stormwater General Permit NJ0163279 on August 1, 2012 to better represent the vehicle recycling industry. This permit (NJ0163261) applies to those facilities that are engaged in scrap metal recycling with or without vehicle recycling, excluding those facilities described in Item 4. below.

A summary of the current permits is as follows:

Permit Number	Permit Name	Permit Term	Facilities Currently Covered by Permit	Which Facilities will be Covered Upon Issuance of New Permits
NJ0107671	Scrap Metal Processing and Recycling Industrial Stormwater General Permit (Category: **SM**)	Issued: February 1, 1995 Expired: January 31, 2010*	Scrap Metal Recyclers with or without Vehicle Recycling (including shredding operations)	- Vehicle-only Recyclers are covered under NJ0163279 which became effective October 1, 2012 - Remaining Sites that engage in Scrap Metal Recycling with or without Vehicle Recycling will be authorized under NJ0163261, which is the subject of this document. - Any sites that engage in shredding operations continue under NJ0107671 until such time as they are addressed through separate individual permit actions.
NJ0163279	Vehicle Recycling Industrial Stormwater General Permit (Category: **RVR**)	Effective: October 1, 2012 Expires: September 30, 2017	Vehicle only recyclers	Vehicle only recyclers
NJ0163261	Scrap Metal Processing and Recycling Industrial Stormwater General Permit (Category: **SM2**)	Subject of this fact sheet - In process	Subject of this fact sheet – In process	Sites that engage in Scrap Metal Recycling with or without Vehicle Recycling will be authorized under NJ0163261, which is the subject of this document.

*NJ0107671 will not be renewed but instead replaced by NJ0163279 and NJ0163261 and, for some facilities, individual permits. Revocation of NJ0107671 will occur after all facilities currently authorized under NJ0107671 are regulated under another general or individual permit.

In accordance with N.J.A.C. 7:14A-6.13(b)4, the Department may issue one master general permit to cover a category of discharges that meet the following criteria: involve the same or substantially similar types of operations, discharge the same type of wastes, require the same or similar effluent limitations and operating conditions, require the same or similar monitoring, and are more appropriately controlled under a general permit than under an individual permit. The purpose of a general permit for a specific industrial sector is to provide equal and consistent regulatory oversight that is applicable to similar facilities with similar industrial activity. The Department has determined that issuance of a master general permit for the scrap metal processing and recycling industry meets these regulatory criteria.

4 Industry Overview and Permit Eligibility Criteria:

Scrap is a term used to describe recyclable and other materials left over from product consumption. Unlike many wastes, scrap can have significant monetary value. Scrap recycling can reduce greenhouse gas emissions and conserve energy and natural resources. Recycling scrap materials can also help keep potentially hazardous materials out of landfills.

The scrap metal industry purchases metals from various industrial and private sources for reuse in the fabrication of new metal stock and products. Sources of scrap metal can include structural steel, electrical equipment, tanks and vats, commercial salvage operations, E-waste (e.g. computers), white goods (e.g. washing machines), and car parts. The most frequently recycled metals are steel, stainless steel, iron, aluminum, copper, lead, and zinc. There are two main categories of metals: ferrous and nonferrous. Metals that contain iron (such as steel) are known as ferrous, and metals without iron are nonferrous. Common nonferrous metals are copper, brass, aluminum, zinc, magnesium, tin, nickel, and lead. Nonferrous metals may include precious or exotic metals. Metals are typically sorted by type then compacted and stored prior to sale to an end user, which may engage in shredding operations. Each scrap recycling facility is unique in regards to material sources.

Many scrap facilities also engage in vehicle recycling and dismantling. Vehicles and their associated parts are a source of numerous recyclable materials. Vehicles are typically recycled in four steps: dismantling, crushing, shredding and resource recovery. In the dismantling stage, facilities recover the fluids and dismantle the usable parts and components. These include, but are not limited to, batteries, wheels and tires, steering columns, fenders, radios, engines, starters, transmissions, alternators, select plastic parts and components, glass, foams, catalytic convertors, and other components. The facility can then crush the vehicle and/or send it off site to a vehicle shredder.

The Department has determined that it is most appropriate to segregate those scrap facilities that also engage in shredding operations into separate individual permits. This will allow the Department to consider many of the unique conditions associated with shredding and ensure that permit for sites operating shredders are tailored specifically to actual operations. In addition, the Department will develop permit conditions for the stockpiling and storage of automobile shredder residue to ensure that it is appropriately addressed. The Department is authorized to segregate certain facilities into individual permits in accordance with N.J.A.C. 7:14A-6.13(e).

This Scrap Metal Processing and Recycling General Permit applies to those facilities that engage primarily in the scrap metal recycling business including those scrap metal recycling facilities that engage in the wholesale or retail distribution of used vehicle parts, including the dismantling of motor vehicles. Scrap metal processing is typically covered under Standard Industrial Classification (SIC) code 5015 whereas vehicle recycling and dismantling is typically covered under SIC code 5093.

In sum, the following facilities are **eligible** under this general permit:

- Facilities engaged in the scrap metal processing and recycling business, which may also include the wholesale or retail distribution of used vehicle parts, including the dismantling of motor vehicles. For existing facilities, this permit applies to all areas of the State of New Jersey. For new facilities (established after October 1, 2013), this permit applies to all areas of the State of New Jersey with the exception of those areas specifically noted below.

The following facilities are **not eligible** under this general permit:

- Industrial stormwater discharges to surface and/or ground waters of the State from facilities that are strictly engaged in the dismantling of motor vehicles and the wholesale or retail distribution of used vehicle parts. These facilities should seek coverage under NJPDES Permit No. NJ0163279.

- Facilities that engage in shredding activities. These facilities must seek coverage under an individual permit.

- Facilities with stormwater discharges already authorized under another general permit (e.g. 5G2 Stormwater Basic Permit); an individual NJPDES Stormwater permit; or an individual NJPDES Discharge to Groundwater permit.

- New facilities (established after October 1, 2013) that discharge to surface waters classified as Category One (C1) waters or FW1 waters (as designated in the tables in N.J.A.C. 7:9B-1.15), and waters classified as Pinelands Waters (PL) (as established in the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq.).

- New facilities (established after October 1, 2013) that discharge to ground water in areas classified as Class 1-A and Class 1-PL, or which discharge to ground water that contributes to surface waters classified as C1 or FW1.

- New facilities (established after October 1, 2013) that submit a request for authorization that fails to demonstrate a facility design capable of full compliance with this permit.

5 Regulatory Authority:

Under the Federal Water Pollution Control Act (1972), amended by the Clean Water Act (1977) and the Water Quality Act (1987), a facility with a stormwater discharge associated with industrial activity shall obtain a National Pollutant Discharge Elimination System (NPDES) permit. On November 16, 1990 the United States Environmental Protection Agency (EPA) published the regulatory definition for "stormwater discharges associated with industrial activity," which was adopted in the NJPDES regulations (N.J.A.C. 7:14A). The term "Stormwater Discharges Associated with Industrial Activity" defines some of the regulated community under the "Phase I" Industrial Stormwater Permit Program.

The Department is the issuing authority for NPDES permits in the State of New Jersey under the NJPDES regulations for discharges to surface water and ground water. The NJPDES definition for "stormwater associated with industrial activity" for discharges to surface water is found at N.J.A.C. 7:14A-1.2. Discharges to ground water are regulated pursuant to the State's Water Pollution Control Act (N.J.S.A. 58:10A), the NJPDES regulations (N.J.A.C. 7:14A-7 and 8), and the Ground Water Quality Standards (GWQS) (N.J.A.C. 7:9C). A discharge permit may be required if the Department determines a point or non-point source discharge contributes to a violation of water quality standards or is identified as a significant contributor of pollutants.

In accordance with the Federal Clean Water Act and its implementing regulations, this category of facilities is required to have a permit for its stormwater discharges to surface water. Pursuant to 40 CFR 122.26, these facilities have a stormwater discharge associated with industrial activity.

Permit effluent limitations, non-numeric effluent limitations, monitoring requirements, Best Management Practices (BMPs) and other conditions are authorized by the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), and the Water Pollution Control Act (State Act; N.J.S.A. 58:10A-1 et seq). These statutes are implemented by the NPDES (40 CFR Part 122) and the NJPDES permit programs.

The Department is authorized under the federal regulations (40 CFR 122.44) and under NJPDES rules (N.J.A.C. 7:14A-6.2(b) to impose BMPs to control or abate the discharge of pollutants in lieu of numeric effluent limitations in NJPDES permits. BMPs may be imposed when the Department determines that BMPs are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the State and Federal Acts.

The proposed requirements incorporated in the Stormwater Pollution Prevention Plan (SPPP) are consistent with the Department and EPA's stormwater permitting philosophy of reducing the amount of pollution created and preventing pollution from occurring in the first place (See 24 N.J.R. 2352). The SPPP requirements and monitoring requirements operate as limitations, controls on stormwater effluent discharges to prevent stormwater contamination, and are intended to achieve Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT).

Under the statutory and regulatory authority of the Clean Water Act, EPA issued the final 2008 Multi-Sector General Permit (MSGP) for stormwater discharges associated with industrial sources. The permit document and related information are located at ht tp://cfpub.epa.gov/npdes/stormwater/ msgp.cfm. The 2008 MSGP applies to industrial facilities located in five States, in certain Indian Country lands, and at various Federal Facilities where EPA remains the NPDES permit authority. The 2008 MSGP contains requirements for industrial facilities in 30 different industrial

sectors to develop, implement, and maintain site-specific stormwater control measures and SPPPs to comply with NPDES requirements. EPA has authorized the State of New Jersey to implement the NPDES stormwater program and administer its own stormwater permitting program. The Department has considered the requirements of the MSGP for guidance, specifically Sector N: Scrap Recycling and Waste Recycling Facilities.

6 Type and Quantity of the Wastes or Pollutants:

Based on the nature of industrial activity and operations at scrap metal processing and recycling sites, there is potential for surface water and ground water contamination from stormwater runoff. Surface water can become contaminated if stormwater is exposed to pollutants and is then discharged to surface water. Likewise, groundwater can become contaminated if pollutants in surface spills contaminate soils and contaminants are then mobilized downward as stormwater infiltrates into groundwater. The volume and quality of stormwater and groundwater discharges will depend on a variety of factors, including the outdoor activities at the facility (e.g. material storage, loading/unloading, vehicle maintenance), extent of impervious surfaces, type of ground cover, and duration and intensity of precipitation. Stormwater quality can vary depending on the effectiveness and implementation of BMPs as well as the performance of any pollution prevention and/or treatment methods.

The following is a list of pollutants that may result from the scrap industry:

Pollutant	Source Material
Aluminum	Metal alloys, cans, clips, sheet metal, extrusions, radiators, wheels, insulated and non-insulated wire, siding, lawn furniture, car trim, hand rails, gutters and leaders, storm doors, transmission housings, heavy electrical cable, power tool housings, screening, hub caps, soda cans, appliances, auto parts, windows, doors, white goods
Copper	Metal alloys, insulated and non-insulated wire, tubing, plumbing fittings, radiators, CATV
Iron	Metal alloys, automobiles, girder beams, pipes, cast iron
Lead	Metal alloys, piping, batteries, paint, solders, sheet metal, cable, wheel weights, E-waste
Zinc	Metal alloys, paint, ingots, rejected castings, flashing, galvanized metals, sheet, wire
Total Petroleum Hydrocarbons or Oil and Grease	Vehicles and vehicle parts, motor oil, fuels, filters, spills and leaks.
PCBs	Capacitors, transformers, hydraulic fluid, transmission and radiator fluid, oil used in motors and hydraulic equipment; equipment parts, electrical equipment (voltage regulators, switches, bushings and electromagnets, fluorescent light ballasts, oil-based paint

The Department considered the above pollutants in the development of the BMPs and monitoring requirements.

7 Summary of Permit Conditions:

In an effort to reduce and/or minimize pollutants in stormwater from these facilities, this permit contains the following requirements:

1) BMPs and Stormwater Pollution Prevention Plan (SPPP)
   - BMPs for Scrap Metal Processing and Recycling
   - BMPs for Vehicle Recycling
   - Site-Wide BMPs
   - Stormwater Pollution Prevention Plan (SPPP)

2) Establishing Drainage Control and Monitoring Locations
   - Drainage Control Measures
   - Initial Drainage Control Plan and Initial Drainage Control Map

- Final Drainage Control Plan and Final Drainage Control Map

3) Discharge Monitoring Requirements and Improvement of Stormwater Quality
   - Discharge Monitoring Requirements
   - Assessment against BMP Design Criteria
   - Implementation of Pollution Prevention Measures and/or Treatment

Additional detail regarding each of these requirements is as follows:

1) BMPs and SPPP

BMPs for Scrap Processing and Recycling

Best Management Practices (BMPs) are practices that are utilized at the facility to minimize exposure of stormwater to pollutants. BMPs in a general permit are designed specifically for the industry covered. BMPs in this proposed renewal are defined for each distinct scrap processing area and are structured to align with the way scrap is generally processed. Part IV of this permit includes detailed BMPs for the following:

- Inbound Scrap Quality Control Program,
- Scrap Metal Sorting,
- Scrap Metal Processing and Dismantling,
- Scrap Metal Storage for Specific Products,
- Scrap Metal Storage and Stockpiling, and
- Scrap Metal Processing Hydraulic Equipment.

In general, BMPs for these areas are designed to minimize exposure of potential pollutant sources to precipitation. This can be accomplished by covering materials with structures or tarps or by containing these areas through containment devices or berms. If stormwater from these areas cannot be contained, treatment may be appropriate.

BMPs for Vehicle Recycling

Many facilities that process scrap also process automobiles. For facilities that process automobiles, BMPs in this proposed renewal are defined for each vehicle recycling area and are structured to align with the way vehicles are generally processed. Part IV of this permit includes detailed BMPs for the following:

- Inbound Vehicle Inspection Area,
- Vehicle Fluid Draining and Dismantling Area,
- Vehicle Parts Storage Area,
- Vehicle Crusher,
- Processed Vehicle Storage Area, and
- Operable Vehicle Storage Area.

The Vehicle Recycling BMPs are designed to ensure that the exposure of stormwater to pollutants will be minimized and/or eliminated. Note that the BMPs contained in this master general permit NJ0163261 pertaining to vehicle recycling are modeled after those contained in the vehicle recycling master general permit NJ0163279.

In comparison to the existing 2005 general permit (NJ0107671), the options for stormwater management for vehicle recycling are expanded for some areas, whereas for other areas the BMPs are more restrictive. The Vehicle Recycling BMPs that are more restrictive in this renewal permit are summarized as follows:

BMP	2005 General Permit	Proposed General Permit
Fluid Draining and Dismantling Area	Fluids shall be drained in a manner that prevents exposure of such fluids to stormwater or the ground surface.	Area shall be contained and under cover, indoors, OR stormwater shall drain in such a manner to not allow exposure to surface water or groundwater.
Portable Vehicle Crusher	Portable hydraulic processing equipment shall have provisions such as drip trays to collect and contain leaks.	Same restrictions as the Stationary Vehicle Crusher. Specifically, runoff shall be contained, discharged to an oil/water separator, or discharged to an approved NJDEP treatment system.

Any existing facilities that cannot meet the BMPs for the Fluid Draining and Dismantling Area and the Portable Vehicle Crusher on the effective date of the permit (October 1, 2013) have until October 1, 2015 to institute measures in order to achieve them.

Site-Wide BMPs

Part IV of this permit also includes detailed BMPs for the following areas that relate to the site as a whole and not necessarily to either scrap processing areas or vehicle recycling processing areas:

- Housekeeping/Sweeping,
- Fluid Storage Area,
- Parts Cleaning/Solvent Degreasing,
- Spill Prevention and Response, and
- Site Stabilization and Dust Control, Erosion Control.

Sitewide BMPs are intended to minimize exposure of potential pollutant sources to precipitation. This can be accomplished by minimizing or eliminating exposure of stormwater to pollutant sources and good housekeeping measures.

SPPP

The objective of the SPPP is to identify potential sources of pollution and source materials on site and to document the practices utilized to minimize and/or eliminate the exposure of pollutant sources to stormwater. More specifically, the SPPP is a tool that is used to document the implementation and ongoing maintenance of the BMPs. The SPPP shall be prepared and/or updated and kept at the facility where it shall be available for inspection.

As described in further detail in Part IV, the SPPP is required to contain the following components:

- Identification of BMPs,
- Process Line Diagram,
- Site Map (including approximate direction of stormwater flow),
- Inventory of source materials,
- Identification of SPPP Team,
- Inspection schedule and log,
- Annual Report,
- Annual Certification,
- Drainage Control Plan (described in further detail below).

The following table compares some key components and submittal requirements proposed in this permit with the 2005 Scrap Metal Processing and Recycling General Permit (NJ0107671, Category SM):

Permit Requirement	2005 SM General Permit	Proposed SM2 General Permit
Annual Report	Shall be prepared annually with submission to NJDEP	Shall be prepared annually and kept on-site.
Annual Inspection	Shall be conducted annually to prepare the Annual Report	Shall be conducted annually to prepare the Annual Report; however, additional inspections are also required.
Annual Certification	Shall be prepared annually to certify completion of annual report and annual inspection with submission to NJDEP	Shall be prepared annually to certify completion of annual report and annual inspection with submission to NJDEP.
Inspection Schedule	Permit requires inspections to be conducted on a periodic basis.	Permit requires inspections to be conducted on a calendar quarter basis, at a minimum.
Initial Drainage Control Plan	N/A	Initial Drainage Control Plan shall be prepared by October 1, 2014 and kept on site. The Initial Drainage Control Map shall be submitted to NJDEP by October 1, 2014.
Final Drainage Control Plan	N/A	Final Drainage Control Plan shall be prepared by October 1, 2015 and kept on site. The Final Drainage Control Map shall be submitted to NJDEP by October 1, 2015.

A complete summary of all compliance and submittal dates is included in Part IV, Item J.

2) Establishing Drainage Control and Monitoring Locations

Drainage Control Measures

The permittee is required to implement drainage control in two phases. By **October 1, 2014**, the permittee is required to prepare an **Initial Drainage Control Plan** to indicate how drainage control will be established and to identify an appropriate monitoring location(s). See Part IV, F.2. By **October 1, 2015,** the permittee is required to prepare a **Final Drainage Control Plan** to show how drainage control has been implemented. See Part IV, F.3.

The objective of drainage control is to ensure that:

- All stormwater associated with the regulated activity is discharged through a discrete permitted outfall(s) to surface water or infiltrates to ground water or both.
- Uncontrolled discharges of stormwater (i.e. sheet flow) within areas of regulated activity are eliminated.
- A representative monitoring location is established that can be one or a combination of any of the following: a discrete permitted outfall(s); a ground water discharge monitoring location(s); or an outlet of an NJDEP approved treatment system.

Drainage control can be established using methods that include, but are not limited to the following:

- Diversionary structures;
- Grading;
- Berms;
- Embankments;
- Collection systems; and/or
- Groundwater infiltration basin(s).

Uncontrolled stormwater discharges should be minimized from migrating off-site. Stormwater control measures such as berms, barriers, and site grading may be used to maintain stormwater on the site. Infiltration trenches filled with aggregate (e.g. gravel, drainage rock) bordering the site boundaries are also an effective means of keeping

stormwater onsite. Ground water infiltration basins, which should be bordered by hay bales and absorbent socks, are also acceptable stormwater control measures for maintaining stormwater on-site.

If stormwater cannot be contained on site then discharges shall be channeled to enable flow to one or more outfalls. Drainage control can be established using diversionary structures, grading, embankments, collection systems, and other similar methods to divert stormwater to a permitted outfall. The site may require several outfalls to establish drainage control.

Drainage control shall be implemented for all areas of regulated activity, including, but not limited to the following areas: Inbound Quality Control Area, Scrap Metal Sorting Area, Scrap Metal Processing and Dismantling Area, and the Scrap Metal Stockpiling and Storage Area. If the facility processes vehicles, then drainage control shall be established as indicated in the specific Vehicle Recycling BMPs (Part IV, D.1. through D.4.).

The permittee shall eliminate regulated industrial activity in any areas that cannot be diverted to a permitted outfall or infiltrate to ground water as per Part IV, F.1.f. The permittee shall ensure that the discharge of stormwater from areas not associated with source material contact (e.g. rooftop runoff, employee parking) is separated from stormwater discharges associated with areas of source material contact as per Part IV, F.1.g.

Initial Drainage Control Plan (DCP)

By **October 1, 2014**, the permittee shall develop an Initial Drainage Control Plan (DCP) to describe how drainage control will be accomplished. The purpose of completion of the Initial DCP is to gauge progress towards compliance with Part IV, F.3. The Initial Drainage Control Plan shall be kept in the SPPP on-site. The Initial DCP shall contain: 1) a written narrative; 2) identification of representative monitoring location(s) and 3) an Initial Drainage Control Map. Additional detail on these three components is included below:

Written Narrative: The written narrative component of a DCP shall describe how the facility will establish drainage control and shall include the following minimum components:

- Facility name,
- NJPDES permit number and Program Interest I.D. Number,
- A written description of each current or proposed representative monitoring location including an alpha-numeric discharge serial number (e.g. DSN 001A) for each stormwater monitoring point,
- The latitude and longitude for each current or proposed monitoring point(s),
- The name of all receiving water bodies (for discharges to surface water) and assigned New Jersey Surface Water Quality Standards classifications (listed at http://www.nj.gov /dep/rules/rules/njac7_9b.pdf), and
- A description of any current or proposed stormwater treatment.

Identification of Representative Monitoring Locations**:** Any current or proposed representative monitoring locations shall be identified on an Initial Drainage Control Map. Stormwater outfalls shall be designed to prevent downstream erosion and/or degradation and ensure stabilization. Monitoring locations can include any of the following:

- A discrete permitted outfall(s),
- A groundwater discharge monitoring location(s), and
- An outlet of an NJDEP approved treatment system.

Each outfall or monitoring location created as a result of drainage control shall be monitored. Areas that require drainage control are specified in Part IV, F.1.c. It is not acceptable to utilize the results of one outfall to represent another substantially similar outfall.

Initial Drainage Control Map: The Initial Drainage Control Map shall be legible, drawn to an appropriate engineering scale and shall clearly depict the following information (where applicable):

- Site boundary,
- Title block containing tax block and lot number,
- North directional arrow,

- Proposed grading of drainage areas, including elevations and flow arrows showing the drainage to regulated outfalls,
- Areas of industrial activity,
- Location of flow diversion structures and/or treatment units,
- Location of groundwater infiltration basins (e.g. lined and unlined basins),
- Location of ground water discharge locations and representative monitoring locations,
- Location of surface water outfalls, discharge structures and representative monitoring locations,
- Receiving waters,
- Existing buildings and other structures,
- Access roads, and
- Date prepared and subsequent revisions.

The Initial Drainage Control Map shall be included as part of the Initial Drainage Control Plan. While the Initial Drainage Control Plan is required to be kept on site, a copy of the Initial Drainage Control Map shall also be submitted to the Department.

Final Drainage Control Plan (DCP)

By **October 1, 2015**, the permittee shall develop a Final Drainage Control Plan (DCP) to describe how drainage control has been accomplished. The Final DCP shall be kept in the SPPP on-site. The Final DCP shall contain: 1) a written narrative, 2) identification of representative monitoring location(s), and 3) a Final Drainage Control Map. A Final DCP is necessary in addition to an Initial DCP to ensure that any revisions or updates to the Initial DCP are documented after drainage control measures have been implemented. Please refer to the above section for detail on the written narrative and identification of representative monitoring locations for the Final DCP. Additional detail on the Final Drainage Control Map is as follows:

Final Drainage Control Map: The Final Drainage Control Map shall be legible, drawn to an appropriate engineering scale, and certified by a licensed professional engineer. The Final Drainage Control Map shall clearly depict the following information (where applicable):

- Site boundary,
- Title block containing tax block and lot number,
- North directional arrow,
- Final grading of drainage areas, including elevations and flow arrows showing the drainage to regulated outfalls,
- Areas of industrial activity,
- Location of flow diversion structures and/or treatment units,
- Location of groundwater infiltration basins (e.g. lined and unlined basins),
- Location of ground water discharge locations and representative monitoring locations,
- Location of surface water outfalls, discharge structures and representative monitoring locations,
- Receiving waters,
- Existing buildings and other structures,
- Access roads, and
- Date prepared and subsequent revisions.

The Final Drainage Control Map shall be included as part of the Final Drainage Control Plan. While the Final Drainage Control Plan is required to be kept on site, a copy of the Final Drainage Control Map shall also be submitted to the Department.

3) Discharge Monitoring Requirements and Improvement of Stormwater Quality

Narrative Discharge Requirements: Stormwater effluent shall also comply with the following narrative discharge requirements:

- The permittee shall ensure that any stormwater flowing from the site is free of trash and debris.

- Discharges of stormwater to surface water and/or the ground shall not exhibit a visible sheen or other discoloration associated with the regulated activity. The permittee shall visually monitor their stormwater effluent on a routine basis to ensure that there is no visible sheen.
- All facilities discharging to surface water are prohibited from discharging foam, discoloration, or odor associated with the regulated activity in accordance with N.J.A.C. 7:14A-12.6.
- This NJPDES permit only authorizes those discharges associated with stormwater as per Part II, B.6.

Discharge Monitoring Requirements: Ongoing site inspections of scrap metal processing and recycling facilities throughout the state have confirmed that many scrap metal activities are conducted outdoors. While housing scrap metal processing either indoors or under cover would eliminate or minimize pollutant exposure, doing so is simply not practicable for many existing facilities. As a result, this permit includes monitoring requirements **that take effect after drainage control is established**. The overall goal of the monitoring is to develop data to support the development of an effective storm water pollution control program that focuses resources on pollutants of concern for scrap metal facilities. The following are the major objectives of discharge monitoring requirements:

- To evaluate levels of certain pollutants of concern associated with storm water runoff from scrap metal facilities.
- To assess and evaluate the effectiveness of any existing control measures..
- To determine the need for any additional pollution prevention measures or treatment by comparing stormwater effluent levels against BMP Design Criteria and state effluent standards at N.J.A.C. 7:14A-12.8.

The following summarizes the basis for each pollutant that is required to be monitored as a requirement of this permit.

Total Suspended Solids (TSS): TSS describes particulates of varied origin, including soils, metals, organic materials, and debris that are suspended in a moving body of water. TSS is associated with most all activities associated with scrap metal processing and storage. Monitoring for TSS is particularly important in measuring the effectiveness of the implemented BMPs, particularly housekeeping measures. Because other pollutants often bind to TSS particulates, TSS is a useful indicator parameter for other pollutants. Inclusion of TSS as a monitoring parameter is consistent with Sector N of the United States Environmental Protection Agency (USEPA) Multi- Sector General Permit for Stormwater Runoff Associated with Industrial Activity (MSGP). The MSGP BMP Design Criteria for TSS is 100 mg/L. Monitoring for TSS shall be conducted on a **quarterly** basis beginning October 1, 2015.

Chemical Oxygen Demand (COD): COD is the measure of the organic matter, which will oxidize, in a strong acid. Most applications of COD determine the amount of organic pollutants found in water, making COD a useful measure of overall effluent water quality. Monitoring for COD serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure as well as the effectiveness of housekeeping measures. Inclusion of COD as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for COD is 120 mg/L. Monitoring for COD shall be conducted on a **quarterly** basis beginning on October 1, 2015.

Total Petroleum Hydrocarbons (TPHC): TPHC is a term used for any mixture of hydrocarbons that are found in crude oil. Because there are so many different chemicals in crude oil and in other petroleum products, it is not practical to measure each one separately. However, it is useful to measure the total amount of TPHC. Monitoring for TPHC serves as an indicator of the effectiveness of BMPs particularly for scrap products that may have contained oil or other fuel products. The NJPDES Regulations at N.J.A.C. 7:14A-12.8 contain a State effluent limitation of 15 mg/L for TPHC as a daily maximum. Monitoring for TPHC shall be conducted on a **quarterly** basis beginning on October 1, 2015. Stormwater effluent data shall be compared against an effluent limit of 15 mg/L as a daily maximum.

Total Recoverable Aluminum: Aluminum is a product in numerous scrap materials such as building materials and white goods. Monitoring for aluminum serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure to such materials. Inclusion of aluminum as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for aluminum is 0.75 mg/L. Monitoring for aluminum shall be conducted on a **quarterly** basis beginning October 1, 2015.

Total Recoverable Copper: Copper is a heavy metal that is toxic to fish at very low levels. Copper and copper alloys are used for a variety of purposes since copper is an effective conductor of heat and electricity. Brass, another common scrap material, is an alloy of copper and zinc. Monitoring for copper serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure to such materials. Inclusion of copper as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for copper based on a hardness value of 100 mg/L is 0.0156 mg/L. Monitoring for Copper shall be conducted on a **quarterly** basis beginning on October 1, 2015.

Total Recoverable Lead: Lead is a heavy metal that is toxic to fish at very low levels. Lead is used for a variety of purposes including building construction and batteries. Monitoring for lead serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure to such materials. Inclusion of lead as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for lead based on a hardness value of 100 mg/L is 0.095 mg/L. Monitoring for lead shall be conducted on a **quarterly** basis beginning on October 1, 2015.

Total Recoverable Zinc: Zinc is a heavy metal that is often used as a galvanizing material for steel as well as in batteries. Monitoring for zinc serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure to such materials. Inclusion of zinc as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for zinc based on a hardness value of 100 mg/L is 0.13 mg/L. Monitoring for zinc shall be conducted on a **quarterly** basis beginning on October 1, 2015.

Total Recoverable Iron: Iron chemical compounds, which include ferric and non-ferric compounds, have many uses. Steel is produced by smelting iron with carbon. Steels and alloy steels are by far the most common metals in industrial use due to their great range of desirable properties and the abundance of iron. Iron is also naturally occurring in high concentrations in surficial geology, bedrock, and groundwater in many parts of the state of New Jersey. Monitoring for iron serves as an indicator of the effectiveness of BMPs in minimizing stormwater pollutant exposure to iron materials. Inclusion of iron as a monitoring parameter is consistent with Sector N of the USEPA MSGP. The MSGP BMP Design Criteria for iron is 1.0 mg/L. Monitoring for iron shall be conducted on a **quarterly** basis beginning on October 1, 2015.

Polychlorinated Biphenyls (PCBs): PCBs belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications. Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. A list of scrap material that may contain PCBs is included on page 6 of the Fact Sheet. Additional information regarding PCBs is available at http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/about.htm.

This permit includes several BMPs targeted towards the minimization of PCB exposure to stormwater. In addition, because limited PCB data is available from scrap recycling facilities, the Department is including a monitoring requirement for PCBs in order to establish a baseline database to determine if PCBs are present in stormwater effluent. Because scrap recycling facilities have the potential to process material that could contain PCBs, this monitoring requirement is included in accordance with best professional judgment. Monitoring for PCBs shall be conducted on an **annual** basis beginning on October 1, 2015.

Improvement of Stormwater Quality

Once drainage control is established and monitoring begins, effluent monitoring data will be collected enabling establishment of a database. Collection of this data will also enable the Department to evaluate the need for effluent limits in the next master general permit renewal cycle. The permittee should compare stormwater effluent data against the following design criteria to evaluate the need for Pollution Prevention Measures and/or Treatment. Note that these design criteria are not intended to be limits and exceedances of these numbers are not considered violations. Effluent data should be compared against the following criteria:

- Total Suspended Solids 100 mg/L
- Chemical Oxygen Demand 120 mg/L

- Total Petroleum Hydrocarbons 15 mg/L
- Total Recoverable Aluminum 0.75 mg/L
- Total Recoverable Copper 0.0156 mg/L
- Total Recoverable Iron 1.0 mg/L
- Total Recoverable Lead 0.095 mg/L
- Total Recoverable Zinc 0.13 mg/L

If effluent data exceeds the above criteria, permittees should take pollution prevention measures in this permit cycle to minimize contact of stormwater runoff with stockpiled materials, processed materials, and non-recycled wastes. Pollution prevention measures could include any of the following:

- Permanent or semi-permanent covers
- Jersey barriers to segregate storage areas and contain stormwater
- Surface grading to divert runoff from storage areas including dikes and/or berms
- Collection and containment trenches
- Sediment traps, vegetated swales and/or strips
- Dry absorbents

The permittee should also consider utilizing treatment systems to meet discharge criteria by improving stormwater quality. This could include any of the following treatment units:

- Filters
- Sand filters
- Groundwater infiltration basin
- Oil Water separator
- An engineered treatment system (at http://www.njstormwater.org/treatment/html)

8 Description of Procedures for Reaching a Final Decision on the Draft Action:

Please refer to the procedures described in the public notice published in the DEP Bulletin. In addition to the DEP Bulletin, the public notice for this permit action is published in the following newspapers:

Atlantic City Press *The Star Ledger* *The Times*

9 Contact Information

If you have any questions regarding the industrial wastewater discharge parts of this permit action, please contact Shashi Nayak of the Bureau of Nonpoint Pollution Control at (609) 633-7021 or via e-mail at shashi.nayak@dep.state.nj.us.

10 Contents of the Administrative Record

The following items are used to establish the basis of the Draft Permit:

Rules and Regulations:

1. 33 U.S.C. 1251 et seq., Federal Water Pollution Control Act. [C]
2. 40 CFR Part 131, Federal Water Quality Standards. [A] [C]
3. 40 CFR Part 122, National Pollutant Discharge Elimination System. [C]
4. N.J.S.A. 58:10A-1 et seq., New Jersey Water Pollution Control Act. [A] [B]
5. N.J.A.C. 7:14A-1 et seq., New Jersey Pollutant Discharge Elimination System Regulations. [A] [B]
6. N.J.A.C. 7:9B-1 et seq., New Jersey Surface Water Quality Standards. [A] [B]
7. Ground Water Quality Standards (N.J.A.C. 7:9-6)
8. N.J.A.C. 7:14C, Sludge Quality Assurance Regulations. [B]

Guidance Documents / Reports:

1. "Field Sampling Procedures Manual", published by the Department and available on the web at www.state.nj.us/dep/srp/guidance/fspm/.

2. "NJPDES Monitoring Report Form Reference Manual" available on the web at www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf.
3. EPA's Multi Sector General Permit Development Document available on the web at www.cfpub.epa.gov/npdes/stormwater/msgp.cfm.

Permits / Applications:

1. NJPDES NJ0107671 Scrap Metal Processing and Recycling General Permit issued for stormwater discharges to surface water dated February 1, 1995.
2. NJPDES NJ0107671 Scrap Metal Processing and Recycling General Permit renewed and expanded to cover surface water and groundwater discharges dated December 1, 1999.
3. NJPDES NJ0107671 Scrap Metal Processing and Recycling General Permit renewed and expanded to cover surface water and groundwater discharges dated February 1, 2005.
4. NJPDES NJ0163279 Vehicle Recycling General Permit issued for stormwater discharges dated August 1, 2012 and effective October 1, 2012.

Footnotes:

[A] Denotes items that may be found in the NJPDES/DSW Administrative Record Library located in the NJDEP Central File Room, 401 East State Street, Trenton, New Jersey.

[B] Denotes items that may be found on the New Jersey Department of Environmental Protection website located at www.state.nj.us/dep.

[C] Denotes items that may be found on the United States Environmental Protection Agency (USEPA) website at www.epa.gov.