



They're not staying down there, anymore!

I. D. D. E.

(ILLICIT DISCHARGE DETECTION AND ELIMINATION)

It comes from the sewer. It comes from the street. It's not just staying down there anymore. It eventually makes it to our outfalls and discharges into our local waterways, affecting water quality and wildlife. Illicit discharge is a big problem in some areas because it is not always easy to detect and often goes unnoticed. It is also a large source of pollution from uncontrolled sources in the urban landscape. LaRC has worked diligently to develop an effective illicit discharge detection and elimination program over the last decade. Part of the solution to this problem comes from LaRC employees looking out for these discharges and helping the Center address these issues by reporting what they see.

What Is An “Illicit Discharge”?

Federal regulations define an illicit discharge as “...any discharge to a municipal separate storm sewer system (MS4) that is not composed entirely of stormwater...” with some exceptions. These exceptions include discharges from National Pollutant Discharge Elimination System (NPDES)-permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered “illicit” because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. LaRC also defines an illicit discharge as any discharge to the MS4 that is not composed entirely of stormwater. Illicit discharges are prohibited via Langley Procedural Requirements (LPR) 8500.1, also known as the “Environmental and Energy Program Manual.”

Illicit discharges can be from:

- Disposal of vehicle maintenance fluids into a storm drain;
- Hosing or washing loading areas in the vicinity of storm drain inlets;
- Leaking dumpsters flowing into a storm drain inlet;
- Old and damaged sanitary sewer line leaking fluids into a cracked or damaged storm sewer line;
- Illegal dumping;
- Allowing unauthorized wash water with soaps or detergents into a storm drain inlet;
- Washing silt, sediment, concrete, cement or gravel into a storm drain;
- Dewatering of trenches or excavations for utility maintenance or construction; and/or
- A measurable flow during dry weather that contains pollutants or pathogens

Dry weather discharges are composed of one or more possible flow types:

- Sewage flows produced from sewer pipes;
- Wash water flows from a wide variety of activities and operations;
- Liquid wastes refer to a wide variety of flows, such as oil, paint, and process water;
- Tap water flows are derived from leaks and losses that occur during the distribution of drinking water in the water supply system; and

Illicit connections can also be considered illicit discharges.

Examples of illicit connections include, but are not limited to:

Sanitary sewer piping that is connected directly from a building to a stormwater system;



Or a basement or shop floor drain that is connected to the stormwater system



- Groundwater and spring water flows occur when the local water table rises above the bottom elevation of the storm drain and enters through cracks or joints.

What Does an Illicit Discharge Look Like Anyway?

Illicit discharges can come in and from a seemingly endless amount of places and take many forms. There are three primary classifications of illicit discharge as defined by the EPA:

Continuous discharges occur most or all of the time, are usually easier to detect, and typically produce the greatest pollutant load.

Intermittent discharges occur over a shorter period of time (e.g., a few hours per day or a few days per year). Because they are infrequent, intermittent discharges are hard to detect, but can still represent a serious water quality problem, depending on their flow type.

Transitory discharges are extremely hard to detect with routine monitoring, but under the right conditions, can exert severe water quality problems on downstream receiving waters. These discharges occur rarely, usually in response to a singular event such as an industrial spill, ruptured tank, sewer break, transport accident, or illegal dumping episode.



Why Are Illicit Discharge Detection and Elimination Efforts Necessary?

Discharges from MS4s often include wastes and wastewater from non-stormwater sources. A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry weather flows were from illicit and/or inappropriate discharges and connections to the MS4. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high

levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Not all non-stormwater discharges are considered illicit discharges, Examples of exempt discharges include:

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration;
- Uncontaminated pumped ground water;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water;
- Springs;
- Water from crawl space pumps;
- Footing drains;
- Lawn watering;
- Individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges; and
- Street wash water.

How You Can Help

Any LaRC personnel or on-site contractors who discover a release of material should respond by calling the LaRC Emergency Dispatcher at 911 (from land line phone on Center). Alternate phone numbers for the Emergency Dispatcher are: 757-864-2222 (Cell Phone) or 757-864-5500 (Business Number). The LaRC Emergency Dispatcher will initiate spill response with the LaRC Fire Department. Center employees can also call the Environmental staff at 757-864-3500 for concerns over potential illicit discharges. **All LaRC employees are encouraged to report illicit discharges and illegal dumping activities.**

The Center's Illicit Discharge Detection and Elimination (IDDE) program is managed by the Standard Practice and Environmental Engineering Branch (SPEEB). For any questions regarding the MS4 program or illicit discharges please contact:

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