

# SPILL REPORTING GUIDELINES



## **N**EVADA **D**IVISION of **E**NVIRONMENTAL **P**ROTECTION

Presentation for the  
NvRWA Conference on 3/16/17  
by Mark Kaminski, P.E.  
NDEP-BWPC

# Nevada Division of Environmental Protection

## Roles and Responsibilities

### NDEP works for the People of Nevada

- To protect Human Health and the Environment.
- To preserve and protect property values.
- To promote investor confidence and minimize adverse economic impacts.

These tasks are summed up in the NDEP Mission Statement:

“To preserve and enhance the environment of the state in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy.”



# The 11 NDEP Bureaus:

Corrective Actions

Waste Management

**Water Pollution Control** and Water Quality Planning

Air Pollution Control and Air Quality Planning

Mining Regulation and Reclamation

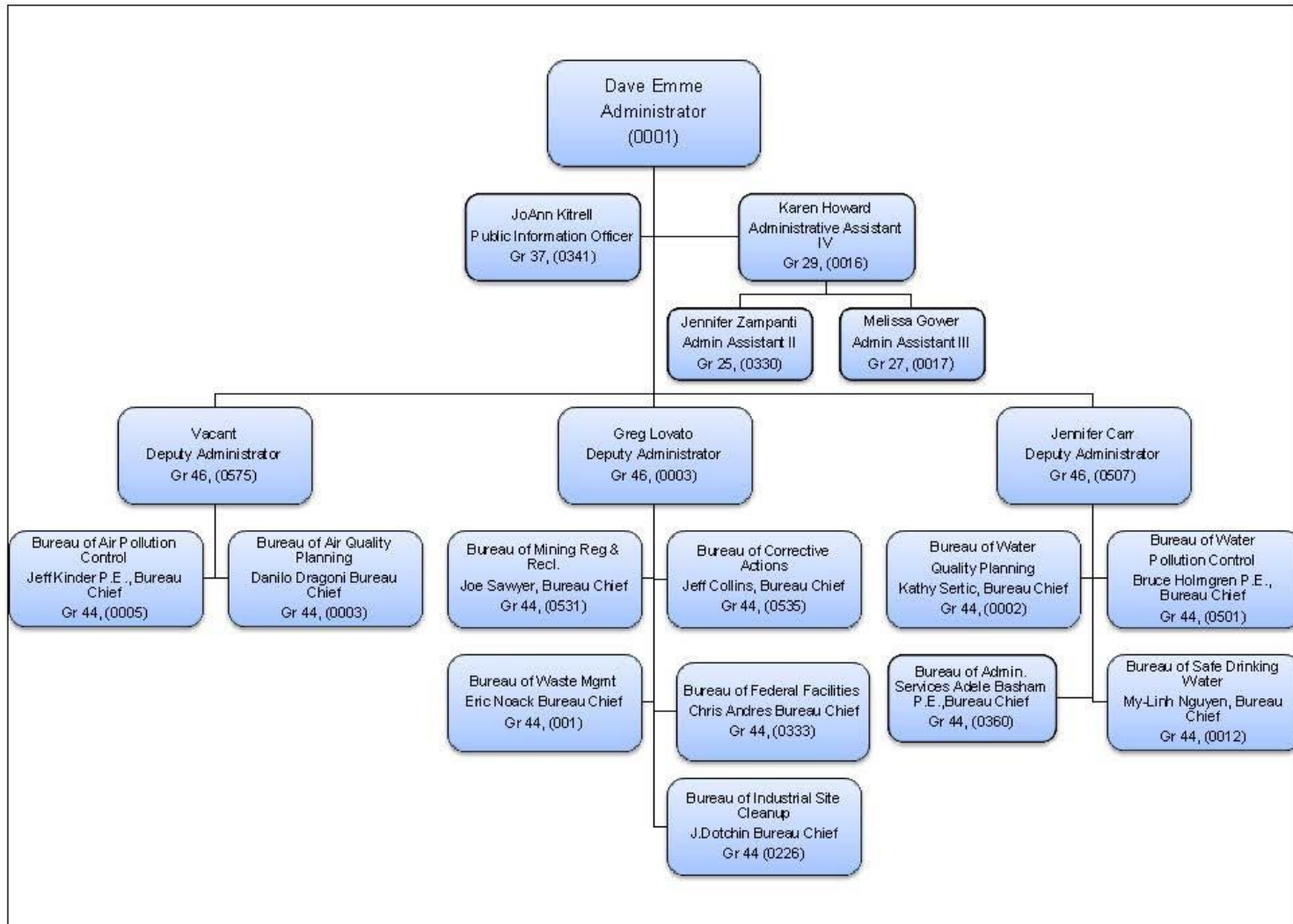
Safe Drinking Water

Federal Facilities

Industrial Site Cleanup

Administrative Services

DIVISION OF ENVIRONMENTAL PROTECTION  
 Division Management – March 25, 2016



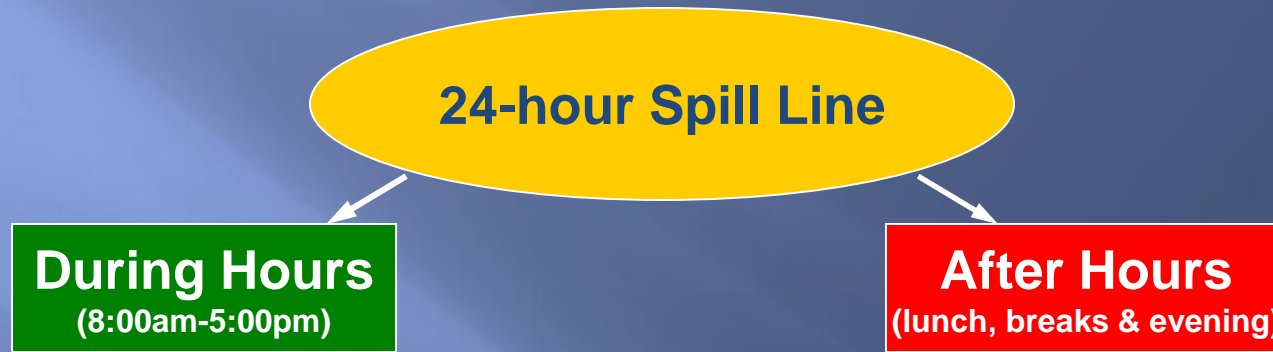
# Bureau of Corrective Actions Environmental Assistance Program

- ▣ Responsible for managing NDEP's 24 hour Spill Reporting Hotline;
- ▣ Point of Contact for all of NDEP's Bureaus;
- ▣ Can act as a liaison between other state, local groups and the EPA;
- ▣ Responsible for Hazardous Materials and Weapons of Mass Destruction environmental support roles at the Nevada Division of Emergency Management's State Emergency Operations Center (location: Nevada National Guard Armory, Carson City).
- ▣ Provides technical assistance and regulatory support to the SEOC and local responders.

Rebecca Bodnar, EAP Program Supervisor

Hal Dawson, EAP Coordinator

# NDEP 24 Hour Spill Hotline



- Two BCA staff are on spill duty
- NDEP Spill Database is used
- Reports routed to appropriate Bureau or agency
- NDEP provides oversight as needed

- Duty Officer is on call duty
- Significant releases are referred to an Environmental Assistance Coordinator
- Weekend & nighttime reports are routed to BCA on the next business day and a spill report is issued

## Current Duty Officers (D.O.) & Environmental Assistance Coordinators (EAC) NDEP Staff (12-13 Employees):

- ❑ Carson City: Jeff Collins, Dave Friedman, Rebecca Bodnar, Alex Lanza, Mike Friend & Hal Dawson; Joe Maez & Mark Kaminski (BWPC); & Ross Cooper (BSDW).
- ❑ Las Vegas: Mike Richardson (BWM); Carlton Parker & Chad Schoop (BISC) & 1 Vacancy (to be filled).
- ❑ Typically, Duty Officers and Environmental Assistance Coordinators serve 2-3 on-call shifts per quarter, 1 wk. per shift.

# What is a Spill?

- A spill can be described as any pollutant, hazardous waste or contaminant that has been spilled, leaked, pumped, poured, emitted, emptied, discharged, injected, escaped, leached, dumped or disposed into the environment. This would then be deemed a spill. Spills in excess the Reportable Quantities must be reported to the Nevada Division of Environmental Protection.
- The reportable quantity for petroleum products such as gasoline, diesel, and hydraulic fluid is 25 gallons or 3 cubic yards of contaminated material, or the presence in groundwater. A spill of any quantity that affects a water way within the State of Nevada must be reported, regardless of the quantity (e.g., oil sheen).
- The reportable quantity for hazardous waste is based on the Federal EPA guidelines established under Title III List of Lists (40 C.F.R. Part 302). *A spill of any quantity that affects a water way within the State of Nevada must be reported, regardless of the quantity.*
- *Spills must be reported to the Nevada Division of Environmental Protection as soon as possible, but no later than the end of the first working day of the release.*



# What is a Reportable Quantity or RQ? (40 CFR Part 302):

## Examples of RQs:

- 5,000 lbs. – Hydrochloric Acid
- 1,000 lbs. – Sulfuric Acid
- 100 lbs. – Ammonia
- 10 lbs. – Chlorine
- 1 lb. – Arsenic compounds

RQ Calculator: <http://homer.ornl.gov/rq/>

5 RQ increments = 5,000 / 1,000 / 100 / 10 / 1 lbs.

# Amended Regulation of the State Environmental Commission

- NAC 445A.3475 has been amended as follows:

**NAC 445A.3475 Provision of notice. Any notice of a release of a hazardous substance required to be provided to the Director:**

**1. Pursuant to NAC 445A.347 may be:**

- (a) **Provided via the online reporting system available at [www.ndep.nv.gov](http://www.ndep.nv.gov)**
- (b) **Faxed to (775) 687-8335; or**
- (c) **Provided by telephone at (888) 331-6337, for in-state telephone calls, or (775) 687-9485, for in-state or out-of-state telephone calls.**

**2. Pursuant to NAC 445A.3473, notification must be provided by telephone at (888) 331-6337, for in-state telephone calls, or (775) 687-9485, for in-state or out-of-state telephone calls.**

# State Environmental Commission Update

- Are there certain releases where I still have to call the NDEP Spill Hotline? **YES!**
- Pursuant to NAC 445A.3473, the NDEP must be notified by telephone “as soon as practicable” within 24 hours for the following types of releases:
  - A) Is in a quantity equal to or greater than that which is to be reported to the National Response Center pursuant to 40 CFR Part 302;
  - B) Involves any amount of a hazardous substance that is released to surface water;
  - C) Threatens a vulnerable resource\*
- **\*vulnerable resource** is defined as: 1) any building or structure that is used primarily to house or provide services to children, elderly persons or sick persons including without limitation, a school, daycare center, senior citizen center or hospital. 2) An area located within 150 feet of a public water system wellhead. 3) a storm drain (NAC 445A.3459).

# Amended Regulation of the State Environmental Commission

## AMENDMENT OBJECTIVES:

- ▣ Supplement the existing Spill Reporting Hotline by allowing the regulated community to report spills using the internet or fax
- ▣ Online Reporting System is not yet functional. Check back with NDEP-BCA @ [http://ndep.nv.gov/bca/spil\\_rpt.htm](http://ndep.nv.gov/bca/spil_rpt.htm).

# Spill Reporting Rule #1

- ▣ Any diversion, bypass, spill, overflow, or discharge of treated or untreated wastewater from wastewater treatment or conveyance facilities under the control of the Permittee is prohibited except as authorized by this permit. In the event the Permittee has knowledge that a diversion, bypass, spill, overflow, or discharge not authorized by this permit is probable, the Permittee shall notify the Administrator immediately.

*Plain English: Contact our office as soon as reasonably possible after a spill, bypass or upset event.*

# Spill Reporting Rule #2

- The Permittee shall notify the Administrator within twenty-four (24) hours of any diversion, bypass, spill, upset, overflow, or release of treated or untreated discharge other than that which is authorized by the permit. The following shall be included as information which must be reported within 24 hours:
  - Any unanticipated bypass which exceeds any effluent limitation in the permit;
  - Any upset which exceeds any effluent limitation in the permit; and
  - Any violation of a limitation for any toxic pollutant or any pollutant identified as the method to control a toxic pollutant.
  - *Plain English: Contact us within 24-hours of discovery.*

# Spill Reporting Rule #3

- ▣ A written report shall be submitted to the Administrator within five (5) days of diversion, bypass, spill, overflow, upset, or discharge detailing the entire incident including:
  - Time and date of discharge;
  - Exact location and estimated amount of discharge;
  - Flow path and any bodies of water which the discharge contacts;
  - The specific cause of the discharge; and
  - The preventive and/or corrective actions taken.
- ▣ *Plain English: A written, follow-up report is due within five (5) business days of the event.*

# Report info to provide to NDEP:

- ▣ Incident date and time.
- ▣ Reporting person/agency and contact info<sup>1</sup>.
- ▣ Name of the discharger and contact info.
- ▣ Location of the complaint or spill.
- ▣ Type of material being released.
- ▣ Quantity and/or concentration.
- ▣ Cause of the complaint or spill.
- ▣ Any remedial action taken to date.
- ▣ Other general info (e.g., is the spill under control or is it ongoing?).
- ▣ 1. Callers can be anonymous on the report.



# When will BWPC staff be contacted after hours<sup>1</sup>?

Type	Soil or pavement	Surface water or Drinking H <sub>2</sub> O (e.g. wellhead)	Potential Concerns
Tahoe Basin	> 100 gal. SSO or effluent	Any amount	Pathogens & Nutrients (algae)
Raw Sewage	> 25,000 gal.	Any amount	Pathogens
Reclaimed Water (RCW)	> 50,000 gal.	Any amount	Cat. A-E RCW not approved for direct human contact
Industrial Wastewater	If toxic to health or the environment	Any amount	Metals, VOCs & high/low pH
Non-toxic Wastewater	> 25,000 gal.	Any amount	e.g., O&G or FOG (sheen)
Geothermal	> 10,000 gal.	Any amount	High TDS & Metals

1. After-hour notification by the E.A.C.

# Properly reported spill calls:

- ▣ Allows the D.O./E.A.C. to make the proper agency notifications for your spill/upset.
- ▣ Conforms with State/Federal rules.
- ▣ Notifies affected downstream parties.
- ▣ Mobilizes the necessary resources (big spills).
- ▣ Addresses media requests to the State.
- ▣ Considered as a mitigating factor if the spill/upset results in an enforcement action.

# Significant Release Example for NDEP (Emergency Operations Center Activated)

Posted January 6, 2016 - 10:09am

## US Ecology explosion caused by water reaction with sodium metal



Exploding waste cell (ca. pre-1992).



Modern waste cell (ca. post-1992)



Hydrogen gas is flammable. The landfill cap was infiltrated with rainwater.

Photo No. 2—Close-up view of the crater area. (SFM photo by Off. Azevedo, October 21, 2015)



# High Profile Media Case for NDEP



Example of a high-profile media case, which attracted nationwide interest due to alleged hazardous waste dumping. Investigated by several agencies including NDEP & EPA.

If you report an SSO, please estimate the volume.



Answer: approximately 225 GPM per the reference sheet on the next page.

# Here's one estimation method.



City of San Diego  
Metropolitan Wastewater Department

## Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division  
(619) 654-4160



5 gpm



25 gpm



50 gpm



100 gpm



150 gpm



200 gpm



225 gpm



250 gpm



275 gpm

Flow Estimation Pictures

Collection System Collaborative Benchmarking Group  
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and  
Response Plan

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

# Example - plant upset



Plant upsets need to be reported to NDEP within 1-business day (e.g., upsets cause odors, high Bac-T levels, etc.). This WWTP lost  $\frac{1}{2}$  of its treatment capacity and was organically overloaded.

# Example - toxic waste



Report toxic waste dumping promptly. NDEP works with other agencies such as U.S. EPA (pre-treatment) or Tri-Net Task Force (drug labs). In this case, silver and sulfite photo chemicals were illegally dumped in large quantities.



# Example – aesthetic issue



Storage ponds need to be maintained and not become a public nuisance (example of a potentially toxic red algal bloom). In this case, NDEP determined the POTW's effluent was O.K.

# Example - Unapproved Bypass



A dam breach, which released > 100 Million Gallons of geothermal fluid. Fluids released offsite and into Waters of the U.S. and into Water of an Indian Nation.

# Example - Unpermitted disposal



Septage cannot be dumped on the ground. It must be disposed of at a POTW or beneficial application site. This release was  $\approx$  100,000 gallons and dumped onto an abandoned mine site (Superfund priority list).

# Other Spills or Complaints



This fire in Lake Tahoe was put out before it reached the diesel tank. A containment boom was installed to contain the glycol foam.

# Other Spills or Complaints



This force main in Lake Tahoe was shutdown while emergency repairs were made on the 16-in. diameter main to prevent further release of effluent into the lake. In all,  $\approx$  200,000 gallons of effluent flowed into a tributary.

# Non-Spills (Complaints)



10/13/2015 10:41



Nevada Department of Agriculture

## Concentrated Animal Feeding Operation (CAFO)



NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### What is a regulated CAFO?

A Concentrated Animal Feeding Operation (CAFO) is an animal feeding operation that:

- confines animals for more than 30 days during a 12 month period,
- is in an area where crops or vegetation are not sustained in the normal growing season and
- meets threshold listed under state regulations Nevada Administrative Code (NAC) 445a.228 and is regulated by the Nevada Division of Environmental Protection (NDEP):

Animal	Threshold
Cattle	1,000 or more
Mature dairy cattle	700 or more
Horses	500
Swine > 55 lbs.	2500
Swine < 55 lbs.	10,000
Goats/Sheep	10,000
Turkeys	55,000 or more
Chickens	30,000 - 125,000

Nevada primarily has a mixture of cattle and dairy CAFOs, but there are a few horse CAFOs and one swine CAFO in the State. Currently there are no poultry CAFOs in Nevada. In addition to CAFOs that meet the criteria listed in NAC 445a.228, NDEP can also issue permits to smaller CAFOs which discharge pollutants to state waters.

### What is the "Right to Farm" law?

Regulations exist in Nevada to protect a landowner's right to farm that land. Nevada Revised Statute (NRS) 40.140 outlines that an agricultural activity conducted on farmland, consistent with good agricultural practice and established before surrounding non-agricultural activities is reasonable. Such activity does not constitute a nuisance unless the activity has substantial adverse effect on public health or safety.

All 50 states have enacted right-to-farm laws that seek to protect qualifying farmers and ranchers from nuisance lawsuits filed by individuals who move into a rural area where normal farming operations exist and who later use nuisance actions to attempt to stop these ongoing operations.

### How is "farmland" determined?

Per NRS 278, zoning in Nevada is primarily deferred to city and/or county jurisdiction to divide the city, county or region into zoning districts of such number, shape and area as are best suited to carry out the purposes of industries located in a given area, as defined in NRS Chapter 278.010 - 278.630.

### Who regulates CAFOs, and how does the process protect the environment?

The CAFO permit, as regulated by the NDEP, protects the environment by providing requirements for managing manure and/or the wastewater generated in the CAFO operations. This includes the construction and maintenance of discrete conveyance channels and pipelines which direct wastewater to solids separators and into holding ponds. Additionally, a nutrient management plan is required for CAFOs that use their holding pond water or manure for fertilizing CAFO cropland to ensure it is done in an agronomic manner.

### What regulations apply to dairy or livestock operation that doesn't qualify as a CAFO?

Most dairy or livestock regulations in Nevada are for the safety of the animals, ensuring a safe food product for public consumption. Applicable dairy regulations may be found in NRS Chapter 584, and applicable livestock regulations may be found in NRS Chapters 561 - 576.

### Why do these regulations apply only to CAFOs?

General pollution control regulations apply to all agricultural operations (no one is allowed to knowingly pollute natural resources). "Concentrated" is the word at play in the CAFO designation. The CAFO permit exists to protect state waters and, by doing so, ensure a well maintained CAFO.

### How can I tell if my drinking water is safe?

The Bureau of Safe Drinking Water at NDEP oversees the regulations for safe drinking water for public water systems in Nevada. For private wells, contact your local extension office for assistance on testing the well for drinking water criteria. The Nevada Department of Agriculture tests for pesticide residue in groundwater, and the Nevada Bureau of Water Pollution Control collects data for other parameters via a monitoring well program at regulated CAFOs.

### What about air quality?

Although NDEP does not have authority to directly regulate odors from a CAFO, the CAFO permit requires that operations perform sound agricultural practices, including good management of wastewaters and manure. These practices should help to control odor emissions, but it is recognized that even a well-operated CAFO will generate some odors.



NEVADA DEPARTMENT OF AGRICULTURE • agi@nv.gov • 775-353-3601 • Document Date: May 6, 2016.

This is an example of a modern dairy operation. Numerous complaints have been received, but the Permittee is legally operating under an NDEP permit and conducting farming activities under Nevada's "Right to Farm" law.

# Non-Spills (Complaints)



This refining operation is watched very closely by its neighbors. BWPC investigations to-date have not substantiated the allegations made against the facility regarding oil dumping. However, NDEP takes all of its spill reports seriously.

# Common Spill/Complaint (Commercial OSDS Failure)



When a commercial OSDS fails, the owner must act in a responsible, expedient manner to make repairs and protect public health or face an enforcement action from NDEP or other agencies. In this Fallon MHP, repair of an OSDS failure was delayed until the owner acknowledged his responsibility to have a licensed P.E. submit an approvable design.



# Guidelines for Handling a Commercial OSDS Failure

- Contact NDEP ASAP. Other agencies may require notification<sup>1</sup>.
- Minimize spillage (e.g., limit water use, provide portable toilets).
- Hire a licensed, qualified professional:
  - Minor (pumping/blockage removal).
  - Major (design new leach field).
- Barricade access (cones, yellow tape, plastic fencing).
- Remove any surfacing (Vacuum Truck).
- Disinfect soil/media with bleach, lime or other disinfectant.
- Annually report tank scum and sludge levels (maintain  $\leq 50\%$  of depth).
- Avoid septic tank additives (i.e., not shown effective to replace pumping).

1. Schools, daycares, nursing homes, food establishments, etc.

# When in doubt hire a Professional

- Raw sewage is a biohazard.
- Always wear Personal Protective Equipment (PPE).
- Wash clothing and hands when done.



Good – Although failed, this field is fenced and posted.



Bad – Can a 2x4 and a 5-gal. bucket really stop kids or pets from contacting this pipeline leak?

# When in doubt hire a Professional

- Make sure your immunizations are current.
- At a minimum, wear gloves and eye protection.
- Understand the hazards of any chemicals being handled.



Good – These employees are suited up and handling labeled disinfectants to clean up an SSO.



Bad – This employee is smoking while using his bare hands to spread chemicals (high pH lime) onto a surfacing sewage spill.

# When in doubt hire a Professional

- Don't make a situation worse with shortcuts.
- Unless you're licensed (P.E.), NDEP won't approve your design plans.
- Your tenants have options besides NDEP to get the repairs completed.



Good – Although the sewer line bridge crossing washed out, the community water was shut off until repairs were complete. Water was made available for the fire station.



Bad – Without a public barrier, you can't reasonably expect to keep the local kids off of a failing absorption mound without a fence or other barrier.

# Guidelines for BWPC Staff on Handling a Spill Call

- Get basic info (name, # & a few details on the spill or complaint).
- Transfer caller to NDEP Spill Hotline (687-9485). Wait for BCA to pick up.
- Callers can remain anonymous on Spill Reports (confidentiality).
- Spill reports are considered a public record.
- On average, 2-3 spill calls are received each day. BWPC is routed on ½.
- Yes, some are later found false (e.g., disgruntled ex-employee).
- Actual emergencies must be reported to **9-1-1**. Examples include injury, death, fire, explosion, major property damage or terrorism.
- NDEP is not a 1<sup>st</sup> responder. We assist the 1<sup>st</sup> response agencies with technical assistance and environmental regulatory oversight.

# Spill Report Forms -

[http://ndep.nv.gov/bca/spil\\_rpt.pdf](http://ndep.nv.gov/bca/spil_rpt.pdf)

NDEP # 0 \_\_\_\_\_

Report Date: \_\_\_\_\_ Report Time: \_\_\_\_\_  
Incident Date: \_\_\_\_\_ Incident Time: \_\_\_\_\_

Do You Want to Remain Anonymous?

Reporting Person/Agency \_\_\_\_\_  
Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Discharger/Owner/Operator of Facility: \_\_\_\_\_  
Address: \_\_\_\_\_ DOT#: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Location of Complaint/Spill: \_\_\_\_\_  
APN#: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_  
Township: \_\_\_\_\_ Range: \_\_\_\_\_ Section: \_\_\_\_\_ Q,Q2: \_\_\_\_\_ Mile Marker: \_\_\_\_\_

Type of Material Discovered: \_\_\_\_\_  
Concentration (% , ppm, ppb): \_\_\_\_\_  
Quantity Found: \_\_\_\_\_ Media Affected: \_\_\_\_\_


Cause of Complaint/Spill: \_\_\_\_\_

Remedial Action Taken: \_\_\_\_\_

Oversight/Enforcement: \_\_\_\_\_  
cc: \_\_\_\_\_  
cc: \_\_\_\_\_

Comments: \_\_\_\_\_

Report Taken By: \_\_\_\_\_



Complaint/Spill Report Form  
State of Nevada  
Telephone: (888) 331-6337  
Fax: (775) 687-8335


These reports can be called, mailed, hand-delivered or faxed in to NDEP. On-line reporting is TBD (e.g. firewall issues).

# Questions?

NDEP Programs & Services   Public Information & More   NDEP Unique Websites   Financial Assistance   NDEP Online Services   Agency Contact Info   More About NDEP

State of Nevada  
Department of Conservation & Natural Resources  
Bureau of Corrective Actions  
901 S. Stewart Street, Suite 4001, Carson City NV 89701

Program - Web Pages



**NDEP Spill Reporting Hotline** [Back: BCA Home Page](#)

**Reporting Spills**   In-state: 1-888-331-6337  
Out of state: 1-775-687-9485

**June 2014 — NDEP Draft Guidelines for Discovery Events**

About Spills, Reportable Quantities and Reporting — A release can be described as any pollutant, hazardous waste or contaminant that has been spilled, leaked, pumped, poured, emitted, emptied, discharged, injected, escaped, leached, dumped or disposed into the environment. This would then be deemed a spill. Spills in excess the Reportable Quantities must be reported to the Nevada Division of Environmental Protection.

The reportable quantity for petroleum products such as gasoline, diesel, and hydraulic fluid is 25 gallons or 3 cyds of contaminated material, or the presence on or in groundwater.


The reportable quantity for hazardous waste is based on the Federal EPA guidelines established under Title III List of Lists (40 C.F.R. Part 302). A spill of any quantity that affects a water way within the State of Nevada must be reported, regardless of the quantity.

Spills must be reported to the Nevada Division of Environmental Protection as soon as possible, but no later than the end of the first working day of the release.

For information regarding State reporting requirements, when to call, who to call, or information on data, please call the Bureau of Corrective Actions at (775) 687-9369 during normal business hours (8:00 - 5:00 PST).

This spill information is entered and maintained on a State database by the Superfund Staff of NDEP.

A spill form has been made available to assist the caller in what information is asked by NDEP. This form may be helpful to a facility and the public. The caller must call Nevada Division of Environmental Protection (NDEP), a fax is not an acceptable reporting mechanism at this time. The caller always has the right to remain anonymous and the report will still be handled with the same level of seriousness.

[Get a copy of the Nevada Spill Reporting Form](#) 

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