OPS-SC-0014
Environmental Management Policy

Revision History				
Rev	**Date**	**Document Owner**	**Approved By**	**Issue Purpose**
0	08/01/2019	R. Courtney	RC	Create std policy
1	07/31/2026	R. Strahan	NR, RG	Update to separate policy by topic

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1 Purpose

The purpose of this Environmental Management Policy is to identify and discuss environmental risks during work planning and pre-job briefs to eliminate or avoid environmental risks.

2 Scope

The Environmental Management Policy applies to all Ampirical employees and contractors.

3 Responsibility

3.1 Ampirical Solutions

- Consider environmental risks and associated control measures in Job Hazard Assessments (JHAs).
- Be prepared to respond effectively if an environmental incident occurs, and if it is safe to do so. Immediately control the area and contact your supervisor and the HSE professional.
- Adhere to site-specific environmental procedures or guidance. Contact your supervisor or the field HSE professional to discuss site-specific environmental requirements or training.
- Comply with all environmental laws, regulations, permit obligations and company policies and procedures.
- Use materials and other resources efficiently to reduce waste generation, discharges and emissions.
- Be aware of your proximity to water bodies and/or drains that could discharge materials directly to a water body.
- Give extra focus and attention to environmental risks when working in or near sensitive environmental areas (e.g., on or near wetlands or water bodies).
- Protect the sensitive area with engineered and/or administrative controls as necessary.
- Avoid chemicals that create hazardous waste by products or may become hazardous waste, if unused. Substitute with nonhazardous chemicals when possible. Ensure all chemicals are approved and have a Safety Data Sheet prior to use.

3.2 HSE Management System

- Ensure the consistency and effectiveness of its HSE management activities using the following:
  - Continually improving HSE risk management.
  - Preventing and detecting non-compliances.
  - Reducing adverse impacts to the environment.
  - Enhancing the company’s reputation with external stakeholders.
- The HSE Management System is designed to be consistent with relevant international standards such as International Organization for Standardization guidelines and industry standards. However, it has been customized to apply to Ampirical ’s unique operating environment, risk profile and culture.

4 Aerosol Can Management

- Aerosol cans are considered hazardous waste unless they no longer contain useful product and they reach atmospheric pressure (no propellant remains in the container).
- The aerosol can is considered empty if it has no more than 3 percent by weight of the total capacity of the container.
- Empty aerosol cans can be recycled as scrap metal or disposed of in the regular trash.
- Defective aerosols can be collected and stored as hazardous waste in a Department of Transportation-approved container in a Satellite Accumulation Area (SAA). Do one of the following:
  - Place a hazardous waste label on the storage container and mark it “Defective Aerosols for Disposal”.
  - Collect as nonhazardous waste to be punctured by a “qualified individual” to remove the contents and recycle the metal. Contact your field HSE professional to determine what constitutes a qualified individual.
- Return defective aerosol cans to the manufacturer, if possible.
- Treat defective aerosol cans that cannot be returned as hazardous waste.
- The defective aerosol can must have a secure cap or the valve stem removed, and it must be lab packed for disposal.
- If you have questions about the proper handling of aerosol cans, contact your supervisor or field HSE professional.

5 Air Permitting

- Proper air permits for the site must be secured prior to starting any work activities that may potentially result in new or modified air emissions.
- Partner with an HSE professional to complete the Ampirical Environmental Requirements Review Checklist to identify potential activities that could trigger the need for an air permit. Generally, the following activities need to be considered:
  - New/modified stationary combustion sources (e.g., emergency generators, engines, boilers, turbines, etc.).
  - New/modified material handling equipment (e.g., storage silos, tanks, transfer points, conveyors, etc.).
  - New/modified sources of fugitive dust (e.g., storage piles, haul roads, material drop points, etc.).
  - New/modified process with the potential to emit any pollutant to the atmosphere.
- Contact an HSE professional with any questions regarding the proposed project or activity, including whether existing permits cover the scope of work or if a modified permit will be required.
- Construct and operate all equipment in accordance with the specifications and locations provided in the air permit application. If a change is needed, notify your supervisor and an HSE professional immediately.

- Ensure that an HSE professional is provided with copies of all documentation required in the permit (i.e., as-built drawings, certificates, etc.). Some permits allow for the construction of equipment and others allow for the operation of emission sources. Additionally, the permit may require notifications and submittals based on operation dates. Prior to initial operation of any piece of equipment addressed in a permit, contact an HSE professional to confirm proper permissions have been obtained.
- Because the permit may require a number of notifications or submittals based on different project milestones, ensure that an HSE professional is included on all project communications related to schedule. Also, notify them of any changes or delays.
- Route all regulatory correspondence or interpretation questions related to the project and/or permit through an HSE professional. Only designated HSE professionals are allowed to interface directly with regulatory personnel.

6 Chemical Control

- Safety Data Sheets, approval status and ordering numbers can be found via the MSDS Search tool on the Ampirical EHS Insight App.
- Credit cards cannot be used to purchase chemicals, except in emergency situations such as outages or situations that impact plant operability. Contact the field HSE professional for assistance by submitting an Emergency Purchase Form.
- Submit requests for new chemicals using a Chemical Approval Form and manufacturer's SDS allowing two weeks for approval. The Chemical Approval Form is located on the Ampirical Safety SharePoint. Contact the field HSE professional for assistance with new chemicals.
- The following ingredients are banned from purchase:
  - MDA or 4, 4-Methylenedianiline
  - Methylene chloride or dichloromethane
  - Asbestos
  - Paints or coatings containing lead or hexavalent chromium
- Seek approval from site management to procure a product that contains a banned ingredient. Contact the field HSE professional for assistance submitting an Exemption Form – Banned Chemicals.
- Current safety data sheets can be found by using the SDS Search in the EHS Insight App.
- The field HSE professional coordinates chemical inventory tasks to ensure accurate chemical inventory data and reports are provided to regulatory agencies. Alert the field HSE professional to any activities that have the potential to increase or decrease on-site chemical quantities, such as:
  - Changes in site processes involving chemical products (e.g., fuel handling, air pollution controls, water treatment, plant operations and maintenance).
  - Addition or removal of bulk containers (e.g., tanks, totes, drums).
  - Contractor activities involving chemical products brought on-site (e.g., during outage work, maintenance activities, construction projects).
- Ensure products are being used in the proper application. All containers must have the manufacturer's label or OSHA Hazard Communication compliant secondary container label attached at all times.

- Do not pour or put any chemical into a drain, toilet, trash receptacle or onto the ground for disposal purposes.
- Contact your supervisor or the field HSE professional if you have unusable chemicals that require disposal.
- Immediately report all chemical spills to your supervisor and the field HSE professional.

7 Containment Systems

7.1 Containment Systems Management

- Identify all oil/water separators and other containment systems at your location and know what drains into them and where they discharge.
- Include oil/water separator operation inspections in operator rounds. Review regularly for any unusual conditions, alarms or petroleum discharge where applicable.
- Operate and maintain these systems as recommended by the manufacturer and document in the approved work management system.
- Never use oil/water separators for oil storage.

7.2 Oil and Chemical Containment Structures

- Conduct preventive maintenance of oil and chemical containment structures, including non-earthen berm containment structures that are greater than 55 gallons in volume, as prescribed within the work management system at a three-year frequency.
- Focus inspections and maintenance activities on risks associated with spills or unpermitted discharges.
- All bulk storage container drainage valves must be securely closed when not in use by authorized personnel.
- Drain oil or chemical bulk storage containment areas in a manner to prevent uncontrolled discharge.
- Inspect secondary containments periodically (as specified in the Spill Prevention, Control and Countermeasure (SPCC) plan). Inspections must be performed on all oil sources, secondary containments, loading/unloading areas and spill response equipment as specified in the SPCC plan.
- Document all inspections and containment draining activities. Inspections records must include the name of the inspector and date of the inspection.
- Retain inspection records at the facility (or at a designated location for unmanned facilities) for a minimum of three years.
- Valve positions should be clearly marked. At facilities that are staffed full-time, verify the position of all manual containment drainage valves at least once a day. If the containment is not dry, the area must be inspected by a person trained in oil handling and the facility SPCC plan (i.e., eLearning activity ENC005 or equivalent) prior to opening the valve.
- At a minimum, check and verify the containment drain valves at unstaffed generation facilities on a biweekly basis. Check and verify the containment drain valves at other unstaffed facilities on a monthly basis. Unstaffed facilities that are routinely visited more frequently shall be checked during each daylight visit.

8 Contaminated Soil

- Any known soil contamination, environmental restrictions, engineering controls or environmental investigation results should be discussed with your supervisor and the field HSE professional prior to performing any clearing, grubbing, stripping, excavation, potholing, trenching or other land disturbing activities.
- Before beginning land disturbing activities, partner with the field HSE professional to complete an Environmental Requirements Review Checklist.
- Contact your supervisor and an HSE professional immediately if you encounter previously unknown contaminated soil during land disturbing activities. If an HSE professional is not immediately available to respond to the discovery, contact the Corporate HSE Manager.
- Do not spread, stockpile, transport or dispose contaminated soil prior to contacting your supervisor or the field HSE professional.
- A site Health, Safety and Environmental Plan must be reviewed and approved by an HSE professional before disturbing contaminated soil.

9 Contractor Chemical Control

- At least two weeks before arriving at the site, work with your site sponsor or project manager to provide the field HSE professional with a list of the products to be brought on-site. Include the maximum quantity of each to be stored, safety data sheets for each product and the number of days each product will be stored.
- Ensure the field HSE professional has evaluated and approved products prior to bringing the products on-site (including pesticides and herbicides).
- Alert the field HSE professional when chemicals are brought on-site so they can be added to the chemical inventory.
- Avoid chemicals that create hazardous waste by products or become hazardous waste if unused. Substitute with nonhazardous chemicals when possible.
- Familiarize yourself with the chemical hazards, required personal protective equipment (PPE), precautions, usage restrictions, exposure effects, storage requirements, and proper disposal methods, prior to using any product. Do not handle any chemicals without the proper PPE.
- Ensure products are being used in the proper application. All containers must have the manufacturer's label or OSHA Hazard Communication compliant secondary container label attached at all times.
- Remove all usable chemical commodities from the site that are not consumed during the job. Waste materials must remain on-site for proper disposal.
- Do not pour or put any chemical into drain, toilet or trash receptacles, or onto the ground for disposal purposes.
- Contact the field HSE professional if you have unusable chemicals that require disposal.
- Ensure that preventive measures, such as containment, are in place to minimize the risk of a chemical release.
- Know where your closest spill kit is located in the event of a spill.
- Immediately report all spills to facility personnel.

- Follow the SWIM process for any chemical spills (Secure the area, warn others, inform appropriate personnel and maintain the area until help arrives) if you are not formally trained in spill response.

10 Cultural Resources

Cultural and archaeological resources include older cemeteries and monuments, historic buildings and structures (50+ years) or their remains, historic or Native American sites, ancient artifacts (e.g., pottery, arrowheads, etc.), clusters of brick, stone or shell, rock paintings or rock carvings, large soil stains, or patterns of soil stains, that are associated with historic or prehistoric open campfires, waste pits, garbage disposal, wells, trenches and building remains, and other items of historic or archaeological value.

- At all times, avoid or minimize the impacts to cultural resources due to land-disturbing activities such as new construction, expanding, clearing rights of ways, etc.
- Stop working immediately if you discover a cultural resource (e.g., grave, artifacts, archaeological site, human bones, etc.) while working on an Ampirical project or property.
- Do not handle or touch the discovered item and notify your supervisor and an HSE professional.
- The HSE professional will contact the appropriate Ampirical department responsible for performing cultural resource evaluations and provide further instructions.

11 Decommissioning and Demolition Activities

Prior to mobilizing a crew to complete decommissioning or demolition activities at a site or facility, partner with an HSE professional to complete an Environmental Review Checklist.

- Evaluate or address the following prior to beginning the job:
  - Review activities that may affect surface waters, streams, rivers, wetlands or other sensitive environments to determine if permits will be needed. Follow all applicable regulations.
  - Submit applicable permits and notifications prior to beginning work if project will disturb one or more acres of land.
  - Complete an endangered species evaluation. Contact the field HSE professional for guidance.
  - Complete a hazardous material building inspection if warranted.
  - Develop a stormwater management plan and implement best practices or develop a stormwater pollution prevention plan if required by permit.
  - Determine a process for interacting with an agency inspector.
  - Determine a process for handling material containing asbestos, including making any necessary notifications to the appropriate environmental/governmental agencies (county/state) and proper disposal.
  - Contact the field HSE professional before initiating a coal pile closure project to ensure that the appropriate procedures are incorporated and the necessary permits are obtained.

  - Contact the field HSE professional before initiating the reuse of demolition materials to ensure appropriate procedures are incorporated and any necessary material tests or reuse approvals are obtained.
  - Determine a process to minimize fugitive dust.
  - Determine paint removal and sampling processes.
  - Determine piping inspection and removal processes.
  - Determine a proper storage and management process for solid and hazardous waste. Consider station generator status when planning work to eliminate hazardous waste that could accumulate over station limits.
- Evaluate materials such as caulk, paint, mastics and sealants to determine PCB content through proper sampling procedures. Results will determine disposal requirements. Evaluate materials for lead and asbestos on a case-by-case basis. Contact the field HSE professional for guidance with material disposal testing requirements.
- Evaluate and test oil from transformers and other oil-filled electrical equipment for PCB content. Any oil with PCB content greater than 50 parts per million (PPM) must be disposed of as PCB-containing oil. Any oil-filled electrical equipment manufactured after 1978 and marked “NON-PCB” does not require PCB testing.
- Contractors are responsible for developing their own Spill Prevention Control and Countermeasure (SPCC) Plan for the decommissioning/demolition activity if there is not an existing SPCC plan in place or the plan is insufficient per 40 CFR 112. This should include the quantity of on-site petroleum, location, type of secondary containment, and frequency of secondary containment and container inspections.
- Determine the location of all waste accumulation areas. Ensure that all required regulatory inspections are conducted. Work with an approved Ampirical waste vendor to ensure proper disposal of all site wastes, including materials to be recycled.
- Contact the field or project HSE professional for additional support.

12 Drinking Water

- In general, drinking water at Ampirical facilities should be purchased from municipal water sources and should not be supplied by Ampirical-owned systems.
- Where Ampirical is the system owner and operator, the system is regulated and must follow specific regulations before being placed into service and during operation.
- Construction, expansion or modification of a regulated drinking water system requires a permit before work begins. General system maintenance does not require a permit but may require follow-up disinfection and testing.
- Operation permits may be required before placing a new drinking water system in operation.
- Each regulated drinking water system is required to have a minimum of one certified operator assigned. The operator must hold a valid certificate issued by the State Environmental Certification Board, which is equivalent to or exceeds the class of the facility. Re-certification requirements vary.

- It is the responsibility of the certified operator to be knowledgeable of federal, state and local regulations that are applicable to their system and ensure that the system is operated in compliance with regulations, this includes verifying all materials used in construction, expansion, operation, treatment and maintenance of a system are certified for said use by NSF International.
- Systems are required to be sampled at representative locations in the system. Each system shall have a sampling plan that is reviewed and adjusted to describe compliance sampling required and the proper time period. Samples shall be taken in accordance with procedures acceptable to agency with regulatory authority.
- Laboratories performing compliance analytical work MUST be certified for drinking water testing by appropriate agency and approved by Ampirical.
- Cross connection between portable and nonportable systems is prohibited.
- Appropriate backflow prevention is required between any public system and Ampirical - owned systems.
- Required records (which vary by state) must be kept at the system location.
- If illness is suspected to have been caused by drinking water, contact the field HSE professional.

13 HSE Event Reporting and Investigation

At Ampirical, the safety of our employees, contractors and the environment are of utmost importance. When accidents or events occur, it is essential to understand what happened and why so that we can learn and improve our operations to prevent event reoccurrence. The HSE Event Reporting and Investigation Program includes an event reporting and investigation process. This process ensures that HSE events are correctly categorized, properly reported and adequately investigated to determine the cause(s) and to ensure that recommendations and corrective actions are implemented to prevent reoccurrence.

- Take action when an event occurs using the following steps:
  - Ensure that personnel in the immediate area are safe.
  - Take steps to stabilize the event location and surrounding area if it is safe to do so.
  - Take steps to minimize environmental impacts if it is safe to do so.
  - Obtain medical treatment for yourself or others as needed.
  - Immediately report the event. Call the control room (if applicable), your supervisor and the field HSE professional.
- Report all events to your supervisor or the field HSE professional as soon as possible so that any necessary notifications to outside agencies can be made within strict regulatory deadlines (some are as short as 15 minutes):
  - Preserve any evidence for investigation while ensuring personal safety and the environment.
  - Provide accurate information, as required, to support incident investigation.

14 Environment Requirements

14.1 General Environment Review Requirements

- Ampirical complies with all regulations, permits obligations and policy requirements applicable to its existing and planned facilities. Environmental requirements can be complicated and often require interpretation.
- As a result, project managers, engineers and work leaders must consult with an environmental professional before starting a project.
- The Environmental Requirements Review Checklist procedure assists individuals in identifying potential environmental requirements when planning projects for new or existing facilities, process modifications and maintenance activities, or when making changes at Ampirical facilities.
- The checklist covers many compliance considerations such as chemical control, hazardous and nonhazardous waste management, air compliance and permitting for new construction, new wastewater discharges, water permitting, drinking water, asbestos and lead abatement, stormwater erosion and sedimentation, wildlife management and demolition activities.

14.2 Completing an Environmental Requirements Review Checklist

- Complete the checklist early in the project development process to ensure that any environmental permitting or design considerations can be included in the project scope and schedule. Contact an HSE professional to start the environmental review process.
- Fill out the checklist based on knowledge of the project work scope.
- Include work scope details in the checklist comments section or as an attachment (specifications, work plans, drawings, aerials, SDS sheets, etc.) that will provide environmental personnel with enough project detail to perform an adequate review.
- Submit the completed checklist and supporting information to the field HSE professional for the project location. If a field HSE professional is not available, send the checklist directly to Environmental Services for review.
- The field HSE professional will review the checklist and provide the project manager with timely feedback regarding any necessary actions to build into the project scope to ensure compliance from a permitting and facility compliance perspective. This feedback can be delivered in many forms but must be timely and accurate to avoid delays in project performance.
- It is the field HSE professional's responsibility to involve Environmental Services subject matter experts (SME) as needed to ensure complete and accurate feedback to project management personnel.
- Notify the field HSE professional if the project scope changes following the initial review. The project manager must ensure that any additional environmental compliance actions are identified and completed.

15 Fugitive Dust

- All Ampirical facilities have a general requirement to minimize fugitive dust emissions. Fugitive dust is particulate matter that becomes airborne and is not emitted from a stack or vent.
- Always follow documented fugitive dust management plans and procedures. The field HSE professional can provide copies of plans upon request.

- Take additional control measures if the existing controls are ineffective (e.g., changing site or atmospheric conditions).
- Use Best Management Practices (BMPs) applicable to the job, project, or site to reduce the possibility for fugitive dust to leave the property. The field HSE professional can provide a list of BMPs upon request. The following are examples:
  - Maintain good housekeeping throughout the project site.
  - Ensure material storage piles are properly stabilized.
  - Consider using stabilizers if the material or pile will be inactive for an extended period of time. Contact the field HSE professional for a list of approved materials.
  - Water the roads frequently enough to prevent dusting conditions. Implement an on-site speed limit to minimize the amount of dust generated from vehicle movement.
  - Ensure that trucks and other material handling equipment (e.g., conveyors) are covered to minimize exposure to wind.
  - Minimize exposed surfaces for storage piles. Items to consider include pile height, slopes and total area exposed.
- Contact your supervisor or the field HSE professional for guidance and recommendations on controlling fugitive dust emissions.

16 Hazardous Material Transportation

- Hazardous material transportation is any process related to handling, packaging, marking, labeling, placarding, storing, moving, loading and unloading of hazardous materials, and responding to emergency situations while such materials are in transportation.
- A hazardous material is a substance or material that the Department of Transportation (DOT) has determined to pose an unreasonable risk to health, safety and property when in transport. Examples of DOT hazardous materials are the following:
  - Paints or solvents
  - PCBs (≥ 1 pound)
  - Asbestos (≥ 1% friable)
  - Lithium and lead-acid batteries
  - Pesticides or herbicides (mosquito repellent)
  - Compressed gas cylinders (propane, sulfur hexafluoride)
  - Fuels (gasoline or diesel)
  - Laboratory chemicals
  - Acids or bases
- DOT regulations govern hazardous material (hazmat) transportation. Employees and contractors performing these functions are considered DOT hazmat employees. Always consult business unit procedures for guidance before shipping equipment or storage containers that contain hazardous materials (e.g., compressed gas).
- All DOT hazmat employees are required to have training that includes general awareness, safety, security awareness and function-specific training. Initial training must be given within 90 days of employment with Ampirical.

- Employees may perform hazmat transportation functions before completing the initial training if they are under the direct supervision of a properly trained and knowledgeable employee. All hazmat employees must receive recurrent training at least once every three years.
- DOT's Materials of Trade (MOT) exception is widely used within Ampirical. The MOT regulations provide exceptions from the hazardous materials regulations for certain small quantities of hazardous materials when transported and used by Ampirical.
- Contact your supervisor or the field HSE professional for more information regarding hazardous material transportation.

17 Land Disturbing Activities

17.1 General

- Consult with an HSE professional when planning any land disturbance. Any use of land that results in a change in the natural cover or topography and that may cause erosion or contribute to sedimentation is considered a land disturbing activity. This includes altering the quality and quantity of stormwater runoff.
- Notify the field HSE professional of any regulatory site visits or inspections as soon as practical. Environmental Services will coordinate any communications with regulatory agencies (federal, state or local).
- Ensure any site inspection documents are maintained and readily available on-site.
- Review any permits to ensure that the required documentation and inspections are being completed and that there are clear owners for these activities.
- Ensure that the control measures are installed in accordance with approved plans. If changes are made or the project scope extends beyond the existing limits of disturbance, contact an HSE professional prior to implementing the change.

17.2 Erosion Control in Environmentally Sensitive Areas

- Minimize any land disturbing activities within the project area. No land grubbing or grading shall occur when working in environmentally sensitive areas such as streams and wetlands without a permit.
- Minimize any soil, spoil stockpile and/or laydown areas adjacent to environmentally sensitive areas. If stockpiles or laydown areas are needed, provide reinforced, double-row silt fence. Consult with an environmental/ HSE professional for guidance and compliance assistance around such areas.
- Construction equipment should be appropriate for the intended purpose – use of composite mats and low-pressure tracks/tires should be used to minimize any adverse wetland impacts or to minimize soil disturbance. Heavy equipment should not be used in environmentally sensitive areas.
- Any wetland activity should include the use of composite mats for access or crossings (riprap, soil, gravel or other such materials should not be used).
- Any stream crossing should include the use of temporary bridges (riprap, soil, gravel or other such materials should not be used).

- A minimum 10-foot vegetative buffer zone on both sides of streams should be maintained such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with lines is removed. Consider hand-clearing woody vegetation immediately adjacent to environmentally sensitive areas. Note there may be additional regulatory buffers in your project area.
- Any streambed or streambank disturbance should be minimized, and any rutting or similar impacts should be returned to pre-project contours and topography immediately after work is complete.
- If conditions warrant protective measures such as silt fences, wattles, hay bales or other appropriate erosion control measures should be utilized to protect sensitive environmental areas.
- Felled trees in environmentally sensitive areas should be removed by chain or cable. If stumps are to be removed, do so only by grinding.
- Installation of aerial infrastructure should be set back at least 10 feet from a stream where practical.
- Transformers or other equipment that has potential for adverse environmental impacts due to potential leaks or spills should be located a minimum of 125 feet away from environmentally sensitive areas.
- Immediately repair and report any erosion control measure failures, deficiencies and/or concerns to Environmental Services.

17.3 Directional Drills/Borings

- Pipeline/utility line construction through jurisdictional waters and wetlands will be accomplished utilizing directional drilling/boring methods to the maximum extent practicable.
- When directional boring or horizontal directional drilling (HDD) under surface waters or wetlands, personnel shall closely monitor the project for hydraulic fracturing (“fracking”) or releases along the length of the bore.
- Any discharge or release of hydraulic materials or sediments into surface waters or wetlands will need to be reported to the appropriate Army Corps of Engineers Regulatory Field Office within 48 hours. Contact the field HSE professional to report a release as soon as possible.
- Drilling entry and exit points shall be managed to avoid any significant buildup of sediments or other materials that could impact the environment. Silt fences, wattles, hay bales, liners or other such devices shall be installed at these locations to ensure no releases to environmentally sensitive areas occur.
- Entry/exit points should be located a minimum of 25 feet away from streams, wetlands or other sensitive environmental areas. For directional boring or HDD under surface waters or wetlands, the line should be at least 5 feet below the streambed.

17.4 Project Close Out/Maintenance

- Remove erosion control measures after project closeout conditions are met to ensure diffuse flow of stormwater through the project areas.

- Take care to avoid any rutting or fill placement in wetlands. Fills or debris should be removed such that revegetation and diffuse flow of stormwater is possible. Mulched material should not be placed in streams or wetland areas.
- Consult with the field HSE professional to ensure all permit required activities are completed and the permit is closed as necessary.

18 Maintenance Tasks Over or Near Water

- Conduct inspections of equipment, components, secondary containments, spill catchments and surrounding areas for any fluid leaks before and after conducting maintenance.
- Perform weekly inspections of non-oil-filled electrical equipment, while it is running, to ensure that there are no leaks while oil and fluid are moving. Report all leaks and equipment deficiencies to your supervisor and write a work order to complete repairs as necessary.
- Any non-oil-filled electrical equipment found to have leaks or improper maintenance should be taken out of service immediately, repaired and re-inspected before being put back into service.
- When operating mobile equipment in or near water, consider the use of an approved environmentally acceptable lubricant in mobile equipment hydraulic systems.
- Properly maintain all equipment by business unit standards or manufacturer instructions. Ensure preventive and corrective maintenance activities are logged or recorded in an approved work management system such as Maximo or Passport.
- Properly store and handle oils, lubricants and other fluids. Follow all Environmental Health and Safety requirements for oil and chemical storage, such as secondary containment and maintaining and storing material 125 feet outside of the boundary of concern, whenever possible.
- Obtain the SDS for fluids in the equipment being serviced and become familiar with associated hazards.
- If possible, conduct all non-oil-filled electrical equipment maintenance in a single location that is far from storm drains and greater than 125 feet from waterways. This may require moving the equipment to a new location that is better suited for spill containment.
- Conduct major maintenance such as disassembly in a location that is at least 20 feet from storm drains, at least 125 feet from waterways and suitable for proper spill containment.
- Use drip pans, catchments, plastic coverings, booms, and/or drop cloths to catch any potential drips and spills when equipment is being serviced. If equipment is not moved before conducting maintenance and the work is conducted within 125 feet of a waterway, cover any nearby openings to
- waterways, such as grates or intakes, with plastic, and place oil absorbent booms around grates and in possible paths of flow to bodies of water in case of spills.
- Make sure that spill cleanup kits are well stocked, on hand and readily available when performing maintenance.

- If a spill occurs, be prepared to respond quickly. Immediately notify your supervisor and the field HSE professional and, if safe, take steps to prevent the spill from spreading or reaching water bodies.
- Contact your supervisor or the field HSE professional for any site-specific requirements.

19 Migratory Birds

- Over 1,000 species of birds are protected by federal law (including very common species like robins, crows and vultures). This law makes it illegal to injure, kill or capture any protected bird, possess any feather or part of a protected bird, or destroy an active nest.
- Ampirical operates 24-hour Migratory Bird hotlines to assist employees and contractors with bird-related incidents that occur during your daily work activities.

24-Hour Migratory Bird Hotlines	
Carolinas	800-573-3853
Florida	727-386-3084
Wind	704-430-7946
Midwest	317-430-4497
Solar	704-657-5775

- When planning to conduct an outdoor work activity or project, ask the following questions:
  - Are there birds or nesting birds in the project area?
  - Are there large birds or a large bird nest in the project area?
  - Will this action affect important bird habitat (nesting, foraging, hunting, congregating and overwintering areas)?
  - Will this action take place adjacent to a river, lake or other bald or golden eagle use areas?
  - Could this action/work unintentionally injure or kill any birds?
  - Do we need a bird protection plan or bird permit?
- If you answered “Yes” to any of these questions, call the Ampirical Migratory Bird Hotline for guidance.
- Notify your supervisor or the field HSE professional and call the appropriate Ampirical Migratory Bird Hotline if you find a dead or injured bird on Ampirical property or rights of way.
- Notify your supervisor or an HSE professional and call the appropriate Ampirical Migratory Bird Hotline if a bird nest with eggs or chicks or an empty nest is in danger of being disturbed. Do not proceed with the work until advised to do so by the Ampirical Migratory Bird Hotline or the HSE professional.
- Notify your supervisor or an HSE professional and call the appropriate Ampirical Migratory Bird Hotline if a bird is trapped inside a Ampirical facility.
- If you suspect you have come into contact with a dead or injured bald or golden eagle, or a large nest near work activities (which may be a bald or golden eagle nest), stop work immediately. Notify your supervisor or an HSE professional and call the appropriate Ampirical Migratory Bird Hotline.

20 Operating and Maintaining Mobile Equipment

- Immediately inspect equipment when it arrives on-site for any fluid leaks or maintenance issues.
- Inspect equipment daily, before and after each use. Be sure to log all inspections per business unit procedures. Pay particular attention to proper installation of hoses, seals, fittings, filters, etc.
- Any equipment found to have leaks, or improper maintenance must be taken out of service immediately, repaired and re-inspected prior to placing back into service.
- Properly maintain all vehicles and heavy equipment. Ensure preventive and corrective maintenance activities for equipment not managed by Fleet.
- Services are logged or recorded in an approved work management system per business unit procedures.
- As possible, routinely inspect all fuel, oil or fluid-containing fittings, hoses and seals during machinery operation to detect leaks. Note: Over-tightened hoses or using incompatible fittings/fluids can cause leaks.
- Ensure proper storage and handling of fuel, oils, lubricants and other fluids such as antifreeze. Keep in mind the appropriate Health, Safety and Environmental requirements for fuel and chemical storage such as secondary containment and container labeling.
- If possible, conduct all vehicle/equipment maintenance and refueling at one location, away from storm drains and greater than 125 feet from waterways.
- Perform major maintenance, repair jobs and vehicle/equipment washing off-site.
- Use drip pans, catchments, plastic or drop cloths to catch any potential drips and spills.
- Perform a weekly inspection of parked equipment to check for leaks, spill containment installation deficiencies or environmental concerns. Keep
- a record of the most recent inspection at or near the home base of the equipment to allow for supervisor review of results and actions taken for problems found.
- Conduct a pre-use inspection before operating equipment. This includes checking for hydraulic fluid gathered on the ground barrier, fluid around fittings and fluid on the hydraulic cylinder.
- Watch out for any fluid leaks that develop during operation, regardless of how minor.
- Recognize hydraulically supported equipment “drifting” during operation (i.e., if operator must continually fight to keep the load raised on an excavator) as a potential hydraulic fluid leak. Even if no external leaks are apparent, drifting is a sign of internal leaking.
- Maintain the proper level in all hydraulic reservoirs. Hydraulic systems operated with a low fluid level will run hot, which will shorten the life and/or damage system components such as seals and hoses.
- Carry portable spill cleanup kits in trucks or heavy equipment to lessen the amount of time needed to respond in case of a problem.
- If a spill occurs, be prepared to respond quickly. Promptly notify your supervisor and a field HSE professional and take steps to prevent the spill from spreading or reaching water bodies in the United States.
- Contact the field HSE professional for any site-specific equipment requirements.

21 Open Burning

- Open burning activities (the burning of any materials where contaminants resulting from combustion are emitted directly into the air, without passing through a stack or chimney from an enclosed chamber) may occur because of land-clearing activities, construction or demolition, conducting fire-fighting training or right-of-way vegetation management.
- Open burning activities are generally discouraged if other cost-effective and regulatory-approved options are available.
- Consider controlled options for open burning in lieu of placing material in an open pile. Consider curtain burners with clean fuel for startup.
- Contact an HSE professional to discuss potential permitting requirements related to the use of controlled options.
- Restrictions on materials combusted, distance from residences and structures, time of day and burning during periods of drought are specified in state and local regulations. Any type of open burning can also trigger the need for advance permits or approvals from county, local or municipal officials, including the local/state fire marshal, state Division of Forestry and USDA Forest Service (fire towers) that may have jurisdiction. Since these local approvals vary considerably, contact an HSE professional for support.
- Prior to an open-burning event, ensure a communication plan has been developed and executed. This includes communications with the appropriate HSE professionals, as well as Corporate Communications and Community Relations organizations. Courtesy notifications may be made to regulatory agencies by the designated HSE professional, even if they are not a regulatory requirement.

22 Polychlorinated Biphenyl (PCB) Management

Equipment and certain manufactured products that contain ≥ 50 parts per million (ppm) PCBs or materials that have been contaminated with PCBs are regulated by the Environmental Protection Agency under the Toxic Substances Control Act (TSCA). Items with PCBs content ≥ 500 ppm are more stringently regulated.

- The following list includes equipment, manufactured products and materials that may be regulated under the TSCA:
  - Equipment – transformers, bushings, capacitors, ballasts, natural gas pipe, breakers, switches, fluorescent lamp ballasts and paper-insulated lead-covered cable.
  - Manufactured products – paints, caulks, mastics and wire coatings.
  - Materials – oil, soil, water, natural gas pipeline liquids (condensate), truck beds, plastics, paper, wood, cardboard and debris.
- PCB spills ≥ 50 ppm and the collection of PCB gas condensate should
- be reported immediately to your supervisor and an environmental/ HSE professional to ensure cleanup protocols and reporting regulatory requirements are met.
- All PCB shipments, cleanup records and analysis should be completed by the field HSE professional and compiled for a site's PCB Annual Document Log/Records.
- PCB materials can be temporarily stored at a location, such as an operation center for 30 days prior to being shipped to a long-term PCB storage location.
- Contact your supervisor or the field HSE professional if you have questions or concerns regarding PCBs or PCB-containing equipment.

*Note: A Hazardous Waste Manifest is required for shipments of PCB Articles and PCB

Article Containers to an approved PCB-disposal facility.

23 Pesticide and Herbicide Application

- Use only "general use" pesticides and herbicides that are approved. General use pesticides are available for purchase and use by the general public. "Restricted use" pesticides (RUPs) are generally prohibited for use by Ampirical. RUPs have the potential to cause unreasonable adverse effects to the environment and injury to applicators.
- Ensure applications are performed by or under the supervision of a licensed applicator.
- Follow the personal protective equipment (PPE) instructions on the product label when handling, mixing or applying pesticides or herbicides. Unless otherwise specified on the product label, the minimum PPE includes a long-sleeved shirt, long pants, eye protection (safety glasses or face shield) and impermeable gloves.
- Personnel can perform incidental applications of general use of wasp, hornet, fire ant and other small insect pesticides (including tick, insect and dog repellents) for immediate personal protection as long as all label instructions are read and followed.
- Maintain pesticide application records for at least three years from the date of application. Generally, records are not required for the following applications:
    - Janitorial use of general use disinfectants
    - Personal use of tick, insect and dog repellents
    - Incidental use of the following household-type products:
        - General use of rodenticides
        - Wasp and hornet aerosol killers, generally use fire ant killers or insect/mosquito repellents for small localized
        - Spot applications
- Keep records for general use applications of microbicides, molluscicides, algaecides and other antimicrobial products for water, wastewater or cooling tower treatment per the requirements of water and wastewater certifications.
- Prepare and review a Pesticide Discharge Management Plan for applications performed under a Pesticide Discharge Permit.
- Ensure all aerial herbicide application projects follow the Transmission Vegetation Management Aerial Herbicide Application Operational Procedures.
- Follow best management practices when applying all terrestrial and aquatic vegetation herbicides or insect pesticides.
- Immediately notify your supervisor or the field HSE professional if any chemical spills occur.

24 Refrigerants

Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are widely used as refrigerants in industrial refrigeration, commercial and comfort air conditioning, motor vehicle air conditioners (MVAC), and small refrigeration appliances. They are also used as a dielectric gas in some load center transformers. Halon is used as a fire suppressant in waterless fire protection systems for computer, telecommunication and data/document storage facilities and hand-held fire extinguishers.

- Avoid knowingly venting any refrigerant substance, including approved substitutes, into the atmosphere during testing, maintenance, servicing, repairing or disposal of an appliance or MVAC, except as allowed by the regulations. Minor releases of refrigerant that result from purging hoses or from connecting or disconnecting hoses to charge or service appliances or MVAC are not considered violations of the prohibition on venting.
- All Ampirical and contracted technicians servicing or disposing of refrigerant-containing appliances or MVAC must have Environmental Protection Agency (EPA) certification and training for the appliances or MVAC they service. Recycling and recovery equipment certified by the EPA must be used. The following are required:
    - Documentation of the EPA certification(s) must be maintained with the field HSE professional or with project documents.
    - Ensure that the technician certification level aligns with the work to be performed.
    - Only certified technicians may purchase refrigerant or Halon materials.
- Follow prescribed service practices from the manufacturer to minimize the release and maximize the recycling of refrigerants and Halon during appliance or MVAC servicing, repair, testing, maintenance and disposal.
- Provide documentation to the field HSE professional sufficient to track and document annualized leak rate, timely repairs, retrofits and notifications for stationary refrigeration equipment with a full charge of more than 50 pounds, as required by law. Some documentation is also required for appliances containing less than 50 pounds of refrigerant and for MVAC activities.
- Follow manufacturer or approved work practices to ensure refrigerants and Halon are recovered from appliances or MVAC, as required by regulations. All refrigerants must be recovered prior to disposal.
- Ensure that recovered refrigerant materials are properly disposed. Contact your supervisor or the field HSE professional with any questions regarding refrigerant management.

25 Reciprocating Internal Combustion Engines (RICE)

- Contact an HSE professional to evaluate the need for an air permit for any reciprocating internal combustion engine (RICE) equipment brought on-site. Equipment may include, but is not limited to the following: pumps, generators, light stands and welders.
- Provide secondary containment for each piece of equipment while on-site to prevent discharge of unanticipated leaks/spills to the environment.
- Containment must provide adequate capacity and be in good operating condition.
- Maintain records (e.g., rental agreements, logbooks) for any portable RICE equipment brought on-site to demonstrate the engine is not stationery.
- Ensure the field HSE professional is made aware of any engine rented and/or owned by Ampirical. Equipment meeting the definition of stationary RICE source may require an air permit modification prior to operation. Ensure the following:
    - Equipment purchased meets the required regulatory emissions standards for the intended use.
    - Maintain a copy of the manufacturer's emissions certification on-site.

- Prior to operation of the equipment, ensure that required maintenance activities have been entered into an approved Work Management System for stationary equipment that is rented or owned by Ampirical. The following should be met:
  - Only use ultra-low-sulfur diesel (ULSD) fuel in the engine.
  - Use a logbook to track run time and the reason for the run event. A non-resettable hour meter must be installed on the engine and used to record hours of operation.
  - Ensure maintenance, including changing hoses, belts, oil and oil filters, is completed per the manufacturer's guidelines or at the default thresholds provided by EPA. Ensure the records are readily available on-site.

26 Spill Prevention Control & Countermeasure (SPCC) Plans

- Develop and implement a Spill Prevention Control & Countermeasure (SPCC) Plan for any facility that has a total aboveground oil storage capacity of 1,320 gallons or more (excluding containers of less than 55 gallons) or total belowground oil storage capacity of 42,000 gallons, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, into or upon the navigable waters of the United States or adjoining shorelines.
- Inspect secondary containments periodically. Inspections must be performed on all oil sources, secondary containments, loading/unloading areas and spill response equipment as specified in the SPCC plan.
- Document all inspections and containment draining activities. Inspections records must include the name of the inspector and date of the inspection.
- Retain inspection records at the facility (or at a designated location for unmanned facilities) for a minimum of three years.
- Contact the field HSE professional for assistance with SPCC plans and their requirements.
- Notify the field HSE professional prior to adding or removing any oil storage containers (excluding containers of less than 55 gallons).
- SPCC plans must be amended when any material changes (i.e., adding/ removing oil containers or piping systems, altering secondary containment or drainage, modifying operation or maintenance procedures, etc.) occur at the facility. Amendments must be made within six months of the change.
- Contractors with oil containers equal to or greater than 55 gallons that have a combined total oil storage capacity of 1,320 gallons or more must prepare and comply with their own SPCC plan. The SPCC plan and any associated records shall be made available to Ampirical for review upon request.
- Contractors must provide secondary containment for oil storage containers brought on-site (regardless of size or amount) and establish an inspection process for both the containers and containments. All bulk storage containers equal to or greater than 55 gallons must be constructed with secondary containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. Secondary containment for oil-filled operational equipment need only address the typical failure mode and the most likely quantity of oil that would be discharged.
- Locate stationary oil-filled equipment, containers and piping within containment that provides adequate capacity and is in good operating condition.

- Visually inspect containment structures subject to periodic integrity testing (unless it has been determined that there is no risk of the impact to navigable waters if the container is compromised).
- Protect containers, aboveground piping and containment structures from potential vehicular traffic and mobile equipment impacts.
- Stage mobile equipment or containers inside containment (see also Mobile Equipment handbook chapter for more information).
- Ensure procedures are posted at designated loading/unloading locations. Perform the loading and unloading of fuel- and oil-containing products in accordance with posted procedures at the unloading area with facility personnel in constant attendance. It is important that tank levels be evaluated before, during and after product off-loading to prevent tank overfill (see also Oil and Chemical Containment Systems handbook chapter work standard for more information).
- Ensure SPCC plans are reviewed by the assigned professional engineer and/ or subject matter expert at least once every five years. Tier 1 SPCC plans can be reviewed by the field HSE professional. Any administrative updates such as changes in facility management or phone numbers should be made immediately. For sites with oil-filled equipment only, SPCC plans are placed in control buildings, if available, or accessible panels.
- Train all personnel involved in the operation and/or maintenance of
- oil-filled equipment annually. All personnel involved in the operation and/or maintenance of oil-filled equipment shall also receive an annual discharge prevention briefing.
- Train contractors to properly recognize and respond to a spill and be able to promptly notify facility personnel.
- Maintain records of oil spill events, inspection reports and training records. Contact HSE professional for assistance with documentation requirements.

27 Spills

27.1 General

- Conduct a pre-job brief prior to working with oils and chemicals to discuss the following:
  - Your work and the risk of spills associated with your work.
  - What could go wrong or lessons learned from past events.
  - What barriers have you put in place to eliminate or reduce the risk of a spill.
  - Distance or flow paths to water.
  - The location and access to an appropriate spill kit.
  - The location of the SPCC plan for the facility, if applicable.
- perform equipment checks on mobile equipment as follows:
  - Inspect equipment at the beginning of a shift, at the end of a shift and when the work scope changes.
  - Inspect hydraulic equipment before use and have defective equipment repaired before it fails.
  - Make every effort to park and/or stage equipment more than 125 feet away from water bodies.

  - Take precautions to prevent leaks from getting to the water/drains when working near water or yard drains.
  - Use containment for off-road or mobile equipment if possible.
- Equipment refueling should take place more than 125 feet from waters bodies whenever possible. If that is not possible, extra precautions shall be taken to avoid spills.
- Refueling must be attended through the entire refueling operation.
- The following proper precautions must be taken to prevent the spilling of any fuel:
  - Place a bucket/containment under refueling nozzle.
  - Have absorbent pads, socks, etc. available.
  - Place containment under mobile equipment and refueling truck as applicable.
- Dike or contain leaking oil-filled equipment. Properly bag or wrap oil-filled equipment for transport. It may be necessary to pump the oil from the leaking unit in some cases.
- Provide containment or construct temporary berms under portable oil-filled equipment, such as compressors, when used outside.
- In the event of a spill, your responsibilities are to first protect yourself and then SWIM:
  - S – Secure the area.
  - W – Warn others to leave the area.
  - I – Inform Contact Environmental Services immediately. Time is of the essence when reporting to Environmental. Do not wait to gather information. Immediately notify your field environmental/ HSE professional.
  - M – Monitor the area, keeping others away until qualified help arrives.

27.2 Spill Reporting

- In order to ensure the protection of human health and the environment, federal and state laws require that certain types of spills and unpermitted releases be reported to the proper regulatory agencies as soon as possible following identification.
- Immediately notify your supervisor and the field HSE professional when a spill or unpermitted release is discovered. In some cases, reporting to an outside agency is required within 15 minutes. There are many types of events that may require reporting. The following are some examples:
  - An oil spill, in any quantity, to navigate water (any oil sheen counts)
  - Any oil spilled to land within 100 feet of a water body
  - A chemical release to air, land or water
  - A release of untreated domestic wastewater
  - An oil spill to soil greater than 25 gallons
  - A coal ash release to the environment greater than 8,000 pounds in a 24-hour period
  - Any fire involving a PCB transformer
  - An unpermitted discharge of industrial wastewater to surface water
  - An unpermitted discharge of pollutants to the air
  - Any spill from an underground storage tank
- Follow the facility event reporting procedure. Call the control room to report an event at a generating station. Refer to the SPCC plan for facility specific procedures if available.
- If you are unable to reach the field HSE professional, contact the HSE Manager.
- Have the following information available when making the notification:
  - Location of the spill/release – facility name, address and location on-site.

  - Date and time discovered.
  - Your name and phone number.
  - What has been spilled? Chemical name, processes released from, etc.
  - Estimate of the volume released into the environment.
  - To what environmental media has the material been released – land, water or air?
  - Has the spill reached a drain or waterway? Does it have the potential to reach a drain or waterway?
  - What health risks exist?
  - What actions, if any, have been taken?
- Only perform spill response activities if you are trained and it is safe to do so.

27.3 Spill Cleanup

- Ensure the event has been reported prior to beginning cleanup.
- Do not attempt spill cleanup if you have not been trained in HAZMAT cleanup procedures.
- Reference the Facility Response Plan (FRP) if the facility is an FRP regulated site or the SPCC plan if it is an SPCC site.
- Confine the spill as close as possible to the source of the release. Consider type of spill, location, weather conditions and quantity to determine the best method for spill containment.
- Identify source of spill and determine the associated hazards.
- Eliminate all ignition sources if flammable or combustible materials are spilled and the danger of explosion exists.
- Use experience and judgment in choosing the best approach and remedial actions. The most generally applicable rule: Confine the spill as quickly as possible to minimize environmental impact.
- Use the tools, equipment, and materials that are readily on hand at the time that a response is necessary until there is time to bring additional, perhaps more effective, material to the site.
- Depending on the size of the spill, containment and/or cleanup strategies needed, you may need to call an Oil Spill Response Organization (OSRO) or facility (hazardous material) HAZMAT team for assistance.
- Response to an incidental spill does not require the utilization of a HAZMAT team but requires people to be trained on the chemicals they are using.
- Contact the facility HSE professional for assistance coordinating spill waste disposal.

28 Storage Tanks

- Ensure that the contents of the storage tank are compatible with the system prior to filling.
- Always check that available volume in the tank is greater than the volume of product to be transferred to the tank.
- Ensure releases due to spilling or overfilling do not occur by monitoring product transfer constantly (NO EXCEPTIONS).

- Immediately contact your supervisor and the field HSE professional upon discovering a release, spill or overfill. If possible, stop and/or contain the release (see Spills section for detailed guidance).
- Contact the field HSE professional prior to installing an underground storage tank (UST), taking a UST system out of service or placing a UST in temporary closure status. Governing agencies must be notified prior to operation or a change in tank status.
- Contact the field HSE professional prior to installing, removing or taking out of service any aboveground storage tanks (AST). Some states or local agencies have rules requiring permits or registrations for ASTs.
- Always consult with the field HSE professional before installing or repairing UST components.
- Prevent releases due to corrosion by operating and maintaining corrosion protection systems for the metal components of the tank and piping that routinely contain regulated substances and are in contact with the ground.
- Review printout from the tank monitoring system daily or more frequently as required.
- Records of a passed leak test result for each tank must be collected and filed monthly.
- Monitor USTs for releases using an approved release detection method once each calendar month, not exceeding 30 days. For exceptions, consult the field HSE professional.
- Train personnel on Class A, Class B, and Class C USTs according to state specific training requirements.
- Maintain a current copy of the UST operating permit and post it in an area that is visible to the fuel delivery vendor.
- Keep a copy of fuel and product delivery receipts on file for at least one year.
- Maintain a sufficient amount of product in used oil tanks (one-third capacity) to ensure a passed leak test is achievable for each calendar month. Do not allow Fleet Services or other vendors to pump tanks out completely as it will take time to allow the tank to rise to the level where the tank monitoring system can give an accurate passed result.
- Ensure preventive maintenance and inspection requirements for the storage tank are correctly identified and tracked to completion in a work management system or compliance tracking system.

29 Stormwater

29.1 Industrial Stormwater

- Industrial stormwater permits are required at all facilities where runoff from rain or snowmelt events comes in contact with industrial activities (e.g., vehicle maintenance, ash handling, materials storage or fuel
- loading operations).
- Apply for and maintain a valid stormwater permit at all regulated locations that discharge industrial stormwater.
- Maintain a Stormwater Pollution Prevention Plan, or equivalent, as required by the issued stormwater permit.
- Contact the facility HSE professional for industrial stormwater permitting and compliance assistance.

29.2 Construction Stormwater

- Obtain approval for temporary construction/land disturbance projects under general state National Pollutant Discharge Elimination System permit programs.
- Create a Stormwater Pollution Prevention Plan or Erosion Control Plan (ECP) as required by the general permit. The amount of area disturbance, which triggers these permits, varies by the appropriate jurisdictional authority.
- Contact the facility HSE professional for construction stormwater permitting and compliance assistance.

29.3 Stormwater Permit Requirements

- Use best management practices at the project site to minimize the mobilization of sediments using items such as silt fence, waddles or other approved erosion control devices.
- Some jurisdictions require long-term Operational and Maintenance Plans (O&M Plans) to be developed and followed after the construction phase of the project. These O&M Plans may require routine documented inspections of the best management practices, as well as annual reports and other documentation showing compliance with maintenance requirements and verification of site conditions of the permanent practice.
- Document any inspections and monitoring that are mandated by the stormwater permit.
- Maintain all documentation on-site per the record retention guidelines specified by the stormwater permit and corporate requirements.

30 Animals, Plans, and Habitats

- There are over 300 species of threatened or endangered animal and plant species in Ampirical regions that are protected by federal law.
- Harming, harassing, capturing or collecting a threatened or endangered animal is illegal.
- Collecting or harming threatened or endangered plants on federal land is illegal, as is removing, cutting or harming threatened or endangered plants in knowing violation of state law.
- Altering habitat or degrading habitat to an extent that it impacts a threatened or endangered species in any way, creates stress on a threatened or endangered species, or directly or indirectly causes death or injures a threatened or endangered species can result in criminal or civil enforcement.
- When planning an outdoor work activity or project that causes ground or habitat disturbances, ask the following questions:
    - Are there endangered or threatened animals or plants in the project area?
    - Could this action affect protected or important habitat?
    - Could this action unintentionally injure or kill any animals or plants?
    - Are there state and local laws to protect animals, plants and habitat?
    - Do we need a protection plan or permit?
- If you answer “Yes” or “I don’t know” to any of these questions, contact your supervisor and an HSE professional for guidance prior to conducting the work.

31 Used Oil

- Do NOT mix hazardous waste or other materials such as solvents, antifreeze or unknown liquids with used oil.
- Only store used oil in Department of Transportation-approved storage containers.
- Storage containers must be closed except for when adding used oil.
- Containers holding used oil shall be clearly labeled or marked with the words “Used Oil.”
- Store containers within secondary containment in a pre-determined used oil storage location. Be mindful if the site has a Spill Prevention and Countermeasure Control Plan (SPCC) and adhere to all requirements.
- Know the location of the closest spill kit in the event of a spill.
- Immediately report any used oil spills to your supervisor and the field HSE professional and take immediate action to minimize the extent of the spill.
- Transformer oil must have a polychlorinated biphenyls (PCBs) determination made by an environmental professional.
- Hot-drained used oil filters are considered nonhazardous waste if they are recycled as scrap metal. They can be placed in the regular trash if they have been properly characterized as nonhazardous based on generator’s knowledge or analytical data and that characterization is documented in the facility files.
- Used oil from all Ampirical facilities can only be sent to a company- approved off-site used oil recycling or disposal vendor.
- Do not transport more than 55 gallons of used oil at one time unless the vehicle is registered as a “Used Oil Transporter.”
- Contact the field HSE professional for any state-specific requirements.

32 Vehicle Washing

32.1 Vehicle Washing Permits

- Ampirical facilities discharging vehicle wash water that drains off-site either by direct discharge or through a storm drain must be covered under an industrial wastewater discharge permit.
- The purpose is to protect against direct or indirect discharges of pollutants to surface waters. Obtain a vehicle wash water discharge permit for any Ampirical facility that washes vehicles on-site. An individual permit may be required for each company washing vehicles at an Ampirical facility.
- Contact the field HSE professional for permitting and compliance assistance related to vehicle washing.

32.2 General Guidelines for On-Site Vehicle Washing

- Release vehicle wash water generated during vehicle washing to a permitted waste treatment system.
- Contact your supervisor or the field HSE professional before using detergents if you are uncertain of a facility’s permitting requirements.
- Collected sediment from the vehicle washing system must be evaluated by the field HSE professional to determine methods for proper off-site disposal.
- Ampirical vehicles may be washed off-site at a commercial vehicle washing facility.

- Ampirical facilities may contract vehicle washing to vendors who provide on-site, turnkey vehicle washing (i.e., taking vehicle wash water with them to be disposed of appropriately).

33 Waste Management and Disposal

33.1 General Requirements

- Personnel involved in the management or handling of Resource Conservation and Recovery Act hazardous waste shall be appropriately trained and the records for such personnel shall be maintained on-site.
- Hazardous waste will be collected in properly labeled containers.
- All facilities where the following materials are disposed of must be Ampirical -approved:
  - Polychlorinated biphenyl waste
  - Hazardous waste
  - Parts washer fluids
  - Recycled drums
  - Universal waste
  - Electronic waste
  - Used oil
  - Solvent rags
  - Coal combustion residuals
  - Manufactured gas plant waste
  - Petroleum contaminated materials
  - Nonhazardous industrial process waste
  - Scrap metal
  - Antifreeze
  - Selective catalytic reduction catalysts
  - Scrubber waste
  - Treated wood
- Minimize the generation of waste by limiting the number of materials used on a job. Do not co-mingle waste; this may generate additional hazardous waste.
- Any discarded or unneeded solid, liquid or gas that presents a danger to people or the environment should be considered a hazardous waste.
- Report all spills to your supervisor or the field HSE professional and take immediate action to minimize the extent of the spill.

33.2 Hazardous Waste Satellite Accumulation Areas

- Hazardous waste can be collected indefinitely in a satellite area as long as the waste continues to be generated and does not exceed 55 gallons.
- The satellite accumulation area must be located at or near the point of the waste generation.
- Containers must be closed unless adding or removing waste to the container.
- Containers must be in good condition.
- The words “Hazardous Waste” or words identifying the waste must be clearly marked on the container.

- Once the 55-gallon limit is reached, the generator must mark the date it was full and move the container to the hazardous waste central accumulation area within 72 hours.

33.3 Hazardous Waste Central Accumulation Areas

- All containers in this location must be labeled with the hazardous waste label and include the date the waste was moved to this location.
- Keep aisle spaces clear and free from obstacles. Maintain at least 2 feet of aisle space.

33.4 Nonhazardous Waste Management

- Characterize each waste stream to determine if usage or interaction with other materials transitioned the material to a hazardous waste category.
- Seek guidance from the field HSE professional on proper disposal of the following materials:
  - Aerosol cans
  - Antifreeze
  - Caulking
  - Drip water
  - Electronics
  - Empty containers
  - Grease
  - Hydrostatic test water
  - Mercury
  - Non-PCB ballasts
  - Oil cleanup debris
  - Oily rags
  - Photo processing waste
  - Rinsates
  - Solvent rags
  - Tires
  - Treated wood
  - Universal waste
  - Used oil
  - Wastewater

33.5 Recyclable Materials Management

- Items that are typically recycled by Ampirical include:
  - Asphalt and concrete (larger volumes of this material may be aggregated and used for beneficial purposes such as beneficial fill, etc., if approved prior to such use).
  - Cardboard and paper.
  - Plastic or metal drums (recycle or recondition all drums).
  - Electronics such as cathode ray tubes, testing equipment, printers, copiers, computers, etc.
  - Lamps.
  - Used oil.
  - Tires.
  - Empty aerosol cans.

- Contact the field HSE professional for information on recycling programs for your facility or jurisdiction.

33.6 Universal Waste Management

- Universal wastes (UW) are a subset of hazardous wastes that can be managed under reduced requirements. Universal wastes include the following:
  - Lamps – mercury vapor lamps, fluorescent lightbulbs, neon lights, high-intensity discharge (HID) lamps, high pressure sodium (HPS) lamps and incandescent lamps
  - Mercury-containing equipment – thermostats and manometers
  - Batteries – nickel-cadmium (NiCd), lithium (LiOH, Li-ION), silver oxide and lead-gel batteries
- Follow the basic requirements for managing UW:
  - Affix a Universal Waste label on a collection container and label as follows:
    - Universal Waste – Lamps (In Florida, label containers require Universal Waste – Mercury Lamps)
    - Universal Waste – Batteries
    - Universal Waste – Mercury - Containing Equipment (In Florida, label containers require Universal Waste – Mercury Devices)
  - Keep the container closed, except when adding or removing waste.
  - Record the accumulation start date (the date when the first item is placed into the container) on the label.
  - Recycle universal waste within one year of the accumulation start date.
- UW batteries may be recycled through Call2Recycle – Rechargeable Battery Recycling Corporation
- Broken lamps are to be managed as hazardous waste, contact the waste subject matter expert for proper collection and disposal. (Small amounts (< 5%) of unintentional breakage may be acceptable in packaged lamps).
- Contact your supervisor or the field HSE professional for additional guidance in managing wastes.

34 Wastewater

- National Pollution Discharge Elimination System (NPDES) permits are a license to discharge wastewater. Each individual discharge to a surface water body (lake, stream, canal, ocean or wetland area) must be covered under a site-specific NPDES permit to be in compliance.
- Any samples collected and analyzed at a permitted outfall must be reported to the appropriate regulatory agency.
- An NPDES permit is granted when the permit holder agrees to comply with a certain set of conditions including:
  - Limits on pollutants that may be present in the discharge
  - Requirements to monitor these pollutants
  - Requirements to report these monitoring results
- Laboratories performing compliance analytical work MUST be certified by the appropriate agency and approved by Ampirical.

- NPDES permit compliance is the responsibility of all Ampirical employees and contractors. Failure to comply with NPDES permit requirements can result in notice of violation (NOV) and associated penalties such as fines, criminal liability (including imprisonment) and disciplinary action.
- The following may be considered a permit violation:
  - Exceedance of permit limit.
  - Failure to meet monitoring and/or reporting requirements (missed samples, late report submittals, missed compliance schedules).
  - Discharge of pollutants that were not permitted.
  - Discharges of oil, hazardous materials or wastes.
  - Exceedances of water quality standards.
  - Bypassing required treatment.
  - Failure to properly operate and maintain wastewater treatment equipment/systems.
- A spill or other unintentional release of liquids from a wastewater treatment system is typically considered an “upset” that must be reported to the regulatory agency. This is true even if the spill or release has no other environmental consequences and does not require reporting under any other law or regulation.
- In order to meet strict reporting requirements, immediately report any exceedances, unauthorized discharges, or unplanned releases to your supervisor and the field HSE professional.

35 Water Use and Minimization

- Many Ampirical facilities have environmental permits that regulate and limit the consumptive use of water. Be aware and comply with consumptive use permits for the facility where you are working. Contact the site environmental personnel for compliance assistance with facility permits.
- Detect and repair all water leaks in a timely manner.
- Use dry methods for cleaning when possible (e.g., sweep paved areas instead of using water).
- Control water hose flow with an automatic shut-off nozzle. Do not let water run when not in use.
- Use vehicle-washing systems that reuse water when available.
- Contact the facility HSE professional to discuss water conservation ideas or with water-use-related questions.

36 Well Drilling and Closure Requirements

- Construct and maintain all groundwater monitoring wells, drinking water wells or wells that withdraw groundwater for process water, in accordance with applicable state statutory requirements, regulatory requirements or permit requirements. These requirements include:
  - Obtaining authorization to withdraw groundwater and to install or abandon wells
  - Developing and maintaining proper documentation and records
  - Conducting monitoring activities in accordance with applicable requirements and analytical procedures

- Contact the facility HSE professional when well installation is planned or existing wells are being considered for modification or abandonment.
- Installation and use of wells in the various states may require any, or all, of the following activities, record-generating and record-keeping requirements:
  - Groundwater withdrawal authorization via registration
  - Groundwater withdrawal authorization via permit application
  - Groundwater use permit
  - Well construction, modification, repair or abandonment authorization
  - Well completion record
  - Well construction record
  - Specific requirements for monitoring wells
  - Withdrawal reporting
- Follow well closure requirements (e.g., grouting and sealing the well casing) when abandoning/closing a well to limit the risk of surface contaminants entering the groundwater. Contact the facility HSE professional for assistance with well closure requirements.

37 Wildlife Management

- The presence of wildlife can create safety hazards and distractions while working. They can also impede the progress of a project or become a general nuisance by doing the following:
  - Leaving droppings in work areas
  - Standing in or running across roadways and walkways
  - Nesting too close to buildings
  - Building dams
  - Becoming entrapped or entangled in equipment or buildings
- Employees and contractors can safely coexist with small and large wildlife on sites and rights of way by following site-specific rules and regulations and using good judgment.
- Follow the designated speed limit on sites.
- Drive on designated site roads and walk on designated pedestrian walkways.
- Do not attempt to approach or make contact with any wildlife. Do not try to feed wildlife or leave food scraps out that might attract wildlife to the area.
- Be aware that state and local laws regulate trapping, relocating, harming and possessing wildlife.
- Notify your supervisor or an HSE professional when the presence of wildlife in a particular location becomes a danger or nuisance to employees and contractors.
- Pay attention to signs on sites and rights of way that designate managed wildlife habitat and avoid these areas.