EPA REGION 8 2015 STUDENT VOLUNTEER OPPORTUNITIES

The US Environmental Protection Agency's (EPA) Denver Regional Office is offering a number of opportunities in 2015 for students to gain valuable professional experience through its student volunteer program. The specific project opportunities available are provided on the following pages.

Eligibility Requirements: Participants must be enrolled or accepted for enrollment as a degree, certificate, or diploma seeking student taking at least a half-time course load in an accredited 2-year or 4-year college or university, graduate, or professional school.

Application Requirements: To apply for any of these positions supply the following by APRIL 6, 2015: transcripts, resumes and a cover letter (indicating the position or positions you are interested in, your available start date and approximate hours/week you could work to robles.elaine@epa.gov with the subject line: Student Volunteer Program.

Student Intern Fair: The EPA regional office is hosting two intern fairs at 1595 Wynkoop Street on March 30th from 9-1 pm and April 1 from 1-5 pm with an opportunity to meet with project sponsors, representatives of many EPA programs, and obtain information on applying for permanent employment with the EPA. For those attending the fair, bring an official ID and leave time for a security screening. Directions and visitor information can be found at: Directions and Visitor Information.

Students are not required to attend the fair to apply. RSVP and/or express your interest in a student volunteer position at: https://www.surveymonkey.com/r/6GBSJD3.

EPA REGION 8 AT A GLANCE

The U.S. Environmental Protection Agency’s (EPA) Region 8 office in Denver employs approximately 525 staff who work to protect human health and the environment in Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 sovereign tribal nations. We share this challenging work with many partners – state, local and tribal governments, businesses, non-governmental organizations, communities and individuals.

EPA Region 8 is unique. Our states encompass the heart of the American West, including much of the Rocky Mountains, Great Plains and Colorado Plateau. Characterized by vast open spaces—mountains, plains, canyons and deserts – and small, concentrated population centers, these areas still maintain some of the wild,
frontier character that many associate with the West. They also contain many of our nation's most recognizable landscapes, including Yellowstone, Glacier, Rocky Mountain, Badlands, Zion, and dozens more National Parks and Monuments, millions of acres of forests, and even more range, farm and grassland.

Region 8 environmental issues are broad ranging, including agricultural concerns; currently operating and abandoned mining operations; industrial complexes; development of large scale energy projects; and oversight of several Federally owned or operated facilities with historic contamination concerns. Given that approximately one third of the area in Region 8 is comprised of public lands, coordination with other Federal partners such as the Forest Service, Bureau of Land Management, National Park Service, etc. is essential to effective environmental management. Tribal Lands in Region 8 constitute an area the size of Florida, and present a unique set of environmental concerns.

HOME BASE IN REGION 8

In December 2006, Denver welcomed a world-class addition to its downtown, the 418,000 square-foot EPA Region 8 building at 1595 Wynkoop Street. The nine-story brick and glass building is a hallmark of environmental sustainability in the prominent Historic District of Lower Downtown (LoDo). The Regional office is adjacent to Union Station, the focal point for Denver’s growing public transit network, and can be directly accessed via a vast array of light rail and bus lines, as well as regional pedestrian and recreational trails. We are centrally located and just minutes from cultural arts complexes, museums, national sports venues, as well as restaurants, shops and outdoor trails. Denver enjoys 300 days of annual sunshine and offers the largest city park system in America with 200 named parks and 14,000 acres of parks in the nearby mountains. There are 850 miles of paved, off-road bike trails in metro Denver, many of which are directly accessible from the EPA Regional Office.

Denver has more than 40 museums and historic attractions, and is home to the Denver Center for the Performing Arts, a showcase for live, world-class theatre, dedicated to excellence in the arts.

DETAILED INTERNSHIP OPPORTUNITIES ARE LISTED BELOW
EPA Region 8 Environmental Justice Student Volunteer Intern

Position Title: Environmental Justice (EJ) Student Volunteer Intern

Background:

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work. EJ is an integral part of Region 8's mission. Our EJ program works with other EPA staff, states, tribes, and communities to incorporate EJ into program activities and policies.

EPA Region 8 Environmental Justice Program

Position Description:

The student intern will support the EPA Region 8 EJ Program. This may include:

- Participating in community engagement activities/meetings.
- Researching and summarizing EJ literature.
- Researching and analyzing publically available place-based and other information and making recommendations for improving usefulness and building community capacity to use information.
- Developing materials to communicate program accomplishments, success stories, and activities including developing social media posts (drafting Facebook and Twitter content, etc.)

Desired Skills:

- Excellent written and verbal communication skills
- Understanding of Social Media
- Ability to work independently
- Ability to work well in a team setting

Knowledge/Experience (optional, but a bonus):

- Marketing/Outreach
- Environmental Science/Engineering
- Environmental Justice

Timeline:

Student volunteer will be on board for a minimum of 3 months, maximum of 4 months.

Desired hours per week: 15-30.

Desired start date: May, 2015 (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed. An earlier start date is possible depending on the student’s needs)

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
Position Title: Energy and Water Resource Intern

Background: State regulations governing energy (oil & gas) development vary between states with respect to critical provisions affecting water resources. Within a state, different state agencies cover different aspects of the industry. For instance one state agency may regulate well construction requirements and another may regulate setback distances from water resources. Federal agencies also play a role and those regulations, guidance, and policies may vary between regions and states. The EPA is seeking a comprehensive overview and comparison of the oil and gas regulations pertinent to protection of water resources. This body of work will assist the agency in NEPA review and regulatory oversight.

Position Description:
The incumbent will have an interest in researching and analyzing the regulatory landscape covering oil and gas development and its juxtaposition with human health and the environment. This person will research specific aspects of oil and gas regulations, policies and guidance within each of the six Region 8 states, several additional states serving as benchmarks, and the federal land management agencies that operate within Region 8. This analysis will need to be carefully documented for future use by staff.

Specific duties may include, but are not limited, to the following:
- Internet searches for regulations, policies and guidance
- Summaries of pertinent aspects regulations, policies and guidance
- Development of database documenting regulatory comparisons
- Attend staff meetings to share progress
- Coordinate research with other region 8 and EPA offices
- Other As Needed

Desired Skills:
- Excellent written and verbal communication
- Excellent research and analytical capabilities
- Basic Excel, Word, Publisher
- Social Media
- Ability to work independently and to work well on a team

Knowledge/Experience (optional, but a bonus):
- Some familiarity with oil and gas production is desirable

Timeline:
Intern will be on board for a minimum of 2 months, maximum of 3 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

Desired hours per week: 16 hours per week or 2+ days per week
(Preference will be given to qualified candidates available to work more hours per week).

Desired start date: May 15, 2015
(Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed.)

For More Information: (Ayn Schmit, 303-312-6220 Program Contact)

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Oil and Gas Water Resource Setbacks Intern

**Position Title:** Oil and Gas Water Resource Setbacks Intern

**Background:** Setbacks from water resources can be an effective and important tool for preventing impacts from industrial activities such as oil and gas production infrastructure from reaching water bodies. Important water resources may include streams, wetlands, drinking water intakes and private and public drinking water wells, sensitive groundwater resources such as recharge zones, etc. Setbacks for oil and gas production infrastructure are intended primarily to reduce risk associated with two potential sources of impact—runoff of sediment and sediment-attenuated pollutants resulting from surface disturbance, and movement of oil/chemical/produced water spills or releases into water bodies. Setback distances are mandated by some state and federal agencies by regulation or through planning and permitting processes, and are described and documented in technical literature developed by resource agencies or published in peer reviewed journals. They may be based on or informed by factors such as topography, soil type, presence or absence of vegetated buffers, and results of watershed modelling. Many states also maintain spill databases which track information on spills including location and resulting impact to water resources. In an effort to determine what the optimal setback from water resources should be in order to protect water from contamination, EPA is conducting further evaluation of technical literature and spill data to better inform the scientific basis for specific setback recommendations.

**Position Description:**
The incumbent will have an interest in learning the regulatory arena covering oil and gas development and its juxtaposition with human health and the environment. If possible, the intern will have knowledge of GIS and data management that will support successful mapping of spill data.

1) The intern will build on research done by EPA on setbacks required by states or federal agencies or recommended in guidance to ensure that all relevant examples are captured.

2) The intern will research the published technical literature pertinent to water resource setbacks and the methodologies and approaches used to derive specific setback distances, and prepare an annotated literature review to document this research. If time and skills permit, the intern will evaluate the suitability and applicability of these methods and approaches for application to Region 8 watersheds and landscapes. The work completed may serve as the basis for a future ORD research grant.

3) Additionally, if time and skills allow, the intern will review state databases on oil and gas-related spills and assist in identifying spills, locations, and any intersection with surface or groundwater.

Specific duties may include, but are not limited, to the following:
- Internet and library searches of relevant technical literature
- Development of database and annotated literature review for future reference
- Coordination with GIS office to develop database of spill information for mapping
- Attend staff meetings to share progress
- Coordinate research with other Region 8 offices
- Other As Needed

**Desired Skills:**
- Excellent written and verbal communication
- Basic knowledge and training in watershed science
- Strong research and analysis skills
- Basic Excel/Access
- Basic Word
- Basic Publisher
- Social Media
- Ability to work independently and to work well on a team

Knowledge/Experience (optional, but a bonus):
- Knowledge of oil and gas industry
- GIS/Arc mapping

Timeline:
Intern will be on board for a minimum of 2 months, maximum of 3 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

Desired hours per week: 16 hours per week or 2+ days per week
(preference will be given to qualified candidates available to work more hours per week).

Desired start date: May 15, 2015
(Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed.)

For More Information: (Ayn Schmit, 303-312-6220 or Judy Bloom, 303-312-6395)

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Brownfields Program Student Volunteer

**Position Title:** Brownfields Program: Water and Energy Conservation

**Background:**

With a growing population along the Front Range and the looming threat of climate change, there can be no doubt that adequate water supply will be a primary concern in Colorado for the foreseeable future. Region 8’s Brownfields program has partnered with multiple housing providers to place compromised lands back into productive use. Many of these providers have expressed a desire for the ability to monitor real-time energy and water consumption of their tenants as a means to promote resident engagement in resource conservation efforts. To that end the Brownfields program was able to obtain funding for research on real-time monitoring of water consumption in affordable multi-family housing.

**Position Description:**
The student intern would support member(s) of the Brownfields team with:

- Research on other resident engagement programs conducted in Colorado and elsewhere
- Developing outreach materials designed to engage residents in resource conservation efforts. Such materials will employ a variety of messages appealing the various benefits associated with resource conservation: e.g. reduced operating costs, cleaner air, cleaner water, protecting wildlife.
- Conducting analysis of preliminary data from real-time water end energy monitors.
- Developing social Media Posts (drafting Facebook and Twitter content, Regional and National)

**Desired Skills:**

- Excellent written and verbal communication skills
- Understanding of Social Media
- Ability to work independently
- Ability to work well in a team setting
- Enthusiasm for sustainable development

**Knowledge/Experience** (optional, but a bonus):

- Marketing/Outreach
- Environmental Science/Engineering
- Sustainability/Resource Management

**Timeline:**
Student volunteer will be on board for a minimum of 3 months, maximum of 4 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 15-30 (preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** May, 2015 (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed. An earlier start date is possible depending on the student’s needs)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Brownfields Program Student Volunteer

**Position Title:** Brownfields Program Student Volunteer Intern

**Background:**

Brownfields are real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Region 8's Brownfields program provides funds and technical assistance to states, tribes, communities, and other stakeholders to assess, clean up and redevelop brownfields properties in the Rocky Mountain region, making it easier for such lands to become vital, functioning parts of their communities.

**Position Description:**
The student intern would support various members of the Brownfields team with:

- conducting site investigations of properties to determine site conditions (targeted brownfield assessments)
- developing outreach materials marketing the program’s grant and technical assistance programs
- accomplishment reporting, developing success stories and developing interactive mapping capabilities
- developing social Media Posts (drafting Facebook and Twitter content, Regional and National)

**Desired Skills:**

- Excellent written and verbal communication skills
- Understanding of Social Media
- Ability to work independently
- Ability to work well in a team setting
- Enthusiasm for in-fill redevelopment

**Knowledge/Experience (optional, but a bonus):**

- Marketing/Outreach
- Environmental Science/Engineering
- Sustainability/Geography/Urban Planning

**Timeline:**
Student volunteer will be on board for a minimum of 3 months, maximum of 4 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 15-30 (preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** May, 2015 (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed. An earlier start date is possible depending on the student’s needs)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov or Ted Lanzano at 303-312-6596
EPA Region 8 Oil Spill Data Analysis Intern Description

Position Title: Data Analyst

Background: Data about oil spills in the oil fields are gathered and held by the individual states or tribes, but accessing that data for analysis purposes is extremely limited. EPA would like to assess how much oil and produced water is spilled, whether it reaches waters of the US, how close it is to waters of the US, and what other facilities/population/species potential impacts might be impacted. The result of analysis may lead to identifying additional protection measures or strategies, planning and response measures and strategies.

Position Description:
Intern would extract/develop spill data from state/tribal published information. EPA would provide a specific geographic focus area, and links to state/tribal information. Data would be entered into a spreadsheet or more robust data management system (depends on skills/experience) and formatted so that it could be used in spatial (GIS) and statistical assessment. Depending on skills and desire of intern, they may conduct analysis using GIS or statistical software that will be provided by EPA.

Specific duties may include, but are not limited, to the following:
- Data extraction and/or entry from web or published reports
- Data reformatting and manipulation to desired regional formats.
- Data analysis
- Presentation of process developed and potential analysis results
- Other As Needed

Desired Skills:
- Excellent written and verbal communication
- Basic Excel
- Basic Word
- Basic Publisher
- Social Media
- Ability to work independently
- Works well on a team

Knowledge/Experience (optional, but a bonus):
- Basic knowledge of MS Access, SQL-Server
- Basic knowledge of database design and management principles
- Basic knowledge of GIS or statistical analysis

Timeline:
Intern will be on board for a minimum of 3 months, maximum of 6 months

Desired hours per week: 20-30 hours per week during summer, less if available in spring/fall.

Desired start date: Spring or Summer 2015

For More Information: Judy Bloom, 303-312-6395 or Tony Selle 303-312-6774

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
Position Title: Region 8 Field Operations Student Volunteer Intern

Background:

Region 8 Field Operations is an organization-wide, cross-programmatic initiative to institutionalize consistent field activities by implementing the Field Operations Group (FOG) Guidelines. The principles in the FOG Guidelines ensure sound scientific data collection for all field activities and apply to all EPA programs and their regulations. The project affords a bird’s eye view of all of EPA Region 8’s high priority programs, such as: CERCLA (Superfund), Clean Water Act (CWA), NPDES, Oil Pollution Act (OPA), Safe Drinking Water Act, Underground Injection Control (UIC), and others. Representatives from these and other programs participate in a high-impact team (FOG Task Force). The team works collaboratively to ensure that field activities support defensible Agency decision-making. A few examples of the types of decisions that are made from data generated through field activities are: enforcement actions, emergency spill responses, and site cleanup assessments—including whether or not and how to clean-up a site.

Position Description:

As part of a high-profile, high visibility initiative to institutionalize consistent Region 8 Field Operations within EPA, the student intern will be responsible for leading a project that develops recommendations for implementing one or more of the FOG Guidelines, such as field documentation and/or sampling and environmental data management. He/she will have an unparalleled opportunity to work with highly skilled scientists, managers, and policy-makers, and will apply strong leadership, communication, and interpersonal skills to identify sustainable approaches to implement field documentation requirements throughout Region 8.

The student volunteer will be responsible for and have the satisfaction of completing a project that will not be shelved, but will be immediately applied and used at the EPA. Last but not least, the intern will experience what it’s like to take a rule, regulation or system and make it into a sustainable and practical everyday practice for field activities. As part of this effort, the student intern will:

- Participate on the FOG Task Force;
- Research and leverage best practices for documenting field activities within EPA Region, the Agency and outside the Agency;
- Create tools such as templates, logbook pages and other field documentation for use in Programs and Offices within Region 8;
- Support development of a Regional Policy for implementing the field documentation or sampling and environmental data management; and
- May have opportunities to present his/her project work to the FOG Task Force members.

The integrity of our science is vital to EPA's work to fulfill our mission to protect human health and the environment. The foundation of our decision-making rests on our ability to generate high-quality work from our field activities. By establishing tangible tools and consistent approaches for field
documentation and sampling and environmental data management, the student intern will have a
direct impact on everyday field activities conducted by EPA Region 8.

**Desired Skills:**

- Excellent written and verbal communication skills
- Ability to work independently
- Ability to work well in a team setting
- Excellent computer skills, including word processing and spreadsheet creation/management
- Enthusiasm for ensuring high-quality field work

**Knowledge/Experience (optional, but a bonus):**

- Knowledge and/or experience in field sampling, monitoring, and field testing methods
- Experience in analyzing and synthesizing information to establish a recommendation and/or course of action

**Timeline:**
Student volunteer will be on board for a minimum of 3 months, maximum of 4 months (there may be an
opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 15-30 (preference will be given to qualified candidates available to work more
hours per week).

**Desired start date:** May or early June, 2015 (Please Note: From the time of acceptance, there will be a 2-
4 week period prior to first day of work while paperwork is completed. An earlier start date is possible
depending on the student’s availability)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
Position Title: Field/Biology Team Student Intern

Background:

The Region 8 Laboratory Field/Biology team supports EPA initiatives and projects by providing field and analytical services for environmental investigations. Investigations involve work in different environments to include lakes, streams, wetlands, mountains, and industrial facilities. The field/biology team of the laboratory has a variety of tools to accomplish investigations, to include: water quality multiprobes, GPS units, flow meters, and other field sensors and equipment. Sampling often necessitates using: canoes, rafts, boats, and hiking, as well as camping. Laboratory analyses includes microbial, algal (chlorophyll and algal toxin), and benthic macroinvertebrate procedures. The laboratory is located in Golden, Colorado. 2015 field work will occur in different areas throughout Colorado and Wyoming.

Position Description:

This is an internship opportunity to assist biologists conducting environmental field investigations of aquatic ecosystems. The student intern will support the field/biology team through:

- Environmental field sampling (lake and/or stream). Field events can be long day or overnight trips and may involve camping.
- Field preparation and demobilization and supply/equipment management
- Field data entry
- Literature research
- Creating or revising documents such as field forms, sampling plans, and standard operating procedures
- Chlorophyll a analysis by spectrophotometry
- Algal toxin analysis by ELISA
- If interested, assistance with microbiological and molecular analyses
- Online field and lab safety trainings must be passed before participating in field/lab activities.

Desired Skills:

- Enjoys working long days in variable outdoor conditions to include inclement weather, hot temperatures, and high altitudes.
- Physical fitness level adequate for some high altitude hiking with equipment, rowing a canoe or inflatable raft, and carrying/loading equipment up to 40 pounds
- Comfortable working around water in swift moving streams and on boats/canoes/rafts
- Willingness to camp
- Ability to learn how to calibrate and use scientific field equipment
- Proficiency in the use of databases and spreadsheets
- A flexible schedule will give the intern more opportunities to assist with field work on longer field days and possibly some overnight sampling events.

Knowledge/Experience (optional, but a bonus):

- Limnology or hydrology coursework or experience
- Experience with R statistical software
- Previous experience with field/outdoor work
Timeline:
Student volunteer will participate in the internship sometime between May and September (there may be an opportunity to extend into the fall for a maximum of 6 months depending on circumstances, but this is not assured).

Desired hours per week: Variable and negotiable. Hours and work schedule will vary based on scheduled field events. Preference will be given to qualified candidates available to work flexible schedules that accommodate long field days and occasional overnight trips.

Desired start date: May 2015 (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed. An earlier start date is possible depending on the student’s needs)

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Resource Conservation Recovery Program Student Volunteer

**Position Title:** RCRA Energy Development Student Intern

**Background:** The Resource Conservation and Recovery Act regulates solid and hazardous wastes. Hazardous waste is waste that is dangerous or potentially harmful to our health or the environment. See [http://www.epa.gov/waste/hazard/index.htm](http://www.epa.gov/waste/hazard/index.htm)

**Position Description:**
The student intern would support the RCRA team on one or more of the following energy-related RCRA Program efforts:

- Continue developing GIS map of oil shale and tar sand development sites in R8 such that clicking on the map gives land ownership, regulatory authority, status of development project, etc.
- Set up a compendium of energy development regulatory resources (federal register notices, interpretive memos, preambles, decision trees, and links to information already compiled on other EPA websites), related agencies and roles, Q&As
- Develop crosswalk between tribal, state and Federal RCRA regulations for energy development (beginning with oil and gas exploration and production exemption)
- Prepare a spreadsheet of petroleum refineries in our region and the RCRA status of each, if applicable. Indicate the status of permits, corrective action projects, and the names of the EPA, state, and tribal project managers.

**Desired Skills:**
- Data entry
- Excellent written and verbal communication skills
- Ability to work independently
- Ability to work well in a team setting

**Knowledge/Experience (optional, but a bonus):**
- Geographical Information Systems
- Environmental Science/Engineering

**Timeline:**
Student volunteer will be on board for a minimum of 3 months

**Desired hours per week:** 24-30
**Desired start date:** May 2015
**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov, or Margo Smith, Environmental Engineer, RCRA Program, 303.312.6318
EPA Region 8 Agriculture and Water Resources

**Position Title:** Ag/Water Resources Intern

**Background:** EPA and other federal and state agencies partner with the agricultural community to fund non regulatory measures and reduce the amount of nonpoint source pollution that reaches surface and ground water. Funding to support conservation practices that protect water quality has been historically provided by EPA through the 319 program and by USDA/NRCS using EQIP funding. The best management and conservation practices, once implemented, may protect water quality and provide a cost savings to the producer. The region seeks to gather examples where there is a cost benefit to the producers so that the examples can be shared region wide.

**Position Description:**
The intern will be comfortable contacting various external partners to discuss the project and gather examples and information. Internet searches may also be utilized. The examples will be written and shared in an electronic format. Information will be closely coordinated with the Public Affairs office, the regional Ag Advisor, and the Watershed Team.

Specific duties may include, but are not limited, to the following:

- Develop list of potential partners
- Phone inquiries with relevant partners
- Internet searches for pertinent information
- Develop template to use for examples
- Prepare examples in electronic format to share broadly
- Attend staff meetings to share progress
- Coordinate research with other Region 8 offices
- Other As Needed

**Desired Skills:**
- Excellent written and verbal communication
- Basic Word, Publisher
- Social Media
- Ability to work independently and well on a team

**Knowledge/Experience (optional, but a bonus):**
- Knowledge of the agricultural industry or practices
- Agricultural marketing
- Water science

**Timeline:**
Intern will be on board for a minimum of 2 months, maximum of 3

**Desired hours per week:** 16 hours per week or 2+ days per week
(Preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** May 15, 2015
(Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed.)

**For More Information:** Judy Bloom, 303-312-6395 or Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Quality Assurance (QA) Student Volunteer

**Position Title:** Quality Assurance (QA) Program Student Volunteer Intern

**Background:** Science is the backbone of EPA’s decision-making. EPA’s ability to pursue its mission to protect human health and the environment depends upon the integrity of the science on which it relies. The environmental policies, decisions, guidance, and regulations that impact the lives of all Americans every day must be grounded, at a most fundamental level, in sound, high quality science. The Region 8 QA Program plays an important role in ensuring science integrity by reviewing/approving environmental sampling plans and data collection activities to ensure they meet certain federal standards of quality. This position will work on exciting and cutting edge projects including working with EPA senior scientists/engineers to help ensure that sample collection activities in the Region are properly tracked and documented so that the data used for decision-making is reproducible and defensible in a court of law, if needed. The position will also work with Tribes, States, and other Environmental Programs within Region 8. Training will be provided.

**Position Description:**

The student intern would support various members of the QA team with:

- assisting in internal and external scientific assessments/audits;
- researching/analyzing data and making recommendations for improving program implementation;
- drafting/editing assessment reports;
- managing the Delegated Approving Officer (DAO) program; and
- accomplishment reporting, developing success stories;

**Desired Skills:**

- Excellent written and verbal communication skills
- Basic Excel
- Basic Word
- Ability to work independently
- Ability to work well in a team setting

**Knowledge/Experience (optional, but a bonus):**

- General understanding or Chemistry, Environmental/Biological Sciences and/or Engineering

**Timeline:**

Student volunteer will be on board for a minimum of 3 months, maximum of 4 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 15-30 (preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** May, 2015 (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed. An earlier start date is possible depending on the student’s needs)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
Position Title: Well Construction Student Intern

Background: Most state oil and gas regulating agencies have information available that identifies well construction and log information for oil and gas wells. It is necessary to be able to refer to well construction and the hydrogeology in contact with the well in order to assess the potential for impacts to groundwater resources. EPA is currently reviewing oil and gas activities at Unita & Ouray and Ft. Berthold reservations. Well construction data needs to be identified and summarized.

Position Description: Review and summarize oil and gas well construction practices for U&O and Ft. Berthold reservations.

Specific duties may include, but are not limited, to the following:
- Review data base information
- Build a template spreadsheet in XCEL
- Write report summarizing construction information
- Other As Needed

Desired Skills:
- Excellent written and verbal communication
- Basic Excel
- Basic Word
- Basic Publisher
- Social Media
- Ability to work independently
- Works well on a team

Knowledge/Experience (optional, but a bonus):
- Familiar with oil and gas well construction.

Timeline:
Intern will be on board for a minimum of 3 months, maximum of 4 months (there may be an opportunity to extend for a maximum of 2 months depending on circumstances, but this is not assured).

Desired hours per week: 16 to 24

Desired start date: May 15, 2015

For More Information: Gregory Oberley, 303-312-7043

Contact: Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Rocky Mountain National Park Nitrogen Deposition Reduction Initiative Communication Intern Description

**Position Title:** Communication Intern

**Background:** Rocky Mountain National Park (RMNP) is a spectacular natural treasure encompassing 415 square miles of montane, subalpine, and alpine ecosystems. On the east side of RMNP, the deposition of excess atmospheric nitrogen is nearing twice the tolerable rate and is impacting natural resources. Three-quarters of the park is above 9000 feet where high elevation ecosystems developed under low nutrient conditions, are especially susceptible to excess nitrogen, which promotes non-native plants and reduces forest health. Reactive nitrogen emissions from a variety of human made sources, including ammonia from agricultural production, contribute to an increasing rate of atmospheric nitrogen deposition at RMNP in Colorado. The park’s unique resources will continue to be harmed if N deposition remains constant or increases.

In 2013, Colorado’s livestock and crop producers and researchers at Colorado State University, with funding from the Colorado Department of Public Health and Environment and the National Park Service, began developing a weather-based “warning system” to inform crop and livestock producers of impending weather events that have a high likelihood of moving nitrogen emissions from eastern Colorado into RMNP. By identifying time periods when nitrogen emissions are most likely to have the greatest environmental impacts, agricultural producers and nonagricultural decision makers may be able to temporarily avoid practices associated with nitrogen emissions, thereby reducing their environmental impacts. A weather-based warning system will provide these decision makers with a valuable tool to reduce environmental impacts by voluntarily implementing best management practices during strategic times when they will be most beneficial. EPA, with other Federal, State, and local business partners would like to effectively promote and expand the use of this system in Colorado.

More information about the Initiative and the Early Warning System:

**Position Description:**
The Region 8 Communication Intern would support the work of Rebecca Perrin, Region 8 Agriculture Advisor and Steve Pratt, Region 8 Air Program related to accelerating the reduction of nitrogen deposition at Rocky Mountain National Park. We are looking for an energetic student who is passionate about solving problems and promoting creative solutions to a diverse audience.

*Specific duties* may include, but are not limited, to the following:
- Research best management practices to reduce nitrogen emissions to educate nonagricultural emitters
- Research ammonia emission reduction efforts in Midwestern and Western states
- Assist in the development of communication plans and outreach material about the RMNP Initiative’s work.
- Research and help design digital marketing options to promote the RMNP Initiative’s work
- Identify existing federal, state and local marketing campaigns related to air quality to potentially partner with to reduce nitrogen deposition at RMNP
• Help coordinate with State, Federal and nonprofit organizations on the tasks above

**Desired Skills:**

- Must possess strong communication skills
- Basic Word and Basic Publisher
- Ability to work independently
- Strong research skills
- Excellent interpersonal and relationship-building skills
- An analytical mind; able to bring new ideas to increase effectiveness of existing outreach

**Knowledge/Experience** (optional, but a bonus):

- Marketing/Outreach design
- Environmental and/or Agricultural Education
- General understanding of air and/or soil chemistry
- General understanding soil science

**Timeline:**

Intern will be on board for a minimum of 3 months, maximum of 4 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 15-30 (preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** Negotiable but not later than June 1, 2015. (Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed.)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov
EPA Region 8 Energy Development & Air Resources

**Position Title:** Energy and Air Resource Intern

**Background:** Air emissions from oil & gas development come from many different sources in hundreds of thousands facilities. Those emissions are estimated and accounted for in various emission inventories fulfilling different purposes. In northeast Utah in the Uinta Basin, concentrated oil & gas development is occurring and air quality impacted. The area is close to being designated in nonattainment for ozone with very high measurements during winter inversion events. In response to regulatory requirements for areas in nonattainment, one of the fundamental building blocks is the emission inventory. This inventory is used to inform ozone photochemical modeling needed to demonstrate how the area will return to attainment and to inform sensible, pragmatic mitigation that most cost-effectively reduces emissions to improve air quality. This body of work will assist a current multi-stakeholder Uinta Basin O&G Emission Inventory Workgroup formed to develop an oil & gas emission inventory for the Uinta Basin. About two-thirds of the oil & gas production in the Uinta Basin is on the Uintah & Ouray Reservation and EPA has a trust responsibility to work with the Ute Tribe to develop this inventory.

**Position Description:**
The incumbent will have an interest in researching and analyzing air emission estimating methodologies covering oil and gas development for greenhouse gases (GHGs), volatile organic compounds (VOCs) and other criteria pollutants like nitrous oxides (NOx) and carbon monoxide (CO), and hazardous air pollutants (HAPs). This person will compare and contrast the various estimating methodologies already in use for EPA’s greenhouse gas inventory; EPA’s Greenhouse Gas Reporting program; EPA’s National O&G Emission Inventory Tool for VOCs, NOx and CO; Western Regional Air Partnership O&G emission inventory; and Utah’s Division of Air Quality estimating approach. This work will inform the multi-stakeholder group who have begun work to develop a new oil & gas emission inventory for the Uinta Basin and provide a tool to reconcile the various inventories. This analysis will need to be carefully documented for future use by staff.

**Specific duties** may include, but are not limited, to the following:
- Summaries of estimating methodologies and how they compare and contrast
- Development of a compilation in a format TBD documenting estimating comparisons by emission source category
- Attend staff meetings to share progress
- Present comparison to Uinta Basin O&G Emission Inventory Workgroup
- Coordinate research with other Region 8 and EPA offices
- Other As Needed

**Desired Skills:**
- Comfort with formulas and good with math
- Ability to concisely yet thoroughly document sources of information and process of comparing estimating methodologies
- Excellent written and verbal communication
- Excellent research and analytical capabilities
- Basic/Intermediate Excel
- Basic/Intermediate Word
- Ability to work independently
- Works well on a team

What We Can Provide:
- Introduction to upstream oil & gas equipment and processes and sources of emissions.
- Access to the various emission estimating methodologies described above.
- Opportunity to learn how to use oil & gas emission estimating software packages.

**Timeline:**
Intern will be on board for a minimum of 2 months, maximum of 3 months (there may be an opportunity to extend for a maximum of 6 months depending on circumstances, but this is not assured).

**Desired hours per week:** 16 hours per week or 2+ days per week
(preference will be given to qualified candidates available to work more hours per week).

**Desired start date:** June 2, 2015 (or before May 14, 2015)
(Please Note: From the time of acceptance, there will be a 2-4 week period prior to first day of work while paperwork is completed.)

**For More Information:** (Cindy Beeler, 303-312-6204, Program Contact)

**Contact:** Elaine Robles, Human Resources, 303.312.6194 or robles.elaine@epa.gov