Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 1 of 14

STATEMENT OF BASIS

PERMITTEE:	Kiewit-Turner a Joint Venture
FACILITY:	Replacement Medical Center Facility, Eastern Colorado Health Care System
PERMIT NO.:	CO-0034991
RESPONSIBLE OFFICIAL:	A.J. Klebba III Deputy Managing Partner Kiewit-Turner a Joint Venture 7200 South Alton Way, Suite A-300 Englewood, Colorado 80112
FACILITY CONTACT:	Tracy Abdouch Executive Superintendent Kiewit-Turner a Joint Venture (303) 917-7717 E-mail: tracy.abdouch@kiewit.com
PERMIT TYPE:	Minor Federal Facility, First Permit Issued

This Statement of Basis (SOB) is for the issuance of the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of treated groundwater (and groundwater mixed with incidental stormwater) from the dewatering related to the construction of the Replacement Medical Center Facility, Eastern Colorado Health Care System to Toll Gate Creek in Aurora, Colorado.

Background Information

Kiewit-Turner a Joint Venture was contracted by the U.S. Department of Veterans Affairs (VA) to build a Replacement Medical Center Facility, Eastern Colorado Health Care System in Aurora, Colorado at the site of the former Fitzsimons Army Medical Center. The new medical campus (called the Replacement Medical Center Facility, Eastern Colorado Health Care System) will replace the existing VA Medical Facility located at East 9th Avenue and Colorado Boulevard in Denver, Colorado.

The new medical campus is planned to include a total of at least 12 buildings, including a conventional facility, 2 inpatient treatment facilities, 2 new and 1 renovated clinical care building, a central plant building, 3 parking structures, a rehabilitation facility, a medical research facility, and a central concourse. In total, the new and renovated square footage will be approximately 1,250,000 square feet and an additional 1,200,000 square feet for parking structures. The completion date of the medical campus is scheduled for early 2015.

For the construction of this facility, the VA awarded the construction contract to Kiewit-Turner a Joint Venture (KT). As part of the construction of this facility, KT will need to dewater groundwater for the construction of at least the VA Hospital Patient Parking Visitor South (PVS) Garage but possibly other buildings/structures if necessary.

An unconfined aquifer test was performed for the construction of the VA Hospital PVS Garage to be located at East Colfax Avenue and Wheeling Street. The PVS will consist of the construction of a three level, below grade parking garage. The proposed PVS will be a cast-in-place concrete construction. The excavation for the proposed PVS will be approximately 96,400 square feet and will extend to a depth of approximately 48 feet below the current ground surface.

The estimated volume of water within the footprint of the PVS excavation was calculated to be approximately 2.6 million gallons. As part of this project, temporary groundwater monitoring wells were installed in the area of the proposed PVS. Groundwater was encountered at depths of approximately 40 feet below the current ground surface. However, groundwater levels and flow fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors. Therefore, groundwater levels and flows during construction of the PVS or at other times in the life of the structure may be higher or lower than estimated.

To conduct the dewatering, KT has installed 88 dewatering wells around the perimeter of the PVS at a depth of approximately 40 to 50 feet deep. The wells have approximately 9 to 15 foot centers. From the 88 wells, the groundwater will be pumped to a 100 gallon above ground tank; the overflow from the 1000 gallon tank will flow into two 25,000 gallon residual tanks, and from the residual tanks the groundwater will be transferred to water trucks for use on-site. KT will use the water on-site for soil compaction, soil moisturizing, and dust control. In the event that more water is dewatered than can be used and stored on-site, KT plans to take the excess water to a landfill for disposal. If KT has more water than can be used on-site and taken economically to the landfill, then KT will rent a portable wastewater treatment system for the treatment and discharge of the wastewater under this permit.

The portable treatment system KT would use would consist of ion exchange system that could treat up to 100,000 gallons per day (see Figure 1). If a treatment system is utilized, wastewater (groundwater and incidental stormwater) from a 25,000 gallon residual tank would be transferred to a chemical mix tank where sulfuric or hydrochloric acid may be added to lower the pH or where sodium hydroxide may be added to adjust the pH higher. pH adjustment would be necessary to create a precipitate which will need to be removed using coagulation and flocculation. Also in a section of the chemical mix, chlorine (in the form of sodium hypochlorite (NaOCl) liquid or tablets) could possibly be added. From the chemical mix tank, wastewater would be transferred to a settling tank where a coagulant consisting of an aluminum salt and a flocculent consisting of a copolymer of acrylamide and sodium acrylate may be added to aid in coagulation and settling. The solids will be collected and properly disposed of at a landfill or sewage treatment plant. The wastewater would then be processed through bag filters and then cartridge filters. Lastly, the wastewater would be treated through three ion exchange resin vessels operated in parallel. From the resin vessels, the treated wastewater would be discharged to a storm sewer manhole located at latitude 39.740642 N and longitude 104.830887 W, which is Outfall 001 (see Photos 1-3). Outfall 001 is located on the VA's property and adjacent to the Clinic Building South (CBS). Compliance monitoring samples must be collected just prior to discharge into the storm sewer manhole and prior to co-mingling with additional wastestreams (e.g. site stormwater). From the storm sewer manhole located at latitude 39.740642 N and longitude 104.830887 W, the wastewater will travel a short distance through the University of Colorado Hospital's municipal separate storm sewer system (MS4) and the City of Aurora's MS4 before being discharged to Toll Gate Creek.

Incidental stormwater shall include only the stormwater which happens to fall within the area of the dewatering and shall only be a minimal amount. Stormwater discharges from the construction activities are permitted under a separate NPDES permit (the EPA's National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities). This facility has been assigned a

permit tracking number of COR10EU2F under the EPA NPDES General Permit for Discharges from Construction Activities.

Water quality samples were also obtained from the monitoring wells in the area of the PVS. Samples from monitoring wells in the northwest, southeast, and southwest area of the PVS were collected in May and June 2011(the monitoring well in the northeast area of the PVS was dry). A summary of the water quality samples and associated water quality criteria is outlined in Table 1.

<u>TABLE 1</u> Groundwater Monitoring Wells Analytical Monitoring Result and Associated Water Quality Criteria

	NW Well	SE Well	SW Well	Acute	Chronic
Sample					
Date	5/17/2012	6/1/2011	6/1/2011	WQS	WQS
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ag (dis)	ND	0.35	0.23	9.8*	1.6*
Ag (tot)	ND	0.37	0.4		
Al (dis)	3640	ND	ND		
Al (tot)	4440	29000	10400	10,071*	1,438*
Fe (dis)	3360	ND	ND		1,000
Fe (tot)	4050	25400	14900		
Se (dis)	100	422	291	29.5	26.5
Se (tot)	238	451	295		
Sb (dis)	ND	ND	ND		
Sb (tot)	ND	1.45	ND		
As (dis)	ND	16.7	7.25		
As (tot)	2.56	1.45	10.4	340	150
Ba (dis)	110	63	48		
Ba (tot)	130	289	241		
Be (dis)	ND	ND	ND		
Be (tot)	0.34	4.69	5.5		
Cd (dis)	ND	0.49	5.8	6.1*	0.85*
Cd (tot)	ND	1.25	1.48		
Cr (dis)	ND	0.48	ND		
Cr (tot)	ND	9.39	8.24		
Cr +6	ND	ND	ND	16	11
Cr +3	No data	ND	ND	1,207*	157*
Cu (dis)	3.1	ND	ND	32*	20*
Cu (tot)	5.23	15.3	32.6		
Hg (dis)	ND	ND	ND	1.4	0.77
Hg (tot)	ND	1.72	1.77		
Pb (dis)	2.25	ND	ND	172*	6.7*
Pb (tot)	3.2	42.8	38.2		
Mn (dis)	498	240	121	4,051*	2,238*

Mn (tot)	558	1110	1220		
Mo (dis)	16	8.45	9.99		
Mo (tot)	18	8.3	4.85		
Ni (dis)	1.89	ND	ND	1,017*	113*
Ni (tot)	3.72	8.84	9.33		
Tl (dis)	ND	ND	ND		
Tl (tot)	ND	2.35	ND		
Zn (dis)	8.1	ND	ND	368*	279*
Zn (tot)	10.3	94.3	114		

* Based upon a stream hardness of 250 mg/L ND = Nondetect dis = Dissolved, tot = Total

Various water quality samples have been collected from the United States Geological Survey (USGS) Gaging Station on Toll Gate Creek since 1998. Based upon the water quality samples, Toll Gate Creek has an average hardness of 267 mg/L. For determining water quality criteria, a hardness of 250 mg/L was used.

Results from the analytical monitoring indicate high levels of naturally-occurring metals (e.g. aluminum, cadmium, iron and selenium). Below is a summary of the analytical monitoring results that exceed the water quality criteria for metals.

		Al	Al	Cd	Cd	Fe	Fe	Se	Se
Date	Monitoring Well Location	Trec (ug/L)	Dissolved (ug/L)	Trec (ug/L)	Dissolved (ug/L)	Trec (ug/L)	Dissolved (ug/L)	Trec (ug/L)	Dissolved (ug/L)
5/17/2011	NW	4,440	3,640	<2	<2	4,050	3,360	238	100
6/1/2011	SE	29,000	<200	1.25	0.49	25,400	<200	451	422
6/1/2011	SW	10,400	<200	1.48	5.8	14,900	<200	295	291

Table 2Groundwater Monitoring WellsAnalytical Monitoring Result that Exceed Water Quality Criteria

Trec = Total Recoverable

As part of the NPDES Form 2D permit application documentation, various organic compounds including volatiles and semi-volatiles were analyzed in addition to the analyses for pH, temperature, metals (total and dissolved), nitrate, ammonia, total dissolved solids (TDS), total suspended solids (TSS), chloride, sulfate, and alkalinity. The NPDES regulations in 40 CFR 122.44(d)(1)(i - iii) require permit writers to assess effluent to evaluate impact of direct dischargers on downstream water quality. This assessment is used to determine permit limitations that are protective of water quality uses. The data submitted in the permit application were evaluated for reasonable potential to exceed the water quality standards.

Based on the RP analysis, the following parameters exceeded the most stringent chronic water quality standard or were quantitatively determined to have a reasonable potential to exceed the standard:

- Aluminum,
- Cadmium,
- Iron, and
- Selenium.

Based on the available data, the following parameter was qualitatively determined that further monitoring data was necessary:

• Copper

The State's "Regulation of Effluent Limitations", Regulation No. 62, includes technology based effluent limitations on BOD₅, total suspended solids (TSS), oil and grease, pH and the maximum limitation on total residual chorine (TRC). Due to the source of the discharge being groundwater, there is no reasonable potential for BOD₅, but the other effluent limitations in Colorado Regulation No. 62 have been included in the permit.

Receiving Waters

Toll Gate Creek is a perennial stream that sustains a low base flow throughout the year and has sharp peaks in flow in response to storm events. Toll Gate Creek is a tributary to Sand Creek. The City of Aurora's MS4 discharges to Toll Gate Creek which is approximately 0.75 of a mile upstream of the confluence of Toll Gate Creek with Sand Creek. Sand Creek is a tributary of the South Platte River. All portions of Sand Creek (COSPUS16a) are impaired for selenium and e coli; however, no TMDL has been developed to date.

In terms of stream classification by the Colorado Water Quality Control Commission, Toll Gate Creek is in Segment 16h of the Upper South Platte River Basin (COSPUS16h), which includes the main stem of West Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with East Toll Gate Creek, the main stem of East Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with West Toll Gate Creek, and the main stem of Toll Gate Creek, downstream of the confluence of East and West Toll Gate Creeks, to the confluence with Sand Creek. Segment 16h is undesignated and is classified Warm Water Aquatic Life Class 2, Class E Recreation and Agriculture. The numeric standards are given below.

Physical and Biologi	cal: Dissolved Oxygen = 5.0 mg/L minimum
	pH = 6.5-9.0
	E. Coli = $126/100$ mL
Inorganic, mg/L:	Un-ionized ammonia (ac) = TVS, Un-ionized ammonia (ch) = TVS
	Chlorine (ac) = 0.019 , Chlorine (ch) = 0.011
	Free Cyanide $(ac) = 0.005$
	Sulfide (ch) = 0.002
	Boron (ch) = 0.75

Nitrite =
$$0.5$$

Nitrate = 100 Metals, ug/L:Arsenic (ac) = 340 , Arsenic (ch) = 7.6 (Trec)
Cadmium (ac/ch) = TVS
Chromium (+3) (ac/ch) = TVS
Chromium (+6) (ac/ch) = TVS
Copper (ac/ch) = TVS
Iron (ch) = 1000 (Trec)
Lead (ac/ch) = TVS
Manganese (ac/ch) = TVS
Mercury (ch) = 0.01 (tot)
Nickel (ac/ch) = TVS
Selenium (ac) = 29.5 , Selenium (ch) = 26.5
Silver (ac/ch) = TVS
Zinc (ac/ch) = TVS

Abbreviations: (ac) = acute (1-day), (dis) = dissolved, (ch) = chronic (30-day), (Trec) = total recoverable, TVS = table value standard.

Note: The standards for selenium are based upon a temporary modification. The ambient quality-based standards are based on the 85th percentile (chronic) and the 95th percentile (acute) of the selenium data collected at a specific instream monitoring location (TG6). For Toll Gate Creek, the 85^{th} percentile = 26.5 µg/l chronic (dis) and the 95th percentile = 29.5 µg/l acute (dis).

The nitrate standard is based on the agricultural classification.

Water Quality Considerations and Antidegradation Criteria Evaluation

Based upon available data, it appears that the discharges from Outfall 001 will not cause a violation of the water quality standards of Toll Gate Creek if appropriate treatment is made prior to discharge. Based upon the monitoring data, concentrations of aluminum, cadmium, iron, and selenium in the untreated groundwater exceed applicable water quality criteria for Toll Gate Creek and treatment will be necessary to meet the water quality criteria for aluminum, cadmium, iron, and selenium. The maximum daily flow rate of discharge is estimated to be 100,000 gallons per day or 0.15 cubic feet per second (cfs). Based upon the USGS Gaging Station (394329104490101) at Toll Gate Creek above 6th Avenue in Aurora, Colorado, the low flow of Toll Gate Creek is assumed to be zero (0) cfs and therefore, water quality criteria will be applied end-of-pipe. A summary of the stream flow data from USGS Gaging Station 394329104490101 is summarized in Table 2. Since March 2012, daily stream flow data has been collected; however, in previous years (2010 and 2011) only a few data points are available.

Table 2
Stream Flow Data for
USGS Gaging Station at Toll Gate Creek above 6 th Ave. (394329104490101)

Date	Stream
	Flow
	(cfs)
6/25/2010	3.52
7/16/2010	5.22

Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 7 of 14

7/21/2010	50.8
8/5/2010	21.6
8/9/2010	45
10/1/2010	2.29
10/12/2010	120
6/20/2011	519
1/20/2012	
2/22/2012	8.53
3/1/2012	5.5
3/2/2012	7.8
3/3/2012	6.9
3/4/2012	5.1
3/5/2012	4.0
3/6/2012	4.8
3/7/2012	5.2
3/8/2012	4.7
3/9/2012	2.3
3/10/2012	37
3/11/2012	4.0
3/12/2012	4.2
3/13/2012	4 1
3/14/2012	5 5
3/15/2012	73
3/16/2012	33
3/17/2012	3.6
3/18/2012	3.6
3/19/2012	3.5
3/20/2012	4.0
3/21/2012	
3/22/2012	
3/23/2012	37
3/24/2012	3.1
3/25/2012	3.1
3/26/2012	3.0
3/27/2012	3.5
3/28/2012	3.2
3/29/2012	3.0
3/30/2012	4.0
3/31/2012	3.0
4/1/2012	2.3
4/2/2012	2.5
4/3/2012	41
4/4/2012	27
4/5/2012	12
	-

Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 8 of 14

4/6/2012	8.9
4/7/2012	4.5
4/8/2012	3.3
4/9/2012	2.8
4/10/2012	1.6
4/11/2012	2.7
4/12/2012	14
4/13/2012	18
4/14/2012	11
4/15/2012	44
4/16/2012	9.8
4/17/2012	7.6

Segment 16h of the Upper South Platte River Basin is referred to as "undesignated and reviewable"; however, due to this regulated activity being temporary and short term (construction will cease in 2015) with respect to the antidegradation criteria in Colorado Regulation No. 31.3.c.ii(c), no further evaluation is required. The permit will not be transferrable and any new permittee will have to apply for a separate NPDES permit which may or may not trigger an antidegration review.

Effluent Limitations

The effluent limitations for Outfall 001 are shown below. The limitations are based on the State of Colorado's Classifications and Numeric Standards for the South Platte River Basin (Colorado Regulation No. 38) for cadmium, iron, and selenium, the Basic Standards and Methodologies for Surface Water (Colorado Regulation No. 31) for aluminum, and Regulations for Effluent Limitations (Colorado Regulation No. 62) for TSS, TRC, pH, and oil and grease.

	Effluent Limitation			
Effluent Characteristic	30-Day Average <u>a</u> /	7-Day Average <u>a</u> /	Daily Maximum <u>a</u> /	
Flow, gallons per day	N/A	N/A	100,000	
Total Suspended Solids, mg/L	30	45	N/A	
Total Residual Chlorine, ug/L	11	N/A	19	
Aluminum, Total Recoverable, ug/L <u>b</u> /	1,438	N/A	10,071	
Cadmium, Potentially Dissolved, ug/L c/	0.85	N/A	6.1	
Iron, Total Recoverable, ug/L <u>b</u> /	1,000	N/A	N/A	
Selenium, Potentially Dissolved, ug/L c/	26.5	N/A	29.5	
The concentration of oil and grease in any single sample shall not exceed 10 mg/L nor shall there be an visible sheen in the receiving water or adjoining shoreline.				

The pH of the discharge shall not be less than 6.5 or greater than 9.0 at any time.

<u>a</u>/ See Definitions, Part 1.1, for definition of terms.

Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 9 of 14

- b/ "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in "Methods for Chemical Analysis of Water and Wastes," U.S. Environmental Protection Agency, March, 1979, or its equivalent.
- c/ "Potentially Dissolved Metals" means that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of less than 2.0 and let stand for 8 to 96 hours prior to sample filtration using a 0.4 or 0.45 um membrane filter. Note: The "Potentially Dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.

Self-Monitoring Requirements

Effluent Characteristic	Frequency	Sample Type <u>a</u> /	Practical Quantitation Limits, <u>g</u> /
Total Flow, gallons per day <u>b</u> /	Continuously	Recorder	NA
Total Suspended Solids, mg/L	Weekly <u>h</u> /	Grab	
Total Residual Chlorine, ug/L i/	Weekly	Grab	
Aluminum, Total Recoverable, ug/L c/	Weekly <u>h</u> /	Grab	50 ug/L
Cadmium, Potentially Dissolved, ug/L c/	Weekly <u>h</u> /	Grab	1 ug/L
Copper, Potentially Dissolved, ug/L c/	Weekly <u>h</u> /	Grab	5 ug/L
Iron, Total Recoverable, ug/L <u>c</u> /	Weekly <u>h</u> /	Grab	50 ug/L
Selenium, Potentially Dissolved, ug/L <u>e</u> /	Weekly <u>h</u> /	Grab	1 ug/L
Oil and Grease	Weekly <u>h</u> /	Visual <u>d</u> /	
pH	Weekly <u>h</u> /	Grab	

The routine self-monitoring requirements are given below.

<u>a</u>/ See Definitions, Part 1.1, for definition of terms.

- b/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate (in gallons per day) during the reporting period and the maximum flow rate observed (in gallons per day) shall be reported.
- <u>c</u>/ "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in "Methods for Chemical Analysis of Water and Wastes," U.S. Environmental Protection Agency, March, 1979, or its equivalent.
- <u>d</u>/ A daily visual observation is required. If a visible sheen is detected, a grab sample shall be taken immediately and analyzed in accordance with the requirements of 40 CFR Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any sample.
- e/ "Potentially Dissolved Metals" means that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of less than 2.0 and let stand for 8 to 96 hours prior to sample filtration using a 0.4 or 0.45 um membrane filter. Note: The "Potentially Dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.

- g/ Practical Quantitation Limit (PQL) means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration. The method and procedures used to analyze for an effluent characteristic (e.g., cadmium) shall have a PQL no greater than specified in this table (e.g., PQL for cadmium no greater than 1 ug/L). For purposes of this permit, analytical values less than the PQL shall be considered to be zero for purposes of determining averages. If all analytical results are less than the PQL, then "less than x", where x is the PQL, shall be reported on the Discharge Monitoring Report form. Otherwise, report the maximum observed value and the calculated average(s).
- <u>h</u>/ After six (6) months, if all tests for a given parameter meet discharge limits, the weekly sampling frequency may be changed to monthly for all parameters for which there were not exceedances of the permit limits for twenty-four (24) consecutive tests. The permittee must request, in writing that the monitoring frequency be changed from weekly to monthly. The permit issuing authority may authorize this change without going to public notice for a permit modification.
- i/ The analysis for TRC must be done with an analytical method that has a method detection limit of no greater than 0.10 mg/L. In the calculation of average TRC concentrations, those analytical results that are less than 0.10 mg/L shall be considered to be zero for calculation purposes. If all individual analytical results that would be used in the calculations are less than 0.10 mg/L, then "less than 0.10 mg/L" shall be reported on the discharge monitoring report form. Otherwise, report the maximum value and the calculated average value.

Endangered Species Act (ESA) Requirements

Section 7(a) of the Endangered Species Act requires federal agencies to insure that any actions authorized, funded, or carried out by an agency are not likely to jeopardize the continued existence of any federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species. Federally listed threatened, endangered and candidate species found in Adams County, Colorado include:

Species	<u>Status</u>
Whooping Crane (Grus americana)	EX
Bald Eagle (Haliaeetus leucocephalus)	R
American peregrine falcon (Falco peregrinus anatum)	R
Mexican spotted owl (Strix occidentalis lucida)	Т
Piping Plover (Charadrius melodus)	Т
Least tern (Sterna antillarum)	E
Ute ladies'-tresses (Spiranthes diluvialis)	Т
Black-footed ferret (Mustela nigripes)	EX
Preble's meadow jumping mouse (Zapus hudsonius preblet	<i>i</i>) T

- T Threatened
- E Endangered
- EX Experimental population, Non-essential
- R Recovery

The discharges from the outfall identified in this permit are believed to be solely a collection of groundwater and incidental stormwater. The EPA finds that this permit is not likely to Adversely Affect any of the species listed by the U. S. Fish and Wildlife Service under the Endangered Species Act due to

the water quality of the discharge, the minimal volume being discharged, and the dilution factor occurring within and downstream of Toll Gate Creek.

National Historic Preservation Act (NHPA) Requirements

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. The EPA has evaluated its planned issuance of the NPDES permit for the Replacement Medical Center Facility, Eastern Colorado Health Care System facility to assess this action's potential effects on any listed or eligible historic properties or cultural resources. The only listed historic building in the vicinity of the facility is the Fitzsimons General Hospital, Main Hospital Building which is located at 12101 East Colfax Avenue, Aurora, Colorado. The historic building opened in 1941, and was associated with the history of military medicine in the United States and served as a national center for the treatment of tuberculosis in military personnel. As the largest building in the state at the time of its construction, it quickly became a regional visual landmark. The University of Colorado Health Sciences Center secured much of the Fitzsimons site in 1995 for its relocation from the old Denver campus at East 9th Avenue and Colorado Boulevard. The old hospital forms the historic centerpiece of the new medical campus in which the VA Eastern Colorado Health Care System will be part of once it is complete. The EPA does not anticipate any impacts on the listed/eligible historic property or cultural resources because the VA Eastern Colorado Health Care System Facility will not be associated with any ground disturbance on the listed historic property nor will its point of discharge.

Miscellaneous

The effective date and the expiration date of the permit will be determined at the time of permit issuance. The intention is to issue the permit for a period of approximately five years, but not to exceed 5 years.

Permit drafted by Amy Clark, 8P-W-WW, March 28, 2012. Permit reviewed by Robert Shankland, SEE, 8P-W-WW, April 17, 2012 Permit reviewed by Bruce Kent, 8P-W-WW, April 17, 2012

As a reminder to the Permittee at the time for renewal of this permit in 5 years, analyte testing for metals for all outfalls should occur and submitted as part of the application documentation. This specific testing should be for all analytes believed to be present in the discharge.

Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 12 of 14

Figure 1



Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 13 of 14

Photo 1



Outfall 001 (Latitude 39.740642 N and Longitude 104.830887 W)



Outfall 001 (Latitude 39.740642 N and Longitude 104.830887 W) in relation to the Clinic Building South (CBS))

Statement of Basis for Permit Issuance 2012 Kiewit-Turner Replacement Medical Center Facility Eastern Colorado Health Care System (CO-0034991) Page No. 14 of 14

Photo 3



Outfall 001 (Latitude 39.740642 N and Longitude 104.830887 W) in relation to the Colfax Avenue (in background))