



COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Richard Payton
8P-AR
US Environmental Protection Agency Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Date: TBD

Dear Mr. Payton,

The Colorado Department of Public Health and Environment's (CDPHE) Air Pollution Control Division (APCD) is submitting two network site modification request forms for the proposed commissioning of ozone and meteorological monitoring at Boulder Reservoir and the decommissioning of ozone monitoring at South Boulder Creek (08-013-0011). The Boulder Reservoir site has been selected as a replacement location to APCD's South Boulder Creek site. The South Boulder Creek site began operation in 1993 and was selected to measure air pollution in the Boulder area. This site is currently located at 1405 ½ South Foothills Highway, at an old City of Lafayette water treatment facility. This site was adversely impacted by flooding in 2013 and has been increasingly impacted by the surrounding vegetation to the point that it no longer meets federal siting criteria. This pending relocation has been acknowledged by APCD in the 2014 and 2015 Annual Network Plans. The APCD believes that given the current circumstances at the South Boulder Creek site, the site should be relocated in the north Boulder area. The continuation of air quality monitoring in the Boulder area is critical to protect the health and welfare of the citizens within the Boulder area.

The proposed site at Boulder Reservoir is located approximately 75 meters east of the park's maintenance facility. Attachment 1 shows a Google Earth photo of the proposed site in relation to the main entrance area of the park. Attachment 2 shows a close-up Google Earth photo of the proposed site location.

This letter and the enclosed network modification forms (Attachment 3 and 4) were made available for a 30 day public comment period from TBD to TBD.

We welcome your consideration of our request and look forward to talking with you in the future. I thank you for your time and I am available to answer any questions you may have.

Regards,

Gregory Harshfield



Colorado Department of Public Health and Environment
Air Pollution Control Division
Continuous Monitoring Supervisor
APCD-TS-B1
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Denver, CO 80246
303-692-3232
gregory.harshfield@state.co.us

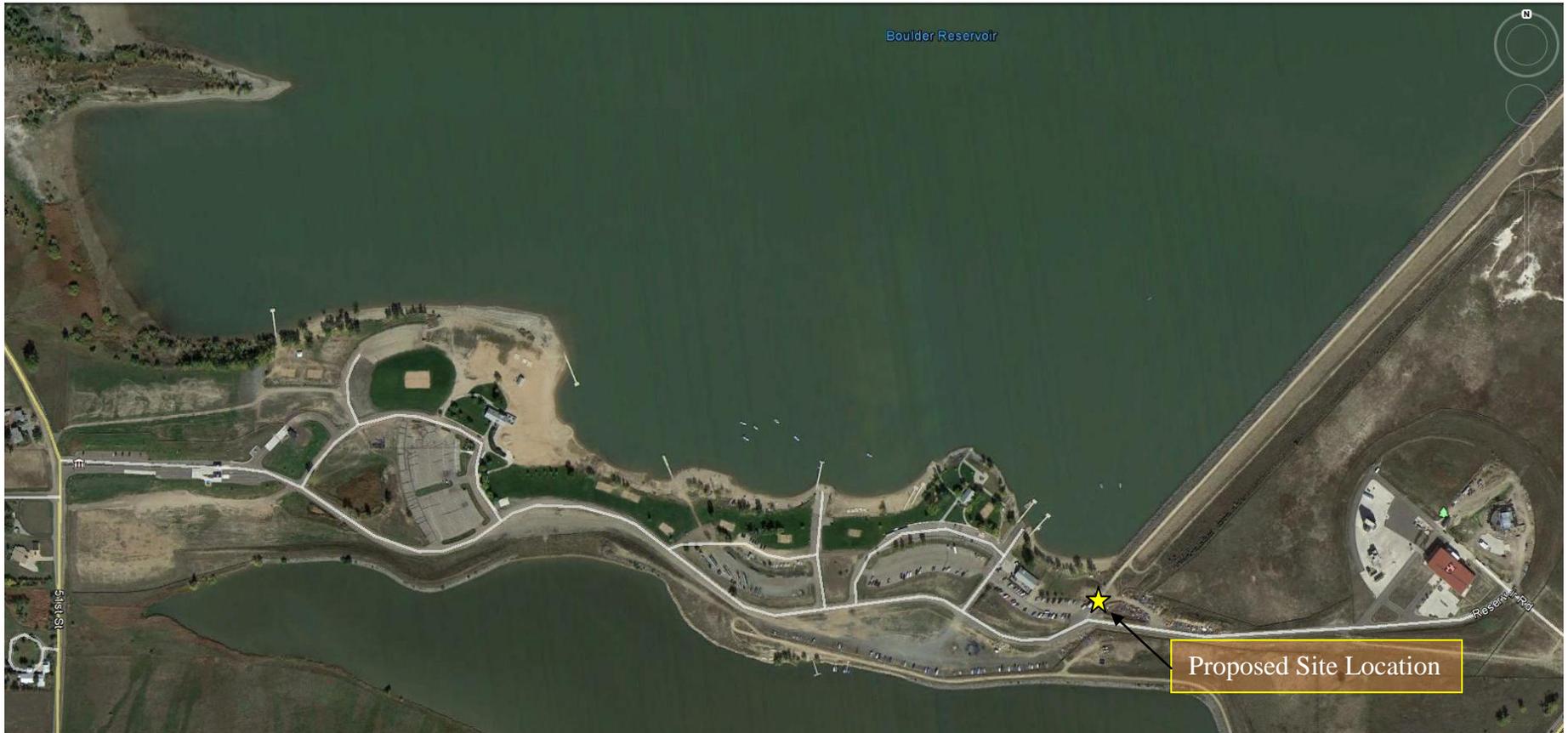
cc: Gordon Pierce

Enclosures:

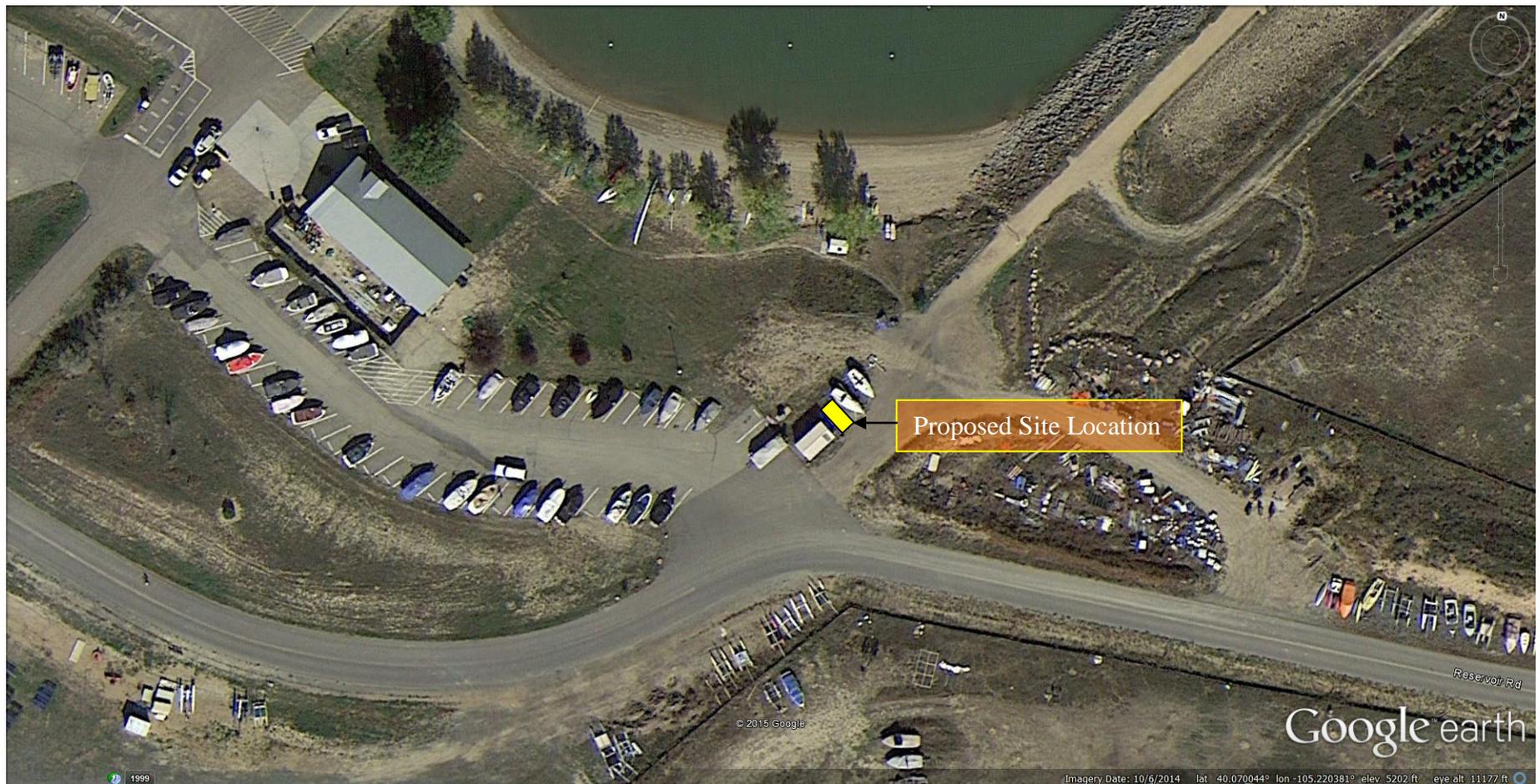
- Attachment 1: Boulder Reservoir Overview Map
- Attachment 2: Site Location at Boulder Reservoir
- Attachment 3: Boulder Reservoir - Ambient Air Monitoring Network Modification Form
- Attachment 4: South Boulder Creek - Ambient Air Monitoring Network Modification Form



Attachment 1. Boulder Reservoir



Attachment 2. Site Location at Boulder Reservoir



Attachment 3. Boulder Reservoir Network Modification Form

EPA REGION 8 AMBIENT AIR MONITORING NETWORK MODIFICATION REQUEST FORM						
(VERSION 2, 4/1/04)						
DATE: 9/15/2015		CITY: 5565 N. 51 st Street, Boulder, CO 80301			STATE: CO	
AQS SITE ID: 08-013-0014 (? - next available in series)			SITE NAME: Boulder Reservoir			
<p>PROPOSED MODIFICATION/REASON WHY: The APCD is proposing to relocate the South Boulder Creek air monitoring site approximately 8 miles NNE of its current location. The South Boulder Creek site is currently located at 1405 ½ South Foothills Highway, at an old City of Lafayette water treatment facility. This site is being relocated because of encroaching vegetation (trees) that make the site no longer compliant with EPA siting criteria. Due to the amount of vegetation impacting the site, it has been determined that the relocation of the site is the most prudent option. This recommendation has been identified in CDPHE's 2014 and 2015 Annual Network Plans. The new location will be at Boulder Reservoir, approximately 75 meters east of the park's maintenance facility.</p>						
AIR QUALITY PARAMETER (PM10, SO2, CO, NO2, ETC.)	MONITOR TYPE (NAMS, SLAMS, SPM, TRIBAL, etc.)	CHECK ONE OR MORE OF THE APPLICABLE CATEGORIES BELOW:				LIST SAMPLER EQUIPMENT
		MAX CONC	SOURCE IMPACT	POPULATION EXPOSURE	BACKGROUND	
Ozone	SLAMS	X				API 400E
Met Tower	SPM					Met One
PROPOSED SAMPLING START: Anticipated Start Date 1/1/16						
ESTIMATED MEASUREMENTS FOR AIR QUALITY PARAMETERS:						
LOCATION (LAT./LONG. OR UTM'S): Lat 40.070016 Long -105.220238 WGS84						
SITE ELEVATION (M. MSL): 1586 Meters				PROBE HEIGHT (M. AGL): TBD		
DISTANCE TO TREE DRIPLINE (M)	DIRECTION TO TREE	DISTANCE TO OBSTACLE (M)	DIRECTION TO OBSTACLE	OBSTACLE HEIGHT ABOVE PROBE (M)	OBSTACLE COMMENTS	
30 Meters	North	No obstacles at site.				
34 Meters	North Northeast					
UNRESTRICTED AIR FLOW: >270 DEG. >180 DEG. <CRITERIA___360___DEG.						
DISTANCE TO FLUES/INCINERATORS (M): 350 Meters to Boulder County Regional Fire Training Facility. (Propane, Wood Pallets fuel sources - infrequent burns)						
DISTANCE TO INTERSECTIONS (M): 1280 Meters Hwy 199 and 63 rd Street			DISTANCE FROM SUPPORTING STRUCTURES (M): VERT.___TBD___HORIZ.___TBD___			
DISTANCE TO EDGE OF NEAREST ROADWAY	NAME OF ROADWAY	DIRECTION	DAILY TRAFFIC ESTIMATES	YEAR OF TRAFFIC ESTIMATES	TYPE OF ROADWAY	COMMENTS
~ 540 Meters	Hwy. 119, Diagonal Hwy	SOUTHEAST	~42,000	2014	MAJOR ST OR HY	
1270 Meters	51 st Street	WEST	~1,800	2012	Arterial, Paved	
DISTANCE TO NEAREST POINT SOURCES (MILES)	DIRECTION TO POINT SOURCES	DISTANCE TO NEAREST AREA SOURCES (MILES)		DIRECTION TO AREA SOURCES		COMMENTS
0.35 km	Boulder County Regional Fire	Propane and Wood				

Training Facility	Pallet combustion		
NOx - 1.3 km (Lockheed Martin, 6.7 tpy) NOx - 2.9 km (IBM, 123.5 tpy)	East Southeast Northeast		
VOC - 0.7 km (Covidien LP, 1.9 tpy)	South Southeast		

CERTIFICATION: I certify the network modification proposed above meets all 40 CFR 58, Appendix E siting criteria, except as noted with submittal.



Printed Name: Gregory Harshfield

Signature:

FOR EPA USE ONLY: Received Date: _____ Follow-up Actions: _____ Approval Status Given: _____ Email Response Date: _____ Letter Response Date: _____

FOR METEOROLOGICAL PARAMETERS ONLY:

MONITORING PURPOSE/OBJECTIVES: Monitor meteorology to assess ozone monitoring results.

PROPOSED MONITORING SCHEDULE/DURATION: Continuous, as long as ozone is run.

PROPOSED START / REMOVAL DATE
OR DATE STARTED / REMOVED: Anticipated Start Date = 1/1/2016

DATA ACQUISITION SYSTEM:

PRIMARY ESC 8832	PARAMETERS:	APPLICABLE √ those that apply	SENSOR HT (M)
BACKUP None	WIND SPEED/DIRECTION	Yes	10
EQUIPMENT MANUFACTURER/MODEL:	SOLAR RADIATION	No	
	RELATIVE HUMIDITY	No	
WILL THE DATA BE USED FOR MODELING? <u>YES</u> NO	PRESSURE	No	
IS SITE REQUIRED FOR SIP? YES <u>NO</u>	SIGMA THETA	Yes	10
UNRESTRICTED AIRFLOW? <u>YES</u> NO	PRECIPITATION	No	
DISTANCE TO TREE DRIPLINE (M): 30 Meters.	TEMPERATURE	Yes	2
NEARBY TERRAIN: SMOOTH <u>ROLLING</u> ROUGH	OTHER (DESCRIBE)		

TOPOGRAPHIC FEATURES (E.G HILLS, MOUNTAINS, VALLEYS, RIDGES, BODIES OF WATER):

Rolling terrain with hills.

COMMENTS:

**FORM KEY:
PAGE 1:**

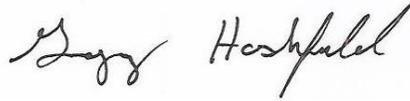
MONITOR TYPE: NAMS = 1, SLAMS = 2, SPM = 3, TRIBAL = A
SITE ELEVATION = GROUND LEVEL ELEVATION
PROBE HEIGHT (M. AGL) = PROBE HEIGHT METERS ABOVE GROUND LEVEL

Attachment 4. South Boulder Creek Network Modification Form

EPA REGION 8 AMBIENT AIR MONITORING NETWORK MODIFICATION REQUEST FORM						
(VERSION 2, 4/1/04)						
DATE: 9/15/2015		CITY: 1405 ½ South Foothills Highway (Hwy. 93), Boulder			STATE: CO	
AQS SITE ID: 08-013-0011			SITE NAME: South Boulder Creek			
<p>PROPOSED MODIFICATION/REASON WHY: The APCD is proposing to relocate the South Boulder Creek air monitoring site approximately 8 miles NNE of its current location. This site is being relocated because of encroaching vegetation (trees) that make the site no longer compliant with EPA siting criteria. Due to the amount of vegetation impacting the site, it has been determined that the relocation of the site is the most prudent option. This recommendation has been identified in CDPHE's 2014 and 2015 Annual Network Plans. The new location will be at Boulder Reservoir, approximately 75 meters east of the park's maintenance facility.</p>						
AIR QUALITY PARAMETER (PM10, SO2, CO, NO2, ETC.)	MONITOR TYPE (NAMS, SLAMS, SPM, TRIBAL, etc.)	CHECK ONE OR MORE OF THE APPLICABLE CATEGORIES BELOW:				LIST SAMPLER EQUIPMENT
		MAX CONC	SOURCE IMPACT	POPULATION EXPOSURE	BACKGROUND	
Ozone	SLAMS	X				API 400E
PROPOSED CLOSE DATE: Anticipated Close Date 1/1/16						
ESTIMATED MEASUREMENTS FOR AIR QUALITY PARAMETERS:						
LOCATION (LAT./LONG. OR UTM'S): Lat 39.957192 Long -105.238487 WGS84						
SITE ELEVATION (M. MSL): 1671 Meters				PROBE HEIGHT (M. AGL): 4.3 Meter		
DISTANCE TO TREE DRIPLINE (M)	DIRECTION TO TREE	DISTANCE TO OBSTACLE (M)	DIRECTION TO OBSTACLE	OBSTACLE HEIGHT ABOVE PROBE (M)	OBSTACLE COMMENTS	
16 meters (tree 1030)	West Southwest	16 meters	West Southwest	10.7 meters	Tree 1030	
18 meters (tree 1031)	West Northwest	18 meters	West Northwest	11.9 meters	Tree 1031	
20 meters (tree 1034)	East Northeast	20 meters	West Southwest	12.2 meters	Tree 1034	
UNRESTRICTED AIR FLOW: >270 DEG. X >180 DEG. <CRITERIA ___-180___DEG.						
DISTANCE TO FLUES/INCINERATORS (M): None						
DISTANCE TO INTERSECTIONS (M): 676 Meters Hwy 93 and Eldorado Springs Dr.			DISTANCE FROM SUPPORTING STRUCTURES (M): VERT._1.5 meter, HORIZ._0.5 meter			
DISTANCE TO EDGE OF NEAREST ROADWAY	NAME OF ROADWAY	DIRECTION	DAILY TRAFFIC ESTIMATES	YEAR OF TRAFFIC ESTIMATES	TYPE OF ROADWAY	COMMENTS
- 408 Meters	Hwy. 93	East Northeast	-16,000	2014	MAJOR ST OR HWY	
DISTANCE TO NEAREST POINT SOURCES (MILES)	DIRECTION TO POINT SOURCES	DISTANCE TO NEAREST AREA SOURCES (MILES)		DIRECTION TO AREA SOURCES	COMMENTS	
NOx - 3.8 km (Public Service-Compressor, 17 tpy)	East					

VOC - 3.1 km (King Soopers Fueling, 8 tpy)	North Northeast		
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CERTIFICATION: I certify the network modification proposed above meets all 40 CFR 58, Appendix E siting criteria, except as noted with submittal.



Printed Name: Gregory Harshfield

Signature:

FOR EPA USE ONLY: Received Date: _____ Follow-up Actions: _____ Approval Status Given: _____ Email Response Date: _____ Letter Response Date: _____

FOR METEOROLOGICAL PARAMETERS ONLY:

MONITORING PURPOSE/OBJECTIVES:

PROPOSED MONITORING SCHEDULE/DURATION:

PROPOSED START / REMOVAL DATE
OR DATE STARTED / REMOVED:

DATA ACQUISITION SYSTEM:

PRIMARY	None	PARAMETERS:	APPLICABLE √ those that apply	SENSOR HT (M)
BACKUP	None	WIND SPEED/DIRECTION		
EQUIPMENT MANUFACTURER/MODEL:		SOLAR RADIATION		
		RELATIVE HUMIDITY		
WILL THE DATA BE USED FOR MODELING?	YES NO	PRESSURE		
IS SITE REQUIRED FOR SIP?	YES NO	SIGMA THETA		
UNRESTRICTED AIRFLOW?	YES NO	PRECIPITATION		
DISTANCE TO TREE DRIPLINE (M):		TEMPERATURE		
NEARBY TERRAIN:	SMOOTH ROLLING ROUGH	OTHER (DESCRIBE)		

TOPOGRAPHIC FEATURES (E.G HILLS, MOUNTAINS, VALLEYS, RIDGES, BODIES OF WATER):

COMMENTS:

**FORM KEY:
PAGE 1:**

MONITOR TYPE: NAMS = 1, SLAMS = 2, SPM = 3, TRIBAL = A
SITE ELEVATION = GROUND LEVEL ELEVATION
PROBE HEIGHT (M. AGL) = PROBE HEIGHT METERS ABOVE GROUND LEVEL