

Central Valley Regional Water Quality Control Board

21 August 2015

WDID: 5A47NC00004

CERTIFIED MAIL

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NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5180, CALIFORNIA DEPARTMENT OF TRANSPORTATION – DUNSMUIR GRADE FACILITY, SISKIYOU COUNTY

On 8 January 2014 the California Department of Transportation (hereafter "CalTrans," or "Discharger") submitted a Report of Waste Discharge (ROWD) for a new onsite wastewater treatment system (OWTS), a replacement of an existing OWTS at the subject truck inspection facility, under State Water Resources Control Board (State Board) General Order 97-10-DWQ. However State Board Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* General Order 2014-0153-DWQ (hereafter General Order) now supersedes Order 97-10.

Based on the ROWD, the proposed replacement OWTS will treat and dispose less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of the General Order. This letter serves as formal notice that the General Order is applicable to your facility and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5180 for your facility.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describes mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached *Monitoring and Reporting Program* (MRP). On 12 December 2014, Central Valley Regional Water Quality Control Board staff inspected the facility to assess potential applicability of this new General Order; to support the inspection CalTrans provided supplemental information. Staff considered the inspection and supplemental information to prepare the MRP. Attachment A is the Inspection Report, Attachments B and C, Location Map and Facility Plan from the supplemental information, Attachment D, the MRP, and Attachment E, the General Order.

REGULATORY BACKGROUND

Public agency records are incomplete. Beginning circa 1968, CalTrans has continuously operated an OWTS at the subject facility. In 1974, Siskiyou County Health Department permitted installation of a 2,500-gallon septic tank with 200 lineal feet of leach lines, in 2, 100-foot segments. In 1997, the State Board activated General Order 97-10-DWQ, under which this facility now operates as a draft enrollee. We can find no record of a Notice of Applicability for Order 97-10-DWQ.

DISCHARGE DESCRIPTION

Caltrans currently owns and operates a 1,500-gallon capacity septic tank and leach field to treat domestic-strength wastewater from its truck inspection facility building. Currently, a pumper truck services the septic tank four times per year. Because Caltrans wishes to construct a larger building, the Discharger proposes to remove, and replace the septic tank with a larger, 3000-gallon capacity version. Anticipated average and peak daily flows are 1,200, and 1,640 gallons/day (gpd).

To accommodate the increased wastewater load, Caltrans proposes to abandon its existing leach field in place, and replace it with a similar version at an adjacent site. The proposed leach field will be 1,091 square feet (sf) with 6 leach lines, each a minimum 400 feet in length, nominally 2 to 2.5 feet below grade surface, to accommodate an application rate of 0.8 gallons/day/square foot (gpdpsf). The leach field will overlie relatively low-permeability soils at least 40 feet thick and likely unsaturated. Staff finds that the standards in the State Board *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (the OWTS Policy) are appropriate in this case for site evaluation. Based on soils descriptions alone, the proposed leach field might not meet standards for a low-risk new or replacement Tier 1 OWTS. However, percolation rates, 2.5 to 9.2 minutes/inch, indicate that the proposed site could meet Tier 1 standards provided that the Discharger operates within the maximum proposed application rate.

Caltrans also owns and operates a separate system for the facility truck inspection bays. Floor drains collect largely snowmelt from trucks and floor rinse-water, an average daily flow of 400 gpd, which flows to a three-celled, 1,500-gallon capacity oil/water separator, and then to a leach field, 90.9 sf, with 2, 100-foot leach lines, which the Discharger intends to replace. Due to the limited discharge, in this specific case staff finds flows from the inspection bays acceptable under the General Order provided that the facility regularly services the oil/water separator, and maintains appropriate records onsite.

This is an existing facility; therefore enrollment under the General Order is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15301 which applies to ongoing or existing projects.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA and the General Order 2014-0153-DWQ, with all attachments.

Additionally the General Order states in Section B.1.L that the discharger shall comply with the setbacks as described in Table 3 (page 19). This table summarizes different setback requirements for various wastewater system equipment and activities from sensitive receptors and property lines where applicable. The Discharger shall comply with the following applicable setback requirements as summarized in the following table.

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Leach Field*	100 feet	NA	50 feet; see <i>Monitoring and Reporting Program</i>	5 feet	NA
* Leach field includes all subsurface dispersal systems.					

The proposed leach field is within site specific applicable setbacks of an ephemeral drainage. A lined culvert extension is within 5 to 10 feet laterally of both the existing, and proposed leach field. The culvert flows to a gully less than 50 feet from the proposed leach field. However, based on facility history and the site inspection, staff finds the General Order applicable based on specific provisions in the MRP.

Flow through the oil/water separator **shall not exceed 600 gallons/day**. Discharges from the leach field of the oil/water separator **shall not degrade beneficial uses of underlying groundwater**. In the annual report, the Discharger shall assess potential for impacts to groundwater from the oil/water separator, and recommend further action, as appropriate. Because proposed flow rates are less than 20,000 gpd, Attachment 1 of the General Order requires no nitrate effluent limit.

Failure to comply with the requirements in the documents could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyredding@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate Regional Water Board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5A47NC00004, Facility Name: Dunsmuir Grade Facility, Order: 2014-0153-DWQ-R5180.

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact Eric Rapport at (530) 224-4998, erapport@waterboards.ca.gov, or the footer address.



(for) Pamela C. Creedon
Executive Officer

EJR: lm

Attachments:

- A, Site Inspection
- B, Location Map
- C, Facility Plan
- D, Monitoring and Reporting Program No. 2014-0153-DWQ-R5180
- E, General Order No. 2014-0153-DWQ

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CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

INSPECTION REPORT

21 August 2015

DISCHARGER: CalTrans
WDID 5A47NC00004
CIWQS ID: 803461

LOCATION & COUNTY: Dunsmuir, Siskiyou County

CONTACT(S): Bob Weber, P.E., CalTrans
Laurie Hurt, CHP

INSPECTION DATE: 12 December 2014

INSPECTED BY: Eric Rapport, Senior Engineering Geologist, Specialist

ACCOMPANIED BY: Doug Barber, Water Resources Control Engineer

BACKGROUND

The California Department of Transportation, (CalTrans, Discharger), owns a truck inspection facility on the Dunsmuir Grade west of Interstate 5, on Old Stage Road north of Mott Road, Siskiyou County. The facility in part includes an Onsite Wastewater Treatment System (OWTS), which the facility operates as a draft enrollee under Waste Discharge Requirements, State Water Resources Control Board (State Board) General Order 97-10-DWQ. On 8 January 2014, CalTrans submitted a Report of Waste Discharge (ROWD) to upgrade the OWTS under Order 97-10-DWQ; however State Board General Order 2014-0153-DWQ supersedes that Order. We inspected the facility to understand the Discharger's wastewater management in further detail, and assess potential applicability of the new General Order.

INSPECTION SUMMARY:

We arrived on-site at about 10:00 AM. Weather was cool and cloudy, following recent heavy rains. Bob Weber, P.E., CalTrans Civil Engineer, gave us an overall facility tour and drawings of the proposed upgrades. We first inspected the existing OWTS leach field, and nearby culvert and gully; see enclosed Photographs; Frame 1 shows the leach field, an unpaved area south of concrete K-rails. Frame 2 shows the gully within 50 feet of the leach field. Note isolated standing water in the channel, and the fine-grained native soils. I asked Bob for further information on local percolation rates, and thickness and hydraulic conditions of the soils above bedrock. He agreed to provide the further information.

We next inspected the truck inspection bays and related wastewater management system. Laurie Hurt, California Highway Patrol (CHP) Commercial Vehicle Inspection Specialist, gave us a tour of the inspection bays; see Frame 3. Based on her description, slot drains in the bays collect largely snow-melt that falls from trucks, and floor rinse-water. This water can include minor amounts of petroleum grease and diesel fuel. I asked Laurie about the potential risk of fuel leaks and other hazardous wastes entering the slot drains. CHP staff contains visible petroleum leaks with plastic pans and sorbent materials on the bay floor. If trucks have

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suspected hazardous materials, CHP staff inspects them outside the building. Staff washes no trucks in the inspection bays, rinses floors only with water, and does not add surfactants.

Sub-grade piping carries water from the inspection bays to a three-celled oil/water separator; see Frame 4. Filtrate from the separator discharges to a small leach field, separate from OWTS leach field.

I then asked about the location of the facility water supply well relative to the leach fields; see Frame 5. The well is much greater than 100 feet laterally from either leach field.

DISCUSSION:

An ephemeral drainage is within 50 feet of the proposed upgrade, nominally prohibited in General Order 2014-0153. However, surface water shows no evidence of eutrophication or stressed vegetation, and the Discharger has operated the existing OWTS for several decades. Therefore, the General Order should still apply in the case; however the Monitoring and Reporting Program (MRP) should specify appropriate wet season inspections of the drainage.

While local soils have generally low permeability, the proposed upgrade appears to meet criteria for a low-risk new or replacement OWTS based on percolation tests. Local geological mapping (Wagner et al 1987) shows near-grade soil is a glacial deposit, i.e., till, typically very heterogeneous with generally low permeability. The shallowest two to three feet below surface in graded areas are likely disturbed. Mud rotary boring logs in a facility geotechnical report (CalTrans 2013) indicate that soils are greater than 40 feet thick, unsaturated, and hard. Using the American Society for Testing and Materials (ASTM) classification, soils are mostly low-plasticity gravelly clay with sand (CL) and loose silty sand with clay (SM). Therefore, soils are likely United States Department of Agriculture (USDA) sandy clay loam and sandy loam.

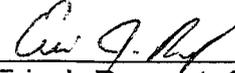
Dependent on near-grade pedogenic structures, currently unknown, USDA soils classifications could prohibit classification of the proposed leach field as a Tier 1, low-risk new or replacement OWTS; see Section 8.1.7, Table 4, in the State Board *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (the OWTS Policy). Further, in November 2010, the leach field for the oil/water separator required corrective action. However, the Discharger attributes issues to root intrusion, rather than insufficient percolation rate. The ROWD includes several percolation test results; these range 2.5 to 9.2 minutes/inch, generally consistent with historical data on file at the Siskiyou County Health Department; therefore based on Section 8.1.5, Table 2 of the OWTS Policy, the upgrade meets Tier 1 criteria provided that the Discharger operates the OWTS at the proposed application rate, 0.8 gallons/day/square foot. Due to overall low permeability, The MRP should specify appropriate regular leach field inspections.

SUMMARY:

In response to a 9 January 2014 Report of Waste Discharge (ROWD), on 12 December 2014 Central Valley Water Board staff inspected the CalTrans Dunsmuir Grade Truck Inspection Facility. The ROWD proposes upgrades the facility on-site wastewater treatment system

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(OWTS). Staff finds that the proposed upgrade is applicable under State Water Resources Control Board General Order 2014-0153-DWQ; this Order supersedes General Order 97-10-DWQ under which the facility has been to date operating its OWTS as a draft enrollee. Based on local site conditions, the Monitoring and Reporting Program should specify appropriate inspections of an ephemeral drainage and leach fields.



Eric J. Rapport, C.H.G., C.E.G.
Senior Engineering Geologist, Specialist

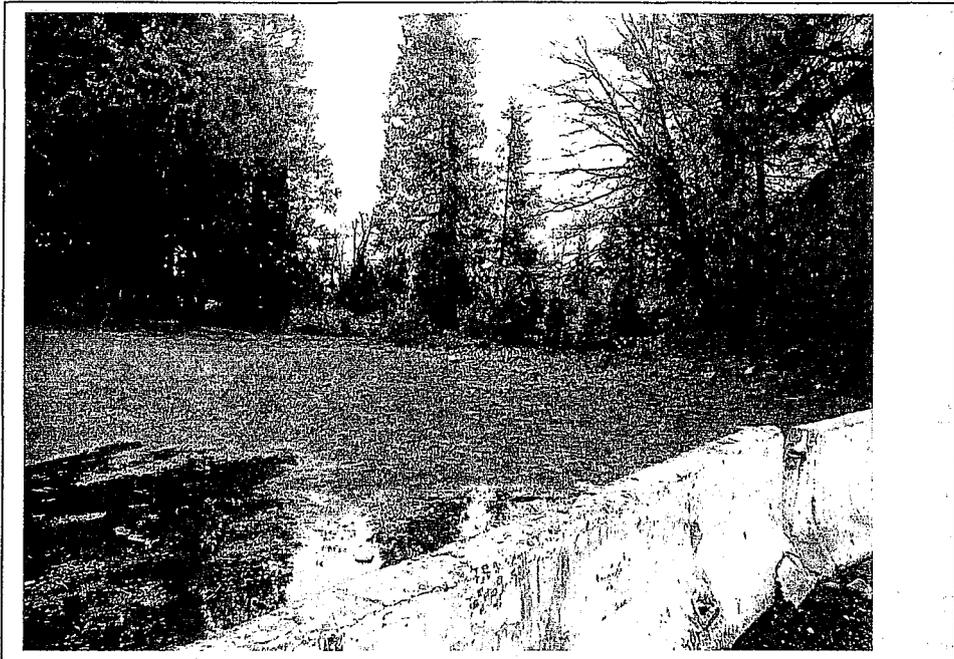
REFERENCES:

CalTrans (2013). Foundation Report, File 02-SIS-5-PM R7.2, 02-2E800, 0200000603, Dunsmuir Grade Truck Inspection Facility Upgrade, 30 December.

Wagner, D.L. and G.J. Saucedo (1987), Geologic Map of the Weed Quadrangle, 1:250,000, California Division of Mines and Geology, Regional Geologic Map 4A.

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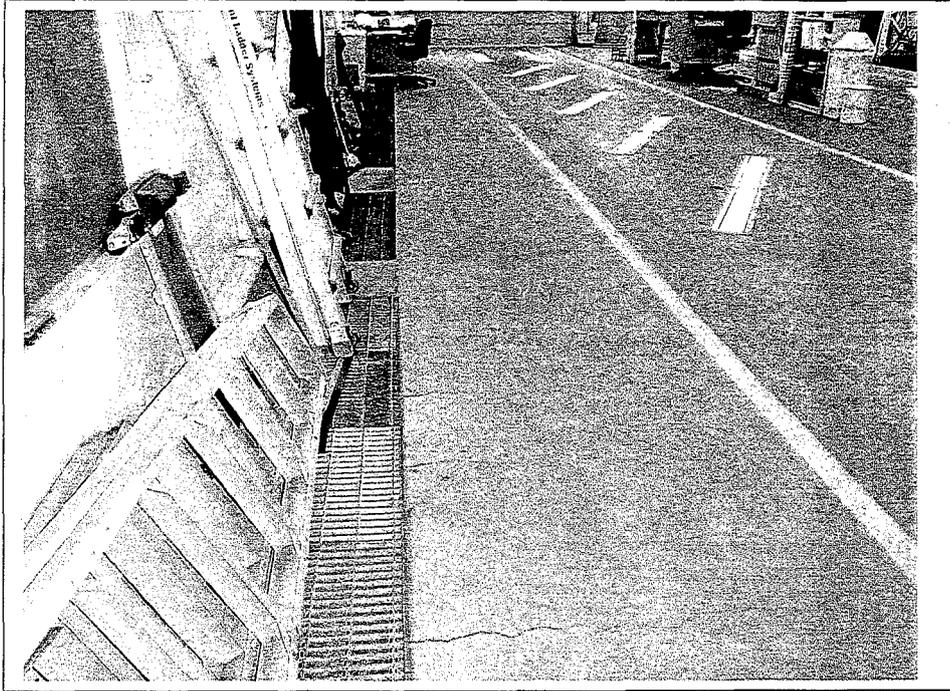


Frame 1, Leach Field

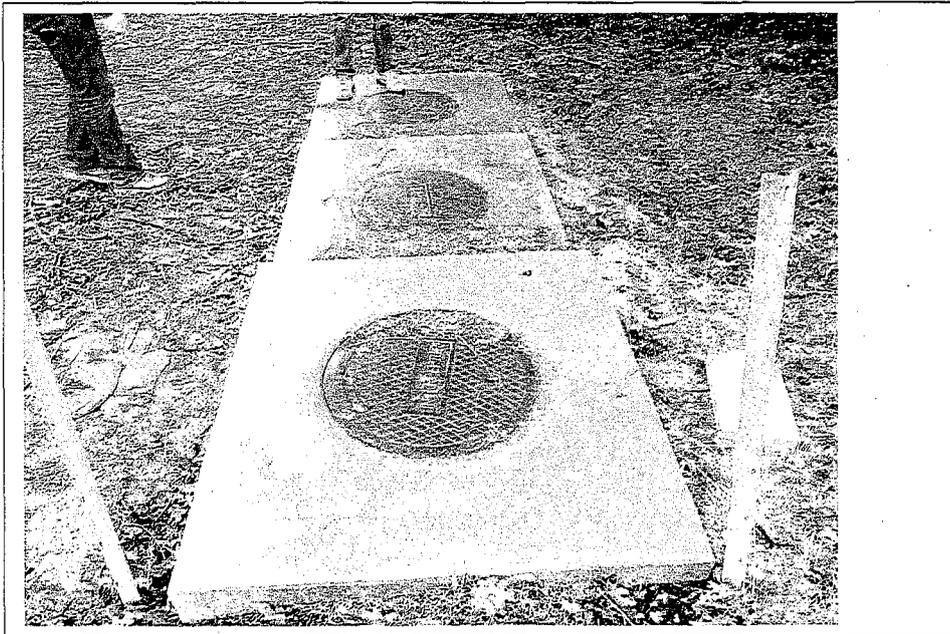


Frame 2, Gulley near Leach Field

Photographs, 12 December 2014 Inspection, CalTrans, Siskiyou County, E. Rapport, cont'd.

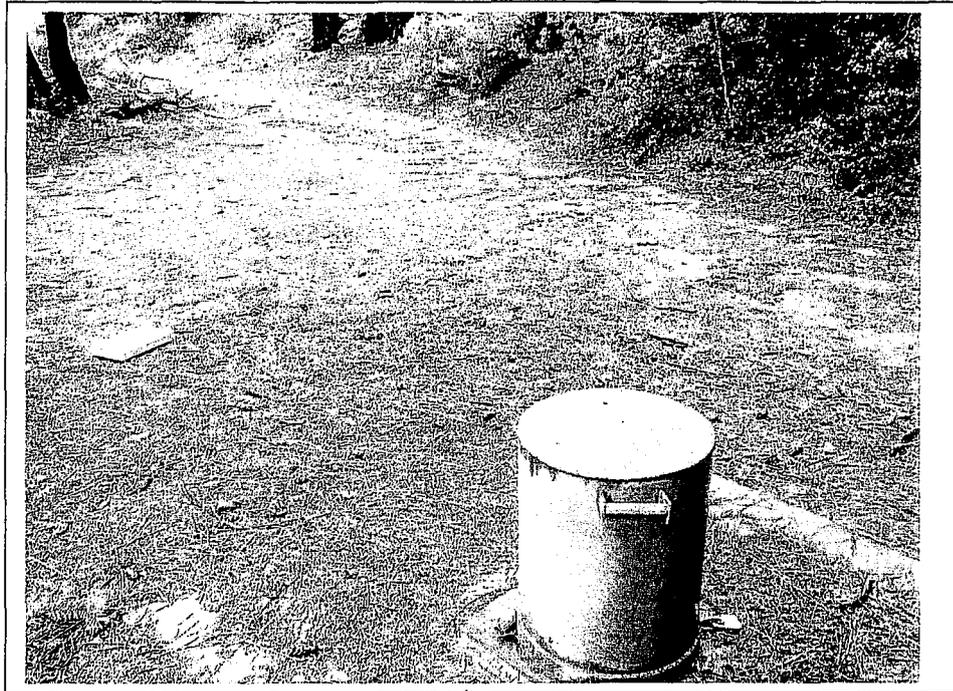


Frame 3, Inspection Bay



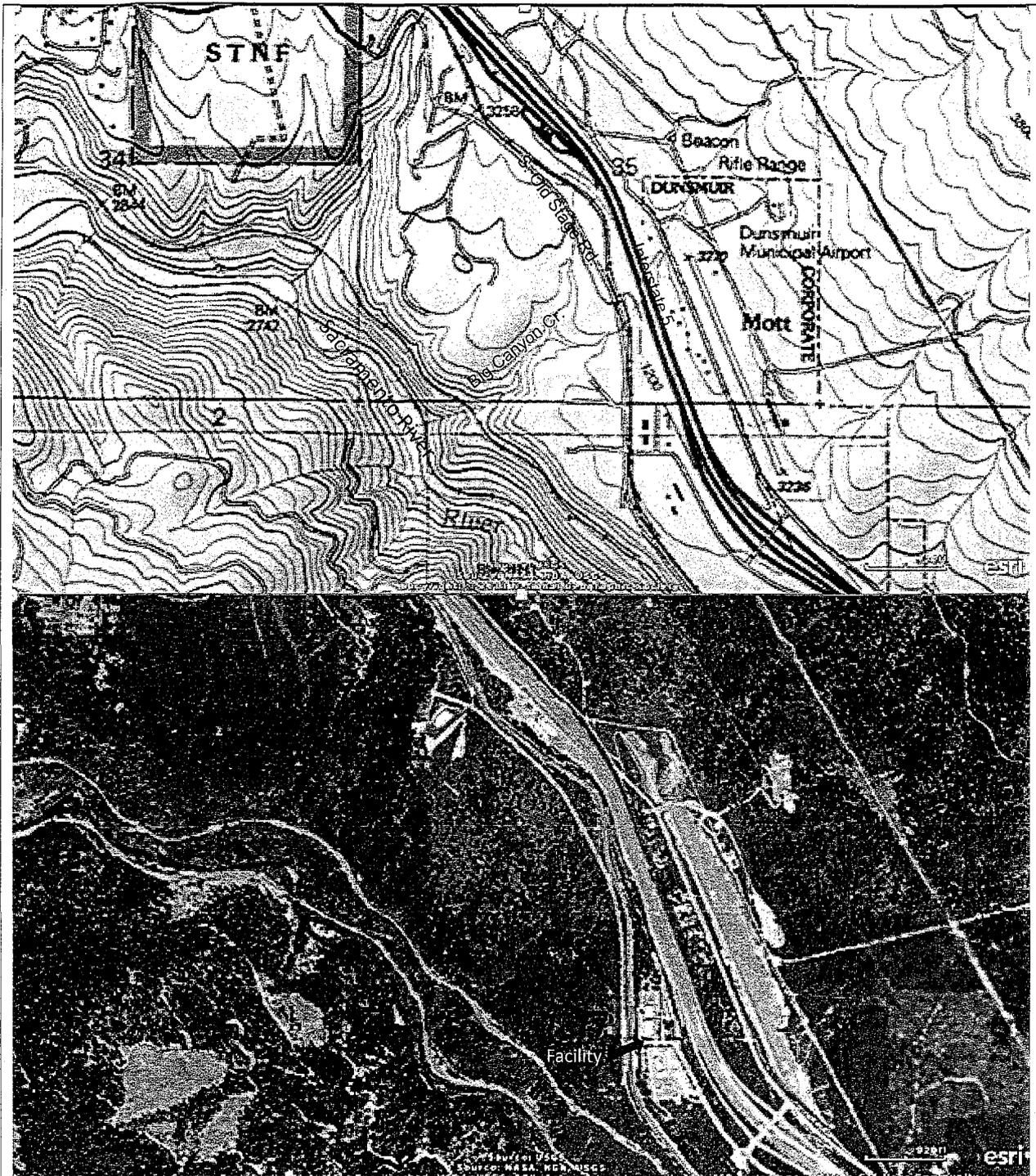
Frame 4, Oil/Water Separator

Photographs, 12 December 2014 Inspection, CalTrans, Siskiyou County, E. Rapport, cont'd.



Frame 5, Supply Well

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Source: ESRI Base Maps

SITE LOCATION MAP

Dunsmuir Grade Truck Inspection Facility, South Old Stage Road north of Mott Road, West Side of Interstate 5, Siskiyou County

