

1 STEPHAN C. VOLKER (CSB #63093)
JOSHUA A. H. HARRIS (CSB #226898)
2 DANIEL P. GARRETT-STEINMAN (CSB #269146)
LAW OFFICES OF STEPHAN C. VOLKER
3 436 14th Street, Suite 1300
Oakland, California 94612
4 Tel: 510/496-0600
Fax: 510/496-1366

5 Attorneys for Plaintiff
6 SAVE STRAWBERRY CANYON,
a non-profit California public benefit corporation
7
8

9 IN THE UNITED STATES DISTRICT COURT
10 FOR THE NORTHERN DISTRICT OF CALIFORNIA
11

12 SAVE STRAWBERRY CANYON, a non-profit)
California public benefit corporation,)

13)
14 Plaintiff,)

15)
16 v.)

17 STEVEN CHU, Secretary of the United States)
Department of Energy; AUNDRA RICHARDS,)
18 Site Office Manager, United States Department)
of Energy Berkeley Site Office; and UNITED)
19 STATES DEPARTMENT OF ENERGY, a)
federal agency,)
20)

21 Defendants.)
22)
23)
24)
25)
26)
27)
28)

Civ. No. CV 10-00797 VRW

**PLAINTIFF'S OPPOSITION TO
FEDERAL DEFENDANTS' CROSS-
MOTION FOR SUMMARY JUDGMENT**

Honorable Vaughn R. Walker

Date: December 9, 2010
Time: 10 a.m.
Courtroom: 6

TABLE OF CONTENTS

1

2 TABLE OF AUTHORITIES. iii

3 I. INTRODUCTION. 1

4 II. ARGUMENT. 1

5 A. BECAUSE BELLA “MAY HAVE A SIGNIFICANT EFFECT” ON THE

6 ENVIRONMENT, DOE MUST PREPARE AN ENVIRONMENTAL

7 IMPACT STATEMENT. 1

8 1. Context. 2

9 2. Intensity. 3

10 a. Controversy. 3

11 b. Other Section 1508.27 Factors. 4

12 B. THE EA’S ANALYSIS OF IMPACTS WAS INADEQUATE AND

13 THEREFORE FAILED TO “FOSTER INFORMED DECISIONMAKING

14 AND PUBLIC PARTICIPATION”. 7

15 1. Radiation Impacts. 7

16 2. Hazardous Waste. 10

17 3. Natural Disasters. 10

18 4. Cumulative Impacts. 11

19 C. THE EA IMPROPERLY INCORPORATES DOCUMENTS BY

20 REFERENCE. 12

21 1. The EA Incorporates Documents by Reference; It Does Not

22 “Mere[ly] Reference” Them. 12

23 2. Incorporation by Reference May Not Be Used in Connection With

24 an EA. 13

25 a. The CEQ’s “Forty Questions” Document Is Entitled to No

26 Deference. 13

27 b. Later Cases Have Approved *Duvall’s* Holding that Incorporation

28 Is Impermissible. 14

3. Assuming *Arguendo* that the EIS Incorporation Requirements Apply to

EAs, DOE Fails to Satisfy These Requirements. 15

D. THE EA FAILS TO ANALYZE AN ADEQUATE RANGE OF

ALTERNATIVES. 17

E. THE EA FAILS TO RESPOND TO PUBLIC COMMENTS. 18

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

F. THE EA IMPROPERLY DEFERRED MITIGATION OF SOME OF THE PROJECT'S POTENTIALLY SIGNIFICANT IMPACTS..... 19

G. PLAINTIFF EXHAUSTED ALL AVAILABLE ADMINISTRATIVE REMEDIES..... 20

III. CONCLUSION. 22

TABLE OF AUTHORITIES

FEDERAL CASE AUTHORITY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Abenaki Nation of Mississquoi v. Hughes
805 F.Supp. 234 (D.Vt. 1992) 14

Alaska Center for Environment v. U.S. Forest Service
189 F.3d 851 (9th Cir. 1999). 1, 2

Alaska Wilderness Rec. and Tourism Ass’n v. Morrison
67 F.3d 723 (9th Cir. 1995). 9, 10

American Rivers v. FERC
201 F.3d 1186 (9th Cir. 1999). 14

Association of Public Agency Customers, Inc. v. Bonneville Power Administration
126 F.3d 1158 (9th Cir. 1997). 21

Baltimore Gas & Electric Co. v. NRDC
462 U.S. 87 (1983)..... 9

Blue Mountains Biodiversity Project v. Blackwood
161 F.3d 1208 (9th Cir. 1998). 1, 9, 12

Cabinet Mountains Wilderness v. Peterson
685 F.2d 678 (D.C. Cir. 1982). 14

Center for Biological Diversity v. National Highway Traffic Safety Administration
538 F.3d 1172 (9th Cir. 2008). 1, 3

Center for Environmental Law and Policy v. U.S. Bureau of Land Management
2010 WL 2102632 (E.D. Wash. May 21, 2010)..... 15

Davis v. Mineta
302 F.3d 1104 (10th Cir. 2002). 14

Environmental Protection Information Center v. Blackwell
389 F.Supp. 2d 1174..... 15

Environmental Protection Information Center v. U.S. Forest Service
451 F.3d 1005 (9th Cir. 2006). 20

Friends of the Earth, Inc. v. U.S. Army Corps of Engineers
109 F.Supp 2d 30, 42 (D.D.C. 2000). 3

Friends of the Earth v. Hintz
800 F.2d 822 (9th Cir. 1986). 14

Friends of Endangered Species, Inc. v. Jantzen
760 F.2d 976 (9th Cir. 1985). 20

Fuel Safe Washington v. F.E.R.C.
389 F.3d 1313 (10th Cir. 2004). 11

1 *‘Ilio’ulaokalani Coalition v. Rumsfeld*
464 F.3d 1083 (9th Cir. 2006). 21, 22

2

3 *Lands Council v. McNair*
537 F.3d 981 (9th Cir. 2008). 9, 10

4 *Nat’l Parks & Conserv. Ass’n v. Babbitt*
241 F.3d 722 (9th Cir. 2001). 3, 21

5

6 *Native Ecosystems Council v. U.S. Forest Serv.*
428 F.3d 1233 (9th Cir. 2005). 7, 8

7 *Natural Resources Defense Council v. Duvall*
777 F.Supp. 1533 (E.D. Cal. 1991). 13, 15, 16, 17, 18

8

9 *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*
137 F.3d 1372 (9th Cir. 1998). 9, 12

10 *Northwest Environmental Defense Center v. Bonneville Power Administration*
117 F.3d 1520 (9th Cir. 1997). 21

11

12 *Okanogan Highlands Alliance v. Williams*
236 F.3d 468 (9th Cir. 2000). 10

13 *Park County Resource Council, Inc. v. U.S. Dept. of Agriculture*
817 F.2d 609 (10th Cir. 1987). 9

14

15 *Piedmont Env’tl Council v. Strock*
394 F.Supp. 2d 803 (N.D. W.Va. 2005). 15

16 *Robertson v. Methow Valley Citizens Council*
490 U.S. 332 (1989). 19

17

18 *Sierra Club v. Babbitt*
69 F.Supp.2d 1202 (E.D. Cal. 1999). 10, 18, 19

19 *Siskiyou Regional Educ. Proj. v. Rose*
87 F.Supp.2d 1074 (D. Or. 1999). 15

20

21 *State of California v. Block*
690 F.2d 753 (9th Cir. 1982). 7

22 *Village of Los Ranchos De Albuquerque v. Marsh*
956 F.2d 970 (10th Cir. 1992). 9

23

STATUTES

24

25

26 42 United States Code
§ 4321 *et seq.* (National Environmental Policy Act). *passim*

27

28

REGULATIONS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

40 Code of Federal Regulations

§ 1502.21.....	13, 14, 16
§ 1508.20.....	19
§ 1508.27.....	4, 7
§ 1508.27(a).....	1
§ 1508.27(b).....	2, 3, 5, 7
§ 1508.27(b)(2).....	4
§ 1508.27(b)(3).....	5
§ 1508.27(b)(4).....	4
§ 1508.27(b)(5).....	5, 6
§ 1508.8.....	11
§ 1508.8(b).....	11
§ 1508.9(b).....	11

46 Code of Federal Regulations

§ 18026.....	14
§ 18037.....	14

1 **I. INTRODUCTION**

2 The Federal Defendants’ (collectively, “DOE’s”) Cross-Motion for Summary Judgment (“cross-
3 motion” or MSJ”) fails to demonstrate that the Department of Energy (“DOE”) complied with the
4 National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* (“NEPA”), before approving the proposed
5 Berkeley Lab Laser Accelerator (the “project” or “BELLA”). DOE’s Environmental Assessment (“EA”)
6 ignores or downplays the project’s potentially significant impacts, fails to consider viable alternative
7 locations, ignores comments, defers formulation of mitigation measures, and improperly incorporates
8 documents by reference. Because of these deficiencies, the Court must deny defendants’ motion.

9 **II. ARGUMENT**

10 **A. BECAUSE BELLA “MAY HAVE A SIGNIFICANT EFFECT” ON THE ENVIRONMENT,
11 DOE MUST PREPARE AN ENVIRONMENTAL IMPACT STATEMENT**

12 An agency correctly determines that it need not prepare an Environmental Impact Statement (“EIS”)
13 *only if* it demonstrates that the project will not have *any* significant impacts. It is settled law that “[i]f
14 there is a substantial question whether an action ‘may have a significant effect’ on the environment, then
15 the agency must prepare an Environmental Impact Statement (EIS).” *Center for Biological Diversity v.*
16 *National Highway Traffic Safety Admin.*, 538 F.3d 1172, 1185 (9th Cir. 2008), *citing Blue Mountains*
17 *Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir.1998). Stated another way, “mere[] . . .
18 asserti[ons] that an activity . . . will have an insignificant effect” do not satisfy NEPA; instead, agencies
19 must “supply a *convincing statement of reasons* why potential effects are insignificant.” *Alaska Center*
20 *for Environment v. U.S. Forest Serv.*, 189 F.3d 851, 859 (9th Cir. 1999) (emphasis added).

21 As DOE correctly observes, agencies decide whether a project’s impacts are significant based on their
22 “context” and “intensity.” MSJ at 7. The term “context” measures the severity of the project’s impacts in
23 light of “society as a whole (human, national), the affected region, the affected interests, and the locality.”
24 40 C.F.R. § 1508.27(a). For instance, “in the case of a site-specific action, significance would usually
25 depend upon the effects in the locale rather than in the world as a whole.” *Id.* “Intensity” is determined
26 by reference to ten factors, six of which are pertinent here:

27 ///

28 ///

1 (2) The degree to which the proposed action affects public health or safety.

2 (3) Unique characteristics of the geographic area such as proximity to historic or cultural
3 resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical
4 areas.

4 (4) The degree to which the effects on the quality of the human environment are likely to be
5 highly controversial.

5 (5) The degree to which the possible effects on the human environment are highly uncertain or
6 involve unique or unknown risks.

7 (6) The degree to which the action may establish a precedent for future actions with significant
8 effects or represents a decision in principle about a future consideration.

8 (7) Whether the action is related to other actions with individually insignificant but cumulatively
9 significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant
10 impact on the environment. Significance cannot be avoided by terming an action temporary or by
11 breaking it down into small component parts.

11 40 C.F.R. § 1508.27(b). In light of these factors and the evidence in the Administrative Record, the EA
12 does not provide a “convincing statement of reasons” demonstrating that the project will have no
13 significant impacts. *Alaska Center*, 189 F.3d at 859.

14 **1. Context**

15 DOE fails to address the project’ s context in assessing the severity of its impacts. MSJ at 7-15.
16 The context here, however, is critically important, especially in regard to the project’ s radiological
17 impacts on nearby residential neighborhoods and the Lawrence Hall of Science, a children’ s museum.
18 But the section of the EA that purportedly addresses “ [r]adiation from [l]aser [p]lasma [a]ccelerator
19 [o]peration” contains *no analysis* of the setting of the project and fails to even *mention* the adjacent
20 neighborhoods and children’ s museum. AR7:0103-0105. Similarly, the project location section also
21 fails to address the nearby neighborhood and museum. In fact, the reader must glean information
22 related to the context of the facility from the visual impacts discussion, where the EA belatedly
23 discloses that the nearest residences are a mere 590 feet from the project and that the Lawrence Hall of
24 Science sits approximately 728 feet from BELLA. AR7:0115.

25 DOE further demonstrates its disregard for the context of the project by arguing that the EA
26 properly determined that radiological impacts would be insignificant based on the fact that “ on a
27 worldwide scale, multiple accelerators are in operation that generate electron beam energies around or
28 greater than 10 GeV.” MSJ at 9. But no information is provided about the settings of the other

1 accelerators or whether they are similarly located in a densely populated urban context. AR7:0081.
2 By blindly relying on the existence of other purportedly similar facilities, without more information
3 about the location of those facilities, DOE completely ignored the context of the project and thereby
4 failed to address one of the two NEPA factors essential for assessing the significance of impacts. The
5 EA therefore fails to demonstrate that the health and safety effects of the project on the nearby
6 neighborhoods and children' s museum are insignificant.

7 **2. Intensity**

8 DOE states that “ the mere presence of one [of the intensity] factor[s] alone is not enough to require
9 an EIS.” MSJ at 9 (*citing Friends of the Earth, Inc. v. U.S. Army Corps of Eng’ rs*, 109 F.Supp 2d
10 30, 42 (D.D.C. 2000)). Yet the Ninth Circuit has stated just the opposite: “ [a]n action may be
11 ‘significant’ if one of the [intensity] factors is met.” *Center for Biological Diversity v. National*
12 *Highway Traffic Safety Admin.*, 538 F.3d 1172, 1220 (9th Cir. 2008) (*citing Ocean Advocates v. U.S.*
13 *Army Corps of Eng’ rs*, 361 F.3d 1108, 1125 (9th Cir.2004)); *Nat’ l Parks & Conservation Ass’ n*,
14 241 F.3d at 731 (either degree of uncertainty or controversy “ may be sufficient to require preparation
15 of an EIS in appropriate circumstances”). Thus, contrary to DOE’ s position, the presence of just one
16 factor may require the preparation of an EIS. As demonstrated below, the impacts of BELLA trigger
17 multiple intensity factors and therefore DOE should have prepared an EIS.

18 **a. Controversy**

19 In its cross-motion, DOE insists that the project’ s radiation impacts are not controversial. MSJ at
20 8-9.¹ It argues that comments on the project only contained “ [c]riticism” (*id.* at 8) and
21 “ unsubstantiated conclusion[s]” (*id.* at 9) and therefore failed to raise any “ substantial dispute” about
22 the project’ s impacts on its surroundings. *Id.* at 8, *citing Nat’ l Parks & Conservation Ass’ n v.*
23 *Babbitt*, 241 F.3d 722 (9th Cir. 2001).

24 DOE’ argument, however, simply ignores the public comments that did in fact raise substantial
25

26 ¹ As discussed in subsection (b) directly below, the existence of controversy is but one of
27 the factors that an agency must evaluate to determine the significance of the project’s impacts.
28 40 C.F.R. § 1508.27(b). Here, multiple factors – including controversy – require preparation of
the EIS.

1 questions about the radiological impacts of the project – just as DOE ignored those same comments in
2 its responses to comments (discussed below). For example, the Committee to Minimize Toxic Waste
3 submitted information on a June 2005 report from the National Academy of Sciences that shows that
4 “ even very low doses of radiation pose a risk of cancer or other health problems and there is no
5 threshold below which exposure can be viewed as harmless” AR7:0189; *see also* AR7:0223
6 (Comments of Mark McDonald, July 17, 2009). This report emphasized that lifetime exposure to low
7 levels of radiation previously thought to be harmless can in fact cause cancer. *Id.*; DOE-SUPP:2361-
8 2364 (“ The BEIR VII report concludes that the current scientific evidence is consistent with the
9 hypothesis that, at the low doses of interest in this report, there is a linear dose-response relationship
10 between exposure to ionizing radiation and the development of solid cancers in humans”). DOE failed
11 to address the risk to nearby residents of developing cancer in light of the National Academy of
12 Sciences report. It had a duty under NEPA to do so, because the information provided by the public
13 created a “ substantial dispute” about the effects of long-term, low-dose radiation on those residents.
14 DOE should have prepared an EIS to fully address this controversial topic. 40 C.F.R. §
15 1508.27(b)(4).

16 **b. Other Section 1508.27 Factors**

17 BELLA’ s radiological impacts are not only significant because they are controversial. They also
18 qualify as significant based on at least four of the other section 1508.27 factors.

19 First, the radiological impacts of the “proposed action affects public health [and] safety.” 40 C.F.R. §
20 1508.27(b)(2). The project requires “3 feet” of concrete, “16 inches of lead,” “26 inches of steel” and
21 then “another 6 feet of concrete to absorb the radiation” that will be produced by the accelerator.
22 AR7:0104. This extensive shielding highlights the extremely dangerous radiation that operation of
23 BELLA will produce and the threat that it poses to nearby members of the public. The EA does not
24 address, for example, what would be the effect on the nearby residents and school children of an
25 accidental release. What would be the radiological impacts of operation of the accelerator if the shielding
26 were compromised by an earthquake, landslide or wildfire? To what extent would the public suffer from
27 exposure to radiation? The answers are unclear from the information provided in the EA. What is clear,
28 however, is that the project may have a significant impact on public health and safety and therefore an

1 EIS should have been prepared.

2 Second, the regulations ask agencies to consider “unique characteristics of the geographic area” that
3 might contribute to the significance of the project’s impacts. 40 C.F.R. § 1508.27(b)(3). As discussed
4 above in the subsection on “context,” the proximity of the facility to residential neighborhoods and a
5 children’s museum heightens DOE’s duty under NEPA to address the project’s potentially significant
6 health and safety impacts. Additionally, the seismic setting of the project site indicates a significant risk
7 that an earthquake could cause accidental exposure of radiation to citizens, yet this issue was relegated in
8 the EA to the category of “Issues Determined *Not* to Warrant Further Discussion.” AR7:0099, emphasis
9 added. Rather than being an issue that does “not warrant further discussion,” the risks posed by the
10 extreme seismicity of the project area must be addressed in an comprehensive EIR. This is especially true
11 given the troubling admission in the 2nd Administrative Draft of the EA – which DOE then “sanitized”
12 out of existence in the Final Draft EA – that “[a]n active fault parallel to the Hayward Fault is thought to
13 *intersect the southwest corner of Building 71 [the project site], and another at right angles is located at*
14 *the northeast corner.”* AR23:0572, emphasis added, citing 1996 LBNL Site Environmental Report.
15 Thus, the location of this project in a seismically hazardous area creates a potentially significant health
16 and safety impact in light the “unique characteristics of the geographic area.” 40 C.F.R. § 1508.27(b).

17 Third, the project’s impacts are significant because of the “degree to which the possible effects on the
18 human environment are highly uncertain or involve unique or unknown risks.” 40 C.F.R. §
19 1508.27(b)(5). For example, despite DOE’ s assertions to the contrary, the admittedly “ experimental”
20 nature of the project, which will “require a laser at or beyond state-of-the-art” technology, presents
21 unknown risks not addressed in the EA. AR14:0337. DOE claims that the “‘uncommon’ aspect of this
22 project is the laser mechanism . . . , a part of the system that does not generate radiation.” MSJ at 9
23 (emphasis omitted). But DOE ignores the salient fact that the *project* generates hazardous radiation in a
24 site clearly unsuited for such a hazard due to its high seismicity, unstable steep slopes, exposure to
25 wildfire and proximity to residential uses and a children’s museum. AR7:009-0100 (discussing nearby
26 earthquake faults), 0103-04 (acknowledging that project would emit radiation), 0115 (stating locations of
27 nearby homes and children’s museum), 19:0459 (“accidents typical at LBNL” are “earthquake, wild land
28 fire, and slides”). The risks of radiation exposure to sensitive populations *are* uniquely high and pose

1 uncertainties not addressed, much less resolved, by the EA. AR7:0306 (LBNL staff expressing doubt as
2 to veracity of radiation analysis); 26:0642 (LBNL staff asking for “details of the radiation studies and
3 health concerns” to be included in EA). In any event, DOE fails to address the unknown risks inherent in
4 the experimental nature of the facility. *Id.*; AR7:0103-0112. Could the laser degrade the shielding of the
5 accelerator faster than traditional accelerators? Is there an increased risk of malfunction that could put
6 members of the public at risk? Does the 10GeV laser present other risks or potential impacts not
7 experienced or studied at other accelerator sites?

8 Furthermore, as discussed above, long-term exposure of low-doses of radiation – as would be
9 experienced by the project’s neighbors – creates an increased risk of cancer for those members of the
10 public exposed. AR7:0189; DOE-SUPP:2361-2364. Yet, the exact extent of this increased risk is
11 “unknown” and therefore requires an EIS. DOE-SUPP:3264 (calling for further research). Further, it
12 is not clear whether long-term exposure of low-doses of radiation may also increase risk of other health
13 effects, such as heart disease and stroke. The National Academy of Sciences therefore concludes that
14 “additional data must be gathered before an assessment of any possible dose response can be made
15 between low doses of radiation and noncancer health effects.” DOE-SUPP:3262. Thus, the impacts of
16 the project “on human environment,” including potential increases to cancer risk and noncancer health
17 effects in nearby residents, “are highly uncertain [and] involve unique or unknown risks.” 40 C.F.R. §
18 1508.27(b)(5). Therefore, DOE should have prepared an EIS.

19 Fourth, the precedential impact of this approval demonstrates its significance. If DOE’s approval
20 stands, then DOE would be able to site radioactive facilities near residential neighborhoods without
21 presenting to the public an accurate and complete study of the radiological impacts of the facility on those
22 neighbors. As discussed in plaintiff’s motion and summarized below, DOE should have provided to the
23 public – at a bare minimum – the calculations it employed to determine the significance of the
24 radiological impacts. Allowing DOE to approve a project as controversial as BELLA without this
25 essential disclosure would set a dangerous precedent. This factor therefore weighs heavily in favor of
26 requiring DOE to prepare an EIS.

27 Fifth, section 1508.27 also requires that an agency consider “[w]hether the action is related to other
28 actions with individually insignificant but cumulatively significant impacts.” 40 C.F.R. § 1508.27(b). As

1 discussed below, DOE ignored the potentially significant cumulative impacts of the project.

2 As with the controversial nature of the project, evaluation of the other factors in section 1508.27
3 demonstrates that the project’s impacts are potentially significant within the meaning of NEPA and
4 therefore DOE should be required to prepare an EIS to fully evaluate those impacts.

5 **B. THE EA’S ANALYSIS OF IMPACTS WAS INADEQUATE AND THEREFORE FAILED TO**
6 **“FOSTER INFORMED DECISIONMAKING AND PUBLIC PARTICIPATION”**

7 In addition to determining whether the agency correctly decided not to prepare an EIS, courts must
8 also determine whether the EA in question “‘foster[ed] both informed decision-making and informed
9 public participation.’ ” *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 960 (9th Cir.
10 2005), *quoting California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982). Despite DOE’s arguments to the
11 contrary, the EA’s deficient evaluation of the project’s impacts failed to foster informed decisionmaking
12 or informed participation by the public.

13 **1. Radiation Impacts**

14 First, DOE incorrectly states that “[t]he EA’s calculations and estimations [related to radiation
15 exposure] are more than sufficient under NEPA” MSJ at 12. In support of this claim, DOE presents
16 multiple citations to materials and analyses that were *not included in the EA*. For example, DOE states:

- 17 • that the “‘dimensions of [the] shielding are based on proven Health Physics calculation
18 models . . . [and] [t]he radiation shielding design is well within established and proven
19 parameters” (MSJ at 10), citing DOESUPP:000007, *not the EA*;
- 20 • that “[t]he potential radiation doses for the closest member of the public would be 1/3,600
21 of a rem per year (0.00028)” (p. 11), citing unknown calculations and the “inverse square
22 law” obliquely referenced at [www.ndt-
23 ed.org/GeneralResources/Formula/RTFormula/InverseSquare/InverseSquareLaw.htm](http://www.ndt-ed.org/GeneralResources/Formula/RTFormula/InverseSquare/InverseSquareLaw.htm), *not
24 the EA*; and
- 25 • that “BELLA is expected to run no more than a few hundred hours per year,” (p.11), citing
26 AR31:0672, *not the EA*.

27 Remarkably, DOE fails to cite the environmental document itself in its attempt to show that the
28 *EA* adequately addressed the project’s radiation impacts to the public. *Id.* Thus, DOE unwittingly makes
29 plaintiff’s point: the *EA* did not contain sufficient information about the radiation impacts of the project.
30 In fact, review of the EA demonstrates that it is completely bereft of the type of “calculations and
31 estimations” related to radiation exposure that defendants claim demonstrate NEPA compliance. MSJ at
32 12. This deficiency is underscored by internal comments on DOE’s 1st Administrative Draft, which state

1 that the EA “need[s] details of the radiation studies and health concerns.” AR26:0642. Despite these
2 comments, no specific analysis was added to the EA. AR7:0103-105. In light of the EA’s informational
3 gaps, it failed to “foster both informed decision-making and informed public participation.” *Native*
4 *Ecosystems*, 418 F.3d at 960. DOE thus fails to demonstrate that the EA contained the analysis required
5 by NEPA.

6 Furthermore, as discussed fully in plaintiff’s motion, the EA failed to analyze unusual
7 circumstances such as accidental radiological releases or sabotage.² DOE does not argue that the EA
8 properly addressed these types of unusual circumstances. MSJ at 10-12. And in fact, the LBNL’s own
9 NEPA Document Manager admitted “that the EA does not do a very good job of accidental analysis.”
10 AR19:0459. DOE’s nonchalance toward accident analysis impermissibly ignores the fact that accidents
11 and acts of sabotage can and do happen, as the recent Deepwater Horizon disaster illustrates. There,
12 regulators were assured that the mechanisms that would prevent a blowout were foolproof. As it turned
13 out, those assurances were mistaken. If the federal government had conducted a more searching review
14 of the safety protocols on the Deepwater Horizon, the Gulf Oil Spill might well have been avoided.

15 So too here, DOE has a duty under NEPA to ensure that the health and safety risks associated with
16 the siting of BELLA near residential areas and a children’s museum are fully disclosed and examined, not
17 brushed aside. DOE must identify and explain in its NEPA review the safeguards it intends to utilize to
18 ensure that no accident or act of sabotage could cause a radiological disaster. Instead, the EA ignores the
19 possibility that a release of radiation could take place. AR7:0103-105. It fails to provide any
20 determination of the maximum exposure levels that would be expected if an accidental release were to
21 occur. *Id.* Rather, it put off such calculations until the future preparation of the “Safety Analysis
22 Document (SAD) and Acceleration Safety Envelope (ASE)” report. AR7:0095. In so doing, the EA
23 deprived the public and the decisionmakers of critical information about what would happen if an
24 accident or sabotage-related release occurred and how such a potential disaster could be prevented and
25

26 ² As discussed in plaintiff’s motion, the EA section entitled “Intentional Destructive
27 Acts” claims to address sabotage, but in fact it only analyzes threats from outsiders and thus
28 ignores scenarios in which LBNL workers with access to the facility engage in sabotage.
AR7:0124.

1 mitigated. The EA was thus inadequate.

2 Furthermore, as also discussed in plaintiff’s motion, the EA ignored the project’s radionuclide
3 emissions despite the fact that an LBNL employee admitted that the facility will “[p]robably” produce
4 such emissions. AR22:0544. With no information on these emissions in the EA, the decisionmakers
5 and the public were deprived of critical health and safety information essential to their understanding
6 and evaluation of the radiological impacts of the project.

7 Finally, DOE argues that the Court should defer to DOE’s presumed expertise concerning
8 radiation analyses. MSJ at 12. Deference, however, is not accorded to an agency’s failure to adhere to
9 NEPA’s required *procedural* mandates. *Alaska Wilderness Rec. and Tourism Ass’n v. Morrison*, 67 F.3d
10 723, 727 (9th Cir. 1995) (“*Alaska*”) (“distinguish[ing] the strong level of deference . . . accord[ed] an
11 agency in deciding factual or technical matters from that to be accorded in disputes involving
12 predominantly legal questions”). As explained in *Park County Resource Council, Inc. v. U.S. Dept. of*

13 *Agriculture*:

14 deference to agency expertise is inapplicable in the NEPA context. The deference
15 envisioned under this rationale is appropriate when the disputed issue is one expressly
16 delegated to an agency that deals exclusively with the area and so has refined an expertise
17 in its nuances. All federal agencies are required under NEPA to prepare an EIS if a
18 proposed action meets the statutory criteria. No single agency has expertise in determining
19 whether an EIS is statutorily mandated in a given instance. NEPA *imposes* duties on
20 agencies; agencies do not exist to administer NEPA. Hence, courts are equally well-suited
21 to examine the issue of whether a proposed action is a major federal action significantly
22 affecting the environment.

19 817 F.2d 609, 620 (10th Cir. 1987) (overruled on other grounds by *Village of Los Ranchos De*
20 *Albuquerque v. Marsh*, 956 F.2d 970, 971 (10th Cir. 1992); *accord*, *Blue Mountains Biodiversity Proj.*
21 *v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998), quoting *Neighbors of Cuddy Mountain v. U.S. Forest*
22 *Service*, 137 F.3d 1372, 1380 (9th Cir. 1998) (“[G]eneral statements about “possible” effects and “some
23 risk” do not constitute a “hard look” absent a justification regarding why more definitive information
24 could not be provided”).

25 DOE’s reliance upon *Lands Council v. McNair* 537 F.3d 981 (9th Cir. 2008) (“*McNair*”) and
26 *Baltimore Gas & Electric Co. v. NRDC*, 462 U.S. 87 (1983) to support this argument is misplaced. MSJ
27 at 12. In *McNair*, the Court held, contrary to DOE’s position here, that agencies must explain the
28 methodology used to reach their conclusions. *McNair*, 537 F.3d at 1003. Likewise, in *Baltimore Gas &*

1 *Electric*, the Court examined an agency’s decision in light of evidence in the record that addressed the
2 methodology and reasons for the agency’s decision. 462 U.S. at 103-104. Notwithstanding the deference
3 due its determinations of factual matters committed to its expertise, an agency must still support its
4 conclusions with evidence and analysis sufficient for courts to determine whether the agency has
5 discharged its statutory duties. *McNair*, 537 F.3d at 994 (the agency must support its conclusions with
6 studies, and must explain conclusions drawn from such studies “and the reasons it considers underlying
7 evidence to be reliable”). Here, DOE failed to support its conclusions with the data and analysis that
8 NEPA requires in an EIS. It neglected to include in its EA, for example, (1) calculations or narrative
9 explaining its conclusions that operation of BELLA will not harm nearby residents; (2) an analysis of
10 accidental or sabotage-related releases; and (3) information on the facility’s radionuclide emissions. By
11 merely conclusorily asserting that radiation releases will have no impacts, and omitting the required data
12 and analysis, DOE committed a procedural violation of NEPA for which no deference is afforded.
13 *McNair*, 537 F.3d at 994; *Alaska*, 67 F.3d at 727.

14 **2. Hazardous Waste**

15 DOE contends that “[d]uring demolition for new construction,” all “excavations will be carried
16 out under a Soil Management Plan, which will prescribe soil handling and sample collection procedures.”
17 MSJ at 13 (*citing* AR7:0092). DOE’s reliance on a yet-to-be created Soil Management Plan presents a
18 classic case of deferred mitigation, a shortcut that does not satisfy NEPA’s informational requirements.
19 *Nat’l Parks*, 241 F.3d at 734 (“A ‘perfunctory description,’ or ‘mere listing of mitigation measures,
20 without supporting analytical data,’ is insufficient to support a finding of no significant impact”) (*quoting*
21 *Okanogan Highlands Alliance*, 236 F.3d at 473). Reference to a future plan to mitigate the potentially
22 significant hazardous waste impacts does not provide the public or the decisionmakers with adequate
23 information to verify DOE’s finding of no significant impact. DOE should have prepared the plan prior
24 to the release of the EA and included details of the plan in the EA.

25 **3. Natural Disasters**

26 DOE argues that the “EA also fully addresses natural disasters.” MSJ at 13. First, it contends that
27 the EA addressed all wildfire impacts because it analyzed BELLA’s potential to ignite wildfires. *Id.* at
28 13-14. Like the EA, DOE ignores the potentially significant impacts of a widespread wildfire on the

1 facility itself. *Id.*; AR7:0103-105. For example, could an intense wildfire damage the BELLA structure
2 in such a way that would cause a release of radiation or hazardous materials? How would the public be
3 impacted by such an event? Under NEPA, these types of questions must be addressed prior to approval
4 of a project like BELLA, which has potentially significant impacts. 40 C.F.R. § 1508.9(b) (EAs “shall
5 include brief discussions . . . of the environmental impacts of the proposed action”); *Id.* § 1508.8(b)
6 (impacts³ “include [¶] indirect [impacts that] . . . are . . . reasonably foreseeable”).

7 Similarly, the EA fails to address the potential impacts of an earthquakes or landslide. Most
8 notably, it ignores the possibility that such an event could cause the release of radiation or other
9 hazardous materials. AR7:0103-105. Yet the EA admits that the project is located in close proximity to
10 the “active Hayward Fault” and the “inactive Wildcat Fault.” AR7:0099. More troubling, the 2nd
11 Administrative Draft states that “[a]n active fault parallel to the Hayward Fault is thought to *intersect the*
12 *southwest corner of Building 71* [the project site], and *another at right angles is located at the northeast*
13 *corner.*” AR23:0572, emphasis added, citing 1996 LBNL Site Environmental Report. Furthermore, the
14 project site is located within “an official hazard zone for earthquake-induced landsliding.” AR2:0009.
15 Based on the seismically hazardous location of the project, the EA should have addressed the potential
16 impacts of an earthquake on the facility. *Fuel Safe Washington v. F.E.R.C.*, 389 F.3d 1313, 1332 (10th
17 Cir. 2004) (rejecting challenge to FEIS because there – in contrast to DOE’s deficient seismic hazard
18 analysis here – the agency “took a hard look at seismic hazards, and its decision regarding how to address
19 reasonably foreseeable earthquakes was reasonable”). DOE’s reference to the EA’s explanation that “the
20 Project will actually improve Building 71’s ability to withstand a seismic event” (MSJ at 14 (*citing*
21 AR7:0099)) does not address the impacts of what would happen if the building was compromised during
22 an earthquake. NEPA requires that analysis.

23 **4. Cumulative Impacts**

24 DOE contends that the “EA’s cumulative impacts analysis shows that impacts are not significant.”
25 MSJ at 15. Regarding the project’s cumulative radiological impacts, DOE relies on the EA’s statement
26

27 ³“Effects and impacts as used in the[CEQ] regulations are synonymous.” 40 C.F.R. §
28 1508.8.

1 that it is “anticipated that BELLA would contribute no measurable radiation at the LBNL property
2 boundaries, whether specifically or cumulatively with all other LBNL activities.” AR7:0132. The EA
3 provides no information or analysis to support this statement. Such ““general statements about “possible”
4 effects and “some risk” do not constitute a “hard look” absent a justification regarding why more
5 definitive information could not be provided.” *Blue Mountains*, 161 F.3d at 1213, *quoting Neighbors of*
6 *Cuddy Mountain*, 137 F.3d at 1380. Without providing more, DOE’s unsubstantiated conclusion that the
7 project will not cause potentially significant cumulative radiological impacts violates NEPA.

8 Furthermore, DOE does not – and cannot truthfully – maintain that the EA provided an analysis of
9 the cumulative effects of accidental radiological releases due to catastrophic events in the project vicinity.
10 MSJ at 15. The EA admits that there are other sources of radiation in the vicinity of the project, but fails
11 to disclose the cumulative impact of a large-scale earthquake that could trigger releases of radiation at
12 those other sources. This information is critical to an understanding of the project’s cumulative health
13 and safety risks. Its omission violates NEPA.

14 C. THE EA IMPROPERLY INCORPORATES DOCUMENTS BY REFERENCE

15 DOE claims that (1) the EA does not actually “incorporate by reference” any documents; (2)
16 plaintiff’s assertion that incorporation by reference may not be used with an EA is incorrect; and (3)
17 assuming the EIS incorporation standards are also applicable to EAs, it has met those requirements. DOE
18 is mistaken on all counts.

19 1. The EA Incorporates Documents by Reference, It Does Not “Mere[ly] Reference” 20 Them⁴

21 DOE implies that the EA does not actually contain “incorporation by reference”; instead, DOE
22 claims, the EA “mere[ly] reference[s]” outside documents but does not incorporate them. MSJ at 16 n.
23 16. Incorrect.⁵ DOE goes far beyond “mere reference[s]” to other documents in its EA. Instead of

24 ⁴ MSJ at 16 (capitalization altered).

25 ⁵ Additionally, to the extent that the documents described below are *not* incorporated by
26 reference into the EA, they may not be used to support the EA’s conclusions. *See Natural*
27 *Resources Defense Council v. Duvall* (1991) 777 F.Supp. 1533, 1538 (E.D. Cal. 1991) (any
28 “justification for the agency’s decision ‘is limited to the four corners of the environmental
statement itself’”) (citation omitted).

1 relying upon outside materials for support for factual matters *stated in the EA*, DOE’s EA repeatedly
2 relies upon the *unstated portions* of other documents to describe the project and support its findings of no
3 significant impact. *See, e.g.*, AR7:0105-06 (“please refer to . . . the LBNL 2006 Long Range
4 Development Plan [“LRDP”] EIR” “[f]or further details” about how LBNL’s fire management
5 procedures will “minimize the risks associated with wildland fire” and thereby ensure that the project
6 “does not increase the likelihood . . . of a potential wildland fire at LBNL”⁶; AR7:0088 n. 4; 0122 n. 22;
7 0061 n. 31 (referring to unstated “significance thresholds” used to determine the significance of the
8 Project’s traffic impacts); AR7:0101; 0102, 0105, 0106, 0122 (referring reader to LBNL’s Publication-
9 3000 for “policies and procedures to address and minimize” various health-and-safety related impacts);
10 EA 7:0104 (instead of providing map, referring reader to Site Environmental Report’s depiction of
11 radiation monitoring system). Such documents were referenced by DOE in the EA with the hope that
12 they would independently establish mitigation or avoidance of the Project’s environmental impacts. They
13 are not used to support *factual* statements in the *EA itself*. By relying on, but not providing the cited
14 analysis and contents of, outside documents to support the EA’s *conclusions*, DOE incorporated these
15 documents by reference.

16 **2. Incorporation by Reference May Not Be Used in Connection With an EA**

17 DOE claims that incorporation by reference may be lawfully used in connection with an EA.
18 Incorrect again. In service of this unsupportable argument, DOE relies on assertedly “formal guidance”
19 from the CEQ – the CEQ’s “Forty Most Asked Questions” document – that is supposedly “entitled to
20 judicial deference.” MSJ at 18. But this CEQ document is entitled to no deference at all. DOE also
21 relies upon a few cases approving of incorporation by reference into an EA. Yet, as noted below, these
22 cases are readily distinguishable.

23 **a. The CEQ’s “Forty Questions” Document Is Entitled to No Deference**

24 As pointed out in plaintiff’s motion for summary judgment, the CEQ *regulation* concerning
25 incorporation by reference by its terms only allows *EISs*, not *EAs*, to incorporate documents by reference.
26 40 C.F.R. § 1502.21 (describing permissible incorporation “into an environmental impact statement”).

27
28 ⁶ This document is not included in the Administrative Record.

1 DOE counters that CEQ’s “Forty Most Asked Questions” document allows incorporation by reference
2 into EAs, and that that document constitutes “important guidance . . . entitled to judicial deference.” MSJ
3 at 18 (citing 46 F.R. 18026, 18037).

4 “But, [DOE’s] reliance on this document is misplaced because courts uniformly have held that the
5 CEQ forty questions document is not a regulation, but [is] merely an informal statement and is not
6 controlling authority.” *Friends of the Earth v. Hintz*, 800 F.2d 822, 837 n. 15 (9th Cir. 1986). No
7 deference is owed because the Forty Questions document “was not the product of notice and comment
8 procedures and does not impose a mandatory obligation on all federal agencies.” *Cabinet Mountains
9 Wilderness v. Peterson*, 685 F.2d 678, 682 (D.C. Cir. 1982); *see also Abenaki Nation of Mississquoi v.
10 Hughes*, 805 F.Supp. 234, 244 (D.Vt. 1992) (collecting cases). Although some “circuits . . . have
11 referenced the memorandum in reaching a decision [citations], none have held that the memorandum is
12 binding or entitled to substantial deference as CEQ regulations are.” *Id.*

13 None of DOE’s cases are to the contrary. In *Davis v. Mineta* the court *specifically stated* that the
14 “Forty Questions document is not owed . . . substantial deference” as it was not “the product of notice and
15 comment procedures.” 302 F.3d 1104, 1125 n. 17 (10th Cir. 2002). DOE’s other case, *American Rivers
16 v. FERC*, does not confront the issue of whether the CEQ Forty Questions document is entitled to
17 deference – it merely relies upon the document for “additional support” for an already established
18 proposition – and thus is no authority for that point. *Id.*, 201 F.3d 1186, 1200 (9th Cir. 1999). Because
19 the CEQ’s Forty Questions document is not worthy of deference, the plain text of 40 C.F.R. section
20 1502.21, which does *not* permit the incorporation by reference of documents into an Environmental
21 Assessment, must control in cases of conflict. Incorporation by reference may not be used in connection
22 with an EA, which is supposed to be “a concise public document,” because

23 the threshold for requiring an EIS is quite low. Thus only in those obvious
24 circumstances where no effect on the environment is possible, will an EA be
25 sufficient for the environmental review required under NEPA. Under such
circumstances, the conclusion reached must be close to self-evident and would not
require an extended document incorporating other studies.

26 *Duvall, supra*, 777 F.Supp. at 1538-39.

27 **b. Later Cases Have Approved *Duvall’s* Holding that Incorporation Is**
28 **Impermissible**

1 Subsequent cases have agreed with *Duvall*. In *Sierra Club v. Babbitt*, the court “[ou]nd[ed]” *Duvall*
2 “to be persuasive, and therefore reject[ed] Defendants’ argument that” certain putatively incorporated
3 documents could properly “be considered in tandem with the EA in determining whether the EA provided
4 the public with an adequate description of the Project.” 69 F.Supp.2d 1202, 1218 (E.D. Cal. 1999).
5 *Siskiyou Regional Educ. Proj. v. Rose* repeatedly cited *Duvall* with approval and adopted its analytical
6 framework to adjudicate an incorporation-by-reference dispute. 87 F.Supp.2d 1074, 1097, 1098 (D. Or.
7 1999).

8 The contrary cases cited by DOE are unavailing. *Center for Env’t Law and Pol’y v. U.S. Bureau*
9 *of Land Mgmt.*, 2010 WL 2102632, at *6 (E.D. Wash. May 21, 2010), cited on page 19 of DOE’s MSJ,
10 relies solely upon the CEQ’s “Forty Questions” document to establish that incorporation is permissible.
11 As discussed above, that CEQ document is unworthy of deference, a point which appears to have been
12 overlooked by the plaintiffs in that case. *Id.* In *Env’t Prot. Info. Ctr. v. Blackwell*, also relied upon by
13 DOE, the plaintiff “conceded that an agency may incorporate by reference in an EA,” and failed to argue
14 that *Duvall* applied. 389 F.Supp. 2d 1174, 1203 (emphasis added). Plaintiff here makes no such
15 concession.

16 Finally, *Piedmont Env’t Council v. Strock* is an unpersuasive out-of-circuit district court case.
17 394 F.Supp. 2d 803 (N.D. W.Va. 2005). The issue in *Piedmont* was “whether it is a violation of NEPA
18 for a cooperating agency to incorporate by reference a FEIS in an EA/FONSI.” *Id.* at 812. The issue in
19 *Duvall* was “whether an EA may incorporate by reference” an earlier DEIS and EA. 777 F.Supp. at 1538.
20 Despite this near-identity of issues, the *Piedmont* Court dismissed *Duvall* out-of-hand, dubiously
21 claiming without explanation that the “issue” before it “[wa]s obviously different than the issue presented
22 in *Duvall*.” *Duvall*’s reasoning, unlike *Piedmont*’s, is “persuasive” and therefore controlling. *Babbitt*,
23 *supra*, 69 F.Supp.2d at 1218.

24 **3. Assuming Arguendo that the EIS Incorporation Requirements Apply to EAs, DOE** 25 **Fails to Satisfy These Requirements**

26 DOE argues that, assuming the EIS incorporation requirements also apply to EAs, its
27 incorporation satisfies regulatory requirements. MSJ at 17. DOE argues only that the incorporation by
28

1 reference in footnote 9 of the EA is proper and makes no argument with regard to the other references.
2 *Id.*; AR 7:0104. (Footnote 9 incorporated by reference a map of the Project’s radiation monitoring system
3 depicted in the 2008 Site Environmental Report. *Id.*) Even this limited argument is incorrect.

4 To satisfy 40 C.F.R. section 1502.21, an incorporated document must satisfy “three standards: 1)
5 the material is reasonably available; 2) the statement is understandable without undue cross reference;
6 and 3) the incorporation by reference meets a general standard of reasonableness.” *Duvall, supra, 777*
7 F.Supp. at 1539. DOE does not dispute the applicability of this test. MSJ at 16-17. Footnote 9 fails the
8 second and third prongs of this test.

9 The radiation monitoring system referred to in footnote 9 is not “understandable without undue
10 cross reference.” *Duvall, supra, 777* F.Supp. at 1539. The EA “does not . . . specifically cite to which
11 . . . portions of the[]” Site Environmental Reports contain the map in question. *Rose, supra, 87*
12 F.Supp.2d at 1098. “This requires undue cross-referencing.” *Id.* Readers of the EA should not have to
13 attempt to ascertain which portion of the multi-volume Site Environmental Reports contain a critical map
14 of the Project. Additionally, even once the map is located, the reader is unreasonably obliged to conduct
15 further cross-referencing in order to determine how the radiation monitoring system’s location relates to
16 the project site. (Building 71, the project location, is not numbered in the Site Environmental Report
17 maps. *See* AR 0179.) Instead of foisting such unnecessary and daunting research tasks upon members of
18 the public solely to eliminate one or two pages from the EA, DOE should have included a map in that
19 document. Its failure to do so does not “meet[] a general standard of reasonableness.” *Duvall, supra, 777*
20 F.Supp. at 1539.

21 As discussed in Plaintiff’s Motion, on page 21, the EA’s other references also fail to satisfy the
22 incorporation by reference test. For example:

- 23 • The truck traffic engineering analysis, relied upon to demonstrate the Project’s lack of air
24 quality and traffic impacts, is a “confidential” memorandum that was not “publicly available,” as
25 required. AR:EAFN:4:1087.
- 26 • LBNL’s “Publication-3000,” which supposedly guarantees that the Project will not have various
27 health and safety impacts, requires undue cross-reference, because the EA repeatedly fails to
28 direct the reader to the pertinent provisions within this gargantuan publication – and even in the
few instances where *chapter* direction is given, the reader is left wondering where in the
document’s massive chapters the particular provisions guaranteeing the project’s safe operation
are located. *See* AR 7:0101, 0102, 0106, 0122.

1 • “There is no evidence in the record concerning the public availability of” DOE Order 5400.5, or
2 concerning LBNL Standard Specification Sections 017419, 024116, 026113, 13281, 13282; thus,
3 the first part of the test is not met. *Rose, supra*, 87 F.Supp.2d at 1098; AR:EAFN:11:1433-1519;
4 AR 7:0101, 0110, 0117.

5 Furthermore, the aggregate amount of incorporation by reference fails to “meet[] a general standard of
6 reasonableness,” as required. *Duvall, supra*, 777 F.Supp. at 1539. The incorporated documents amount
7 to over 1,000 pages, *excluding* a number of lengthy documents omitted from the AR by DOE. *See*
8 *generally* AR:EAFN:6, 9. Trying to track down each of these cross-referenced documents – some of
9 which, like the 2006 LBNL LRDP,⁷ were not even included in the Administrative Record – would be a
10 vexatious and futile exercise.

11 Because DOE incorporated voluminous documents into its EA, but EAs may not incorporate
12 material by reference (and even if they could, DOE’s incorporation would not satisfy the applicable legal
13 requirements), this Court must disregard the putatively incorporated material and require DOE to
14 complete an EIS.

15 **D. THE EA FAILS TO ANALYZE AN ADEQUATE RANGE OF ALTERNATIVES**

16 DOE argues that the EA considered an adequate range of alternatives. As for offsite alternatives,
17 DOE argues that all offsite options were rejected because, as the EA states, “vacant accelerator facilities
18 in the area are uncommon, and a large perimeter around the building might have to be leased and secured
19 to provide an equivalent amount of protection from potential risk of radiation exposure to the public.”
20 AR7:0097. First, the EA does not address whether other industrial buildings could be modified to house
21 the new accelerator. *Id.* It thus fails to explain why it limited its search of offsite alternatives only to
22 “vacant accelerator facilities.” *Id.* Further the EA did not analyze whether the project could be
23 constructed at one of the other 21 DOE national laboratories – within an existing “vacant accelerator
24 facilit[y]” or other large building. *Id.*

25 In addition, DOE contradicted the second part of its justification for eliminating all other offsite
26 alternative when it stated in the responses to comments that “[a] large perimeter is *not* required around
27 Building 71 because adequate protection is provided by the shielding from the cave and beam dump.”

28 ⁷ A lone page of this report is included as AR:EAFN:32. But the section regarding fire mitigation measures referenced at AR 7:0105-06, for example, was excluded.

1 AR7:0245, emphasis added. If a perimeter is not required, as DOE contends, then EA’s rationale for
2 ignoring all offsite alternatives is untenable.

3 **E. THE EA FAILS TO RESPOND TO PUBLIC COMMENTS**

4 DOE falsely claims that the EA “responds in detail to all comments received.” The EA entirely
5 fails to respond to a number of pertinent comments about the Project’s impacts.

6 Two sets of public comments referenced a recent report from the National Academy of Sciences
7 (the “BEIR Report”) that concludes that “even very low doses of radiation pose a risk of cancer or other
8 health problems and there is no threshold below which exposure can be viewed as harmless.” AR7:0184,
9 189, 223. The “detail[ed]” response to these comments referenced by DOE (MSJ at 21) reads: “Please
10 see response to comment AM-3.” AR 7:0250, 0268. Response to comment AM-3 does not acknowledge
11 the National Academy’s findings and instead asserts that compliance with regulatory “standards and
12 requirements” would “protect LBNL workers and the public,” thereby implying that radiation below these
13 regulatory limits is not harmful. AR 7:0237-0239. This direct conflict with the BEIR Report’s
14 conclusions is neither acknowledged nor explained.

15 Implicitly acknowledging this inadequacy, DOE states, “Also, the administrative record includes a
16 letter . . . to the National Academy of Sciences expressing serious concerns about the BEIR Report and
17 refuting its conclusions.” MSJ at 21. But a letter only present in this Court’s *Administrative Record* does
18 not and cannot constitute an adequate *EA comment response*, particularly when the letter is *not once*
19 *mentioned* in the EA. If DOE is so confident about this letter’s conclusions, it should have exposed it to
20 public review in the EA, as NEPA requires, not hidden it in the hopes that it might constitute a *post hoc*
21 justification for its actions. Any justification for DOE’s conclusions must appear in “ the four corners of
22 the environmental [assessment] itself.” *Duvall, supra*, 777 F.Supp. at 1538.

23 The EA also fails to respond to other public comments about the project’s radiation emissions.
24 Save Strawberry Canyon implored DOE to

25 [p]lease clarify the basis for estimates of radioactive emissions. Please provide
26 evidence of the documents and reports which are the basis for estimated
27 radioactive emissions. Furthermore, please provide empirical evidence which
shows that the three feet concrete wall . . . suffice[s] to absorb the radiation to the
level estimated.

28 AR 7:0230. Indeed, even *DOE’s own staff* realized that it “need[ed]” to provide “details of the radiation

1 studies and health concerns. [LBNL] would like [the EA] to summarize . . . and include more details, if
2 available, in an appendix.” AR 26:0642. Instead of responding to such comments and providing the
3 further detail requested, DOE ignored the comments and internally decided that the radiation analysis
4 supporting the EA was not reliable enough to present to the public. AR 12:0306. In so doing, DOE
5 violated NEPA.

6 **F. THE EA IMPROPERLY DEFERRED MITIGATION OF SOME OF THE PROJECT’S**
7 **POTENTIALLY SIGNIFICANT IMPACTS**

8 DOE claims the EA did not improperly defer mitigation of potentially significant impacts. MSJ at
9 22-24. The EA, however, relies on three future documents to mitigate the effects of the project on the
10 health and safety of the public: (1) the Safety Analysis Document (SAD); (2) the Acceleration Safety
11 Envelope (ASE); and (3) the Soil Management Plan. AR7:0095; AR7:0092.

12 DOE argues first that the measures to be described in these documents “are not mitigation
13 measures.” MSJ at 23. DOE, however, fails to explain its argument. *Id.* It merely quotes the regulation
14 that defines mitigation measures and lists other mitigation measures that are in the EA, but provides no
15 analysis of why the SAD, ASE, and Soil Management Plan do not fit within the regulation’s definition.
16 *Id.*, citing 40 C.F.R. § 1508.20 (1987).

17 Contrary to DOE’s unexplained position, the three documents will prescribe measures that will be
18 taken to avoid or minimize impacts of the facility. Specifically, the EA states that the SAD and ASE will
19 calculate maximum exposures and implement measures based thereon (AR7:0245) to “ensure the
20 facility’s safe operation.” AR7:0095. As for the Soil Management Plan, the EA explains that it will
21 “prescribe soil handling and sample collection procedures.” AR7:0092. Thus, the measures described in
22 the EA meet section 1508.20’s definition of mitigation measures in that they seek to “avoid[] the impact
23 altogether” (subsection (a)) or to “minimize[] impacts by limiting the degree or magnitude of the action
24 and its implementation” (subsection (b)).

25 DOE also argues that, even if the future reports will contain mitigation measures, NEPA does not
26 require the measures to be contained in the EA. MSJ at 24. The case law that DOE cites for its position,
27 however, does not hold that mitigation measures can be put off until after finalization of the EA/FONSI
28 and approval of the project. In *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989),

1 the court held that NEPA contains “a requirement that mitigation be discussed in sufficient detail to
2 ensure that environmental consequences have been fairly evaluated.” Here, DOE has provided no detail
3 at all, because neither the SAD nor the ASE exists in even conceptual form. *See, e.g.*, AR 7:0095
4 (“[p]rior to operations, LBNL will review and approve a [SAD] and [ASE]” “to ensure the facility’s safe
5 operation”) (emphasis added). In *Env’t Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1015-16 (9th
6 Cir. 2006), the court upheld an EA’s mitigation measures *only* because the “EA contain[ed] very specific
7 and detailed information on the ways . . . [a] timber harvest would be conducted in order to minimize [its]
8 effects.” Here, no “very specific and detailed information” exists. *Id.*

9 And finally, in *Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976, 987 (9th Cir. 1985),
10 the court upheld a suite of detailed mitigation measures that caused the project to *enhance* the survival of
11 certain endangered species before remarking in passing that “[e]ven if the mitigation measures in the
12 present case would not *completely* compensate for all adverse environmental impacts, this shortcoming
13 would not be detrimental.” (Emphasis supplied.) Here, because formulation of the project’s mitigation
14 measures is unlawfully deferred, their efficacy cannot be determined. Contrary to DOE’s argument,
15 courts have consistently held that a mere listing of mitigation measures cannot support a finding of no
16 significant impact:

17 While the agency is not required to develop a complete mitigation plan detailing the
18 precise nature of the mitigation measures, the proposed mitigation measures must be
19 developed to a reasonable degree. A perfunctory description, or mere listing of mitigation
20 measures, without supporting analytical data, is insufficient to support a finding of no
21 significant impact. In evaluating the sufficiency of mitigation measures, we consider
22 whether they constitute an adequate buffer against the negative impacts that may result
23 from the authorized activity. Specifically, we examine whether the mitigation measures
24 will render such impacts so minor as to not warrant an EIS.

25 *National Parks & Conservation Ass’n v. Babbitt*, 241 F.3d 722, 734 (9th Cir 2001) (quotations and
26 citations omitted). Thus, DOE was required to “develop[,] to a reasonable degree,” the SAD, ASE, and
27 Soil Management Plan, and describe in the EA the mitigation measures developed therein, prior to
28 approving the project. *Id.*

G. PLAINTIFF EXHAUSTED ALL AVAILABLE ADMINISTRATIVE REMEDIES

DOE incorrectly claims that plaintiff failed to exhaust its administrative remedies with regard to
(1) hazardous waste; (2) seismic events; (3) incorporation by reference; (4) deferred mitigation measures;

1 and (5) location alternatives. *See* MSJ at 24-25. However, the exhaustion requirement is met where
2 *other* commenters raised the pertinent issues, and the requirement does not apply to allegations of
3 procedural missteps.

4 In *Ilio'ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1092 (9th Cir. 2006), the court drew a
5 distinction between two situations for the purpose of evaluating waiver arguments: first, those
6 “involv[ing] the failure to raise a specific factual contention regarding the substantive content of an
7 [environmental document] during the NEPA public comment process,” and second, where “plaintiffs
8 allege procedural violations of NEPA.”

9 The latter situation is not subject to waiver; plaintiffs may assert procedural violations in court
10 even where *no* members of the public participated in the public comment process. *Id.*; *see also Northwest*
11 *Environmental Defense Center v. Bonneville Power Administration*, 117 F.3d 1520, 1535 (9th Cir. 1997)
12 (federal agency has a “duty to comply with public participation processes provided for in the [relevant]
13 Act regardless of whether participants complain of violations”); *accord, Ass’n of Public Agency*
14 *Customers, Inc. v. Bonneville Power Administration*, 126 F.3d 1158, 1185 n. 11 (9th Cir. 1997) (same,
15 for NEPA).

16 While the former situation – involving plaintiffs who fail to “raise a specific factual contention”
17 about an environmental document’s substantive comment – is *generally* subject to exhaustion, exhaustion
18 is nonetheless *not* required “where the agency had independent knowledge of the issues that concerned
19 Plaintiffs.” 464 F.3d at 1092. An agency may have such “independent knowledge” where other
20 commenters raised the same issue in their comments. *Id.* at 1092-93.

21 All of the allegedly unexhausted issues raised by DOE are either alleged “procedural violations”
22 or issues of which DOE “had independent knowledge.” *Id.* at 1092. DOE “had independent knowledge”
23 of plaintiff’s hazardous waste claim because other commenters raised concerns about the hazardous waste
24 generated by the Project.⁸ Other commenters drew DOE’s attention to the seismic risks posed by the
25

26 ⁸ *See, e.g.,* AR7:0170 (“The EA . . . failed to address the legacy contamination created by
27 past operations. . . . The groundwater and soil in the area are contaminated”), 220 (project will
28 “make incredible amounts of toxic waste”), 223 (“[w]ill the construction and operation of the
BELLA accelerator hinder, complicate, or delay remediation of contamination from previous

1 Project.⁹ (Indeed, DOE’s awareness of this issue is demonstrated by the fact that *DOE’s own staff*
2 requested additional detail about seismic hazards. AR 19:0459.) DOE’s failure to adequately address
3 location alternatives was also pointed out by various commenters.¹⁰ Commenters also pointed out DOE’s
4 improper failure to include complete mitigation measures in the EA.¹¹

5 Plaintiff need not have exhausted its incorporation by reference argument because this
6 “procedural” argument is not subject to exhaustion. *Ilio’ulaokalani Coalition, supra*, 464 F.3d at 1092.
7 DOE is deemed to be aware of the procedural requirements of NEPA; exhaustion therefore does not
8 apply. *Id.* To the extent that DOE was not made aware by the public of its improper deferral of
9 mitigation measures – which plaintiff disputes, as noted above – this procedural requirement is likewise
10 not subject to exhaustion. *Id.*

11 **III. CONCLUSION**

12 For each of the reasons set forth above, DOE’s Cross-Motion for Summary Judgment lacks merit.
13 Accordingly, it should be denied.

14
15 Dated: October 1, 2010 Respectfully submitted,

16
17
18 operations?”), 230 (“[p]lease clarify the potential impacts to hydrology, water quality, and soil
19 . . . in light of historic groundwater contamination as evidenced by a radioactive plume described
in the EA”).

20 ⁹ See, e.g., AR 7:0169 (BELLA “is located in a known landslide area, which is
21 crisscrossed by several earthquake faults The EA also failed to consider the fact that
22 [Building]71 and the entire LBNL site is in the Hayward Earthquake Fault Zone. . . . [T]he
23 Hayward Fault is ripe for a *catastrophic* earthquake *at any time*”) (emphasis supplied), 225
(expressing concern because project would be located in “a high risk fire area, high risk
earthquake area, and slide zone”).

24 ¹⁰ See, e.g., AR 7:0180 (requesting “[a] more detailed and careful analysis of the
25 *Proposed Action and Alternatives*” in light of various deficiencies) (emphasis supplied); 181
26 (“[A]lternatives . . . from the hill site *must* be considered”) (emphasis supplied); 220 (“[t]here are
27 no real alternative sites listed in the [EA], merely sites in the same . . . area. . . . [¶] [T]he Bella
Laser Accelerator needs a special environment away from populated areas”).

28 ¹¹ See, e.g., AR 7:0180 (“Has a comprehensive Safety Analysis Document been prepared
and finalized?”)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

LAW OFFICES OF STEPHAN C. VOLKER

/s/ Stephan C. Volker
STEPHAN C. VOLKER

Attorney for Plaintiff SAVE STRAWBERRY CANYON