

1 JOHN L. MARSHALL
SBN 6733
2 570 Marsh Avenue
3 Reno, Nevada 89509
4 Telephone: (775) 303-4882
Attorney Appellant Save Our Smith Valley, Inc.

5
6 BEFORE THE NEVADA STATE ENVIRONMENTAL COMMISSION
7

8 In Re:

9 Appeal of Groundwater Pollution Control
10 Permit No. NS2014502
Smith Valley Dairy
11 _____/

12 **SOS's OPENING BRIEF**

13 **I. Introduction**

14 At what price economic development?

15
16 In this appeal, a group of Nevada citizens ask the State Environmental Commission to
17 help the Nevada Department of Environmental Protection ("NDEP") protect the waters so
18 critical to the lives and livelihoods of Smith Valley residents. Appellant Save Our Smith Valley
19 ("SOS"), a non-profit group of affected valley residents, will establish at hearing the following:

20 1. An out-of-state, experienced dairy operator (the "Operator") purchased lands in
21 Smith Valley, Nevada to open an industrial dairy, also know as a confined animal feeding
22 operation or "CAFO."

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24 2. Because CAFOs aggregate so many large animals in a small area that produce so
25 much waste and manure, CAFOs pose an inherent and severe risk to the environment,
26 particularly to surface and ground water resources.
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1 3. Many months before receiving a permit from NDEP, the Operator commenced and
2 finished construction of the Smith Valley Dairy (“Dairy”).

3 4. NDEP’s permitting process then became an exercise in rationalizing what and
4 where the Operator had already built, rather than properly siting and designing a facility
5 protective of Nevada’s water resources. Indeed, the siting and design of the Dairy is
6 inconsistent with NDEP’s own guidance documents on how to protect the waters of the State.
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8 5. Because the Dairy was already built and NDEP’s permit conformed to that
9 location and design, the public participation process was rendered meaningless.

10 6. SOS and its members are directly affected and aggrieved by the presence of the
11 Dairy.

12 In light of these facts, SOS requests that the State Environmental Commission (“SEC”)
13 remand the permit back to NDEP, order the Dairy to cease operations, and direct NDEP to
14 develop – if possible – a permit for the Dairy that truly protects Nevada’s waters
15 notwithstanding what the Dairy had already built.
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17 **II. Background**

18 A. The Inherent Risk of CAFOs

19 Multiple studies and litigation have demonstrated the risk of CAFOs to not only surface
20 and groundwater but to the social fabric of rural communities. See e.g., Pew Commission on
21 Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal*
22 *Production in America* (2008), [http://www.ncifap.org/ images/PCIFAPFin.pdf](http://www.ncifap.org/images/PCIFAPFin.pdf) (“Pew Report”)
23 (Exhibit 1).¹ CAFOs contaminate by two primary means: leakage from manure piles and
24 lagoons and land application of animal waste. The pollutants of greatest concern include nitrate
25 and pathogens, each of which can harm groundwater quality upon which rural citizens depend
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28 ¹ SOS will submit all reference material and a witness list in compliance with NAC 445B.8914.

1 for clean drinking water. *Id.*, see also JoAnn Burkholder, et al., *Impacts of Wastes from*
2 *Concentrated Animal Feeding Operations of Water Quality*,
3 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1817674/> (Exhibit 2).

4 Nitrates cause or contribute to a number of human health impacts, including “blue baby”
5 syndrome that results from an inability of human blood cells to transport oxygen. Linda
6 Knobloch et al., *Blue Babies and Nitrate-Contaminated Well Water*, 108 *Env. Health*
7 *Perspectives* 675 (July 2000), [http://ehp.niehs.nih.gov/members/2000/108p675-](http://ehp.niehs.nih.gov/members/2000/108p675-678knobleloch/108p675.pdf)
8 [678knobleloch/108p675.pdf](http://ehp.niehs.nih.gov/members/2000/108p675-678knobleloch/108p675.pdf) (Exhibit 3); see also US Geologic Survey, *Relating Nitrogen*
9 *Sources and Aquifer Susceptibility to Nitrate in Shallow Ground Water of the United States*,
10 http://water.usgs.gov/nawqa/nutrients/pubs/gw_v39_no2/gw_v39_no2.pdf (Exhibit 4). In
11 addition, a variety of pathogens, including viruses, bacteria, and parasites that cause diseases in
12 humans are found in animal waste; indeed USEPA has found that “diseases from livestock
13 animals, transmitted through air, water, and food, cause significant human suffering and
14 economic losses in the U.S. every year” and that “living near CAFO operations has been
15 associated with significant deterioration in human health including increased gastrointestinal
16 illness, headaches, sore throats, sinusitis, and childhood asthma.” USEPA, *Detecting and*
17 *Mitigating the Environmental Impact of Fecal Pathogens Originating from Confined Animal*
18 *Feeding Operations*: Review 3 (September 2005),
19 <http://www.epa.gov/nrmrl/pubs/600r06021/600r06021.pdf> (Exhibit 5). Research in Wisconsin
20 has documented a correlation between nitrate contamination in private wells and inadequate
21 manure management practices. University of Wisconsin-Extension, Final Report of the
22 Northeast Wisconsin Karst Task Force (Feb. 2007),
23 <http://fonddulac.uwex.edu/onred/documents/KarstTaskForceFinalReport.pdf> (Exhibit 6).
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1 There can be no debate that CAFOs pollute. As recently found by the United States
2 District Court, CAFOs pollute surface and ground water as a result of leaking ponds, feeding
3 pens, silage storage, storm water overflows and application of wastes to fields. See *Community*
4 *Association for Restoration for the Environment v. Cow Palace LLC*, Case No.: 13-CV-3016-
5 TOR (E.D. Wash.), Order Re: Cross Motions for Summary Judgment (January 14, 2015), at pp.
6 4-45 (*Cow Palace* Order can be found at: [http://www.centerforfoodsafety.org.php53-2.ord1-
7 1.websitetestlink.com/files/320--order-granting-in-part-msj-11415_78926.pdf](http://www.centerforfoodsafety.org.php53-2.ord1-1.websitetestlink.com/files/320--order-granting-in-part-msj-11415_78926.pdf).) (Exhibit 7) See
8 also USEPA, *Risk Assessment Evaluation for Concentrated Animal Feeding Operations* (May
9 2004), <http://nepis.epa.gov/Adobe/PDF/901V0100.pdf> (Exhibit 8).

11 B. Examples of Nevada’s Statutory and Regulatory Guidance Applicable to CAFOs

12 NDEP’s overriding mission is to protect the quality of Nevada’s waters. NRS
13 445A.305(2). To that end, NDEP, both as the delegated authority under the federal Clean
14 Water Act and state law, can only issue permits for discharges that do not pollute waters. In
15 permitting waste facilities like CAFOs, statutes and internal policy guide NDEP. For example,
16 NAC 445A.285 instructs that waste ponds should be located outside of 100-year floodplains
17 unless protected from floodwaters. Under NDEP’s own Animal Waste Storage Impoundments
18 guidance (WTS-38, August 2014 (Exhibit 9)), on CAFO waste collection ponds state “storage
19 impoundments **shall not** be located within a 100-year floodplains unless protected from
20 floodwaters and groundwater intrusion (uplift)” *Id.* at p.2 (emphasis added). NDEP
21 continues its guidance on how to protect the state waters by mandating that in order to protect
22 storage impoundments from floodwaters, the “impoundments **must** be designed to withstand the
23 run-off generated by the 24-hour storm event with a 100-year recurrence interval.” *Id.*
24 (emphasis added). Similarly, NDEP instructs that “[m]inimum groundwater separation distance
25 between the bottom of the proposed storage impoundment and the seasonal high groundwater
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1 table shall be 4 ft. or the design shall incorporate a liner ballast measure to protect liner uplift
2 from high water table.” Id.

3 In WTS 37 (Exhibit 10), NDEP provides a “Guidance Document for the Design of Lined
4 Wastewater Holding Ponds (Surface Impoundment)” (September 2011) that is also applicable to
5 CAFOs. In WTS 37, NDEP requires that an applicant for a permit submit site characterization
6 data that include depth to groundwater, gradient and groundwater quality. Id. at p.2. The
7 applicant is also required to present a “[w]atershed map of the site which depicts the 100-year
8 flood plain and storm water drainage channels” Id. WTS 37 directs that “[t]he pond must
9 be designed to withstand the run-off generated by the 24-hour storm event with a 100-year
10 recurrence interval.” Id., at pp.2-3. Moreover, the applicant “shall attempt not to locate any
11 ponds within the 100-year flood plain” Id., at p.3. WTS 37 also instructs that a “plan for
12 leak detection must be presented for all ponds. Examples of leak detection systems include
13 double liner designs with leak collection sumps, and monitoring wells. Other innovative plans
14 for leak detection will be reviewed by [NDEP] on a case-by-case basis.” Finally, in WTS 37,
15 NDEP instructs that “a double-lined pond is required when any industrial and/or process (non-
16 domestic) wastewater is stored.” Through application of these policies, NDEP believes that it
17 can protect groundwater from wastewater storage ponds.
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20 C. The Smith Valley

21 1. Geology and Hydrology

22 The Smith Valley, in the area of the Dairy, is characterized by deep well-drained soils and
23 relatively high ground water. Winter floods occur regularly in Northern Nevada, including
24 1904, 1907, 1928, 1937, 1943, 1950, 1955, 1963, 1986, and 1997. In a 1963 U.S. Geologic
25 Soil Survey of Lyon County, the water level at the Dairy site was between 2 to 6 feet below
26 ground surface (“bgs”). (Exhibit 11). In 2001, artesian wells were reported on the Dairy
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1 property and at a nearby location. Not surprisingly, the 100-year flood plain covers a portion
2 northern portion of the Dairy's property – where the facilities are located; the bulk of the
3 Operator's ownership lays outside the 100-year floodplain. The flood plain drains northward to
4 Artesia Lake and the State of Nevada Artesia Lake Wildlife Management Area.

5
6 In the summer of 2013, the third year of drought, the Dairy's geotech report found
7 groundwater report at 14 feet bgs. Lumos & Associates, Geotech Report (Exhibit 11). Soil
8 sampling in that report indicated past depths to groundwater up to 4 feet bgs.

9 2. Public reliance on the groundwater under the Dairy

10 Smith Valley residents and SOS members depend on groundwater for domestic and
11 agricultural use. All of the surrounding residents use wells for drinking water. Groundwater
12 discharge and seepage from the Dairy will inevitably pollute the aquifer, which provides water
13 to the entire community. According to NAC § 445A.8255, a "Groundwater Protection Area"
14 means "a geographic area that is: (1) Near to or surrounding public water wells, including,
15 without limitation, community water systems and nontransient noncommunity water systems
16 that use groundwater as a source of drinking water; and (2) Delineated as a groundwater
17 protection area pursuant to the source water assessment and protection program of this State."
18 Degradation to the community's sole source of drinking water will not only devastate the area,
19 it will be irreversible.

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22 D. The Pressure Behind Approving the Dairy Permit

23 The members of SOS are aware that many states actively recruit California dairymen with
24 tax incentives and promises of a laxer regulatory environment. See e.g.
25 <http://articles.latimes.com/2013/mar/30/business/la-fi-california-dairies-20130330> (Exhibit 12).
26 Indeed, the Nevada Dairy Commission promotes coming to Nevada for dairy "friendly
27 regulations." <http://dairy.nv.gov/Consider-Nevada/> (Exhibit 13). The Smith Valley Dairy,
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1 however, is not here to produce milk and milk products for Nevada citizens. Instead, it is part
2 of a milk product industry and will ship its milk to the Fallon plant where all product will be
3 shipped overseas to China. [http://www.diversifynevada.com/news/news-articles/las-vegas-
4 review-journal-cow-power-new-milk-production-plant-could-provide](http://www.diversifynevada.com/news/news-articles/las-vegas-review-journal-cow-power-new-milk-production-plant-could-provide) (Exhibit 14). SOS does
5 not question the motivations of the State to provide good jobs to Nevada residents, but the
6 question put front and center in this appeal is: Do we need to sacrifice and compromise
7 Nevada's system of environmental protection for the sake of a few jobs?
8

9 D. The Dairy as Constructed

10 The Operator built the Dairy to its economic advantage notwithstanding the inevitable
11 pollution of the State's waters. The Dairy operation consists of two general areas: (1) milk
12 production (the sheltering, feeding, milking and disposal of cows) and concomitant waste
13 management (the collection and storage of tons of manure), and (2) the fields for disposal of
14 animal wastes and feed and silage production. The Operator located and built the production
15 and waste storage area in the northern corner of its ownership – within the 100-year floodplain
16 where surface flows are concentrated (i.e., the low point) before they leave the property and
17 drain across private property and thence to Artesia Lake and the Artesia Lake Wildlife
18 Management Area.
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20 In order to construct the production and waste storage area in this portion, the Operator –
21 all without a permit from NDEP – graded and excavated the ponds to a depth up to 10 to 12 feet
22 below grade. See Dairy Map GR3 (Exhibit 15). The ponds were lined with a single barrier –
23 again prior to the permitting – and the area was re-graded to construct a small 3-foot berm
24 around the facility to protect against a 24-hour, 25-year flood – prior to permitting. The
25 Operator also constructed and buried a line from the impoundment ponds south to the
26 application fields prior to permitting and without pressure testing the line to protect against
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1 unknown leaks. The Operator also constructed barns, sheds and feeding areas without any
2 barrier to waste infiltration and stored an enormous pile of covered silage on bare ground (as it
3 ferments, silage produces a waste stream that is very acidic and can on its own pollute
4 groundwater unless placed on an acid resistant barrier and drained appropriately. See
5 *Community Association for Restoration for the Environment v. Cow Palace LLC*, supra.
6

7 E. NDEP Failed to Stop Blatantly Illegal Construction

8 Nevada law clearly precludes the pre-permit construction of facilities that require prior
9 NDEP approval. No person may: “[c]onstruct, install, expand or significantly modify any
10 factory ... or other industrial or commercial facility which will result in a discharge not
11 authorized by an existing permit to waters of the State.” NAC 445A.283(1); see also NRS
12 445A.585 (“a permit is required for construction of treatment works. A person *shall not* begin
13 the construction of any treatment works without a permit issued by the Department.”)
14 (Emphasis added.)
15

16 During or before March of 2014, the Operator commenced construction of the Dairy, a
17 full year prior to receiving a permit to do so. Upon learning of the Operator’s construction
18 activities in March of 2014, NDEP notified the Operator in an email that construction cannot
19 occur without a permit. See March 19, 2014 NDEP Email (Exhibit 16). However, NDEP failed
20 to act for nine months. On December 31, 2014, NDEP issued a Cease and Desist Order to the
21 Operator to stop further construction – of the already completed Dairy. See December 31, 2014
22 NDEP letter to Dirk Vlot (Exhibit 17). Thereafter, NDEP found the Operator to have violated
23 NAC 445A.283(1) by building the Dairy before receiving a permit. See February 18, 2015
24 NDEP Letter Re Formal Enforcement [] Smith Valley Dairy (Exhibit 18). Thus, NDEP –
25 despite being put on notice of a blatant violation of its own regulations – took no action to stop
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1 the construction and instead sent a Cease and Desist Order only after the violator had completed
2 the Dairy.

3 F. The Pro Forma Public Process

4 After the Operator built the dairy and NDEP negotiated a permit conforming to what had
5 already been constructed, NDEP began is public “participation” process. As described below,
6 this pro forma process provided no opportunity for the public to have meaningful input.
7

8 1. NDEP barred access to documents necessary for early public involvement

9 After becoming aware of the Operator’s application to NDEP for a discharge permit, SOS
10 members asked NDEP to review the application file. Under the Nevada Public Records Act,
11 NRS 239.010 provides “all . . . public records of a governmental entity **must** be open at all
12 times during office hours for inspection by any person, and may be fully copied”
13 (Emphasis added.) See also NRS 445A.665 (“Any records, reports or information obtained
14 under [NRS 445A.300](#) to [445A.730](#), inclusive, must be available to the public for inspection and
15 copying”) Notwithstanding these clear directives, NDEP denied the public access to the
16 public records in its possession. See August 26, 2014 NDEP email (Exhibit 18). NDEP denied
17 concerned citizens access to these critical files because it anticipated the Operator was going to
18 submit additional public records in order to make the file “complete.” Id. There is no basis in
19 law for this position and SOS understands that NDEP no longer abides by it.
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22 2. NDEP released documents late in process

23 After repeated requests for public records, NDEP finally provided the records for copying
24 in mid-November 2014. Even then, the records NDEP provided were incomplete as pages
25 were missing and letters and email attachments were excluded. See December 29, 2014 Email
26 (Exhibit 20). In addition, although SOS requested a copy of the Storm Water Pollution
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1 Prevention Plan months before, it did not receive a copy until December 29, 2014. See
2 December 29, 2014 NDEP Email (Exhibit 21).

3 3. NDEP Delayed Comment Period to Coincide with Holiday Season

4 Although NDEP had working copies of its public notice in October of 2014, it delayed
5 publishing the notice until December. Thus, the public comment period occurred over the
6 Christmas and New Year holidays. See NDEP Emails (Exhibit 22); Notice of Proposed Action
7 (setting the public hearing for January 7, 2015 and ending comment period on January 9,
8 2015)(Exhibit 23). Responding to public pressure, NDEP extended the comment period to
9 January 30, 2015.
10

11 4. NDEP provided minimal response to public comment

12 NDEP's responses to comments illustrate the futility of the public participation process for
13 the already built Dairy. In its March 9, 2015 Notice of Decision (Exhibit 24), NDEP provides
14 merely a one- or two-sentence response to the public's concerns. *Id.* No changes were made to
15 the permit for the already constructed Dairy.
16

17 G. NDEP's Permit Conformed to the Already Built Dairy

18 As noted above, NDEP's March 9, 2015 Groundwater Pollution Control Permit No.
19 NS2014502 (Exhibit 25) conforms exactly to the Dairy that was finished months beforehand.
20 It contains no justifications for the deviations from NDEP's own guidelines of minimum
21 standards to protect state waters from CAFOs and surface impoundments.
22

23 H. Impact of the Dairy on Smith Valley Residents

24 SOS provides here a sampling of summary testimony of members regarding how the
25 Dairy affects them:

26 Marshall Todd: I am a retiree who bought my home in Smith Valley in November 2012. I
27 have coronary heart disease and was recently prescribed oxygen. The blowing dust from the
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1 dairy construction and the smoke from burning construction materials have exacerbated my
2 lung problems, rendering me a virtual prisoner in my home.

3 I did not learn that a CAFO dairy was moving within less than a thousand feet from my
4 property until they started construction; they worked all night and the noise and light kept me
5 from sleeping. There was no notification of the impending construction, public officials were
6 tight-lipped and information was scarce. I would like to move, but the proximity of the dairy
7 has lowered my property value to the point that I would have to sell at a loss, which I cannot
8 afford to do.

10 Darlene and Glen Peters: We own two parcels of land very close to the dairy. One is a
11 cattle ranch at 350 Burke Drive. The construction at the CAFO dairy has eroded the topsoil; it is
12 blown onto our property, causing much damage. We had to paint the shop building due to the
13 blowing dirt corrosion.

15 I tried to reach Mr. Vlot, but he has declined any communication with us. In addition to
16 the ranch, we own 20 acres at 40 Jessen Road that we purchased in 2011; this property is
17 adjacent to the new dairy and contains a domestic well. A real estate agent advised me last
18 week to go ahead and list our ranch because its value is declining. It is heartbreaking to learn
19 that everything we have invested in this property has been in vain. I have lived close to dairies
20 almost all my life and I know what to expect. A CAFO dairy with 7,000 cows not only
21 undermines our financial wellbeing, it will ruin our quality of life.

23 Frank Ely: Since the dairy construction began, it appears that three or more feet of dirt
24 have been removed from the northern portion of the property. Not coincidentally, considerable
25 dirt has blown across our property ever since then. We are falconers, but the intermittent air
26 quality has deteriorated to the extent that we have had to get rid of our hawks. More alarming,
27 however, is the dairy's potential to ruin the water quality in our area. A survey conducted by the
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1 U.S. Department of Agriculture between 1968 and 1979 reports that the water table at the dairy
2 site was situated between 6 inches to 3 feet below the surface.

3 An artesian well exists on 38 Linda Way, and at least two exist on the property that is now
4 under the dairy development. As of October 1, 2014, the well on Linda Way was 14.5 feet deep,
5 the same depth cited in the dairy's application for a discharge permit. Considering the
6 frequency of winter floods in northern Nevada, the location of this CAFO facility is
7 unconscionable. When the next major flood occurs, the inevitable runoff from the dairy will
8 exceed the capacity of its holding ponds and pose a serious health risk to residents of Smith
9 Valley and beyond.

11 **III. Grounds for Appeal**

12 A. Dairy Permit Violates Statutory Provisions

13 Pursuant to NRS § 445A.585, "a permit is required for construction of treatment works. A
14 person *shall not* begin the construction of any treatment works without a permit issued by the
15 Department." However, the Dairy began construction on its treatment works facility as early as
16 March 17, 2014 in clear violation of NRS § 445A.585. Additionally, NAC § 445A.283 requires
17 a permit *before* constructing treatment works.

18 NDEP issued a Cease and Desist Order and Notice of Alleged Violation to the Dairy,
19 however, the Dairy had already completed construction of its treatment works without a permit
20 as noted by several neighboring residents, as well as civil engineering expert, Kathy J. Martin,
21 P.E. The Dairy suffered no repercussions with regard to commencing construction in violation
22 of Nevada law. In fact, NDEP made clear that the agency would approve the permit from the
23 beginning, without conducting the proper testing and necessary oversight. There is no
24 information available about whether the treatment works were designed according to any
25 standards because they were completed long before the permit was approved.
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1 Additionally, the permit allows pollution discharge through a pipe, across two private
2 residences into a protected wildlife area. This is in clear violation of the Clean Water Act, 33
3 U.S.C. § 1251 *et seq.*, which provides that “the discharge of any pollutant by any person shall
4 be unlawful.” *See* 33 U.S.C. § 1311(a). Here NDEP is allowing the discharge of pollutants
5 from SVD (a point source) into Artesia Lake, a wildlife management area. Artesia Lake
6 constitutes “navigable water” under the Clean Water Act, which defines the term broadly as
7 “the waters of the United States, including territorial seas.” *See* 33 U.S.C. § 1362(7). Without a
8 National Pollution Discharge Elimination System (NPDES) permit specifying the allowable
9 discharge conditions, the Dairy cannot discharge pollutants. This discharge is in clear violation
10 of the Clean Water Act’s provisions, which apply because the wildlife area receives federal
11 funding. Also, the pipe, which was constructed before approval of the plan and issuance of the
12 Smith Valley Permit, has not undergone any pressure testing to ensure proper functioning or to
13 check for leaks, blockages, or other failures. According to engineering expert, Kathy J. Martin,
14 the plans submitted by the Dairy were not site specific plans, but were in fact, general
15 engineering plans that are not suited to the Dairy’s location.

16 For example, the Operator located the Dairy’s highly sensitive infrastructure, including the
17 wastewater storage impoundments, within the 100-year flood plain even though the bulk of its
18 ownership lies outside the flood zone. NDEP provided no justification as to why the pond was
19 constructed in that location despite the statutory and guidance to place those facilities outside
20 the 100-year floodplain. Likewise, despite being within the 100-year floodplain, and express
21 guidance to protect such impoundments from a 100-year flood, the permit only requires the
22 Operator to protect from the 25-year flood – again without any justification for the departure
23 from its own guidance as to how to protect the State’s waters in WTS 37 and 38.

1 Similarly, the NDEP-permitted ponds will inevitably result in zero, and most likely
2 negative, separation from seasonal high groundwater. The Operator did not report, and NDEP
3 did not require, disclosure of seasonal high groundwater. Instead, the Operator reported the 14-
4 foot bgs summer depth after 3 years of drought and NDEP simply accepted and relied on this
5 measurement for permitting purposes. However, evidence establishes that groundwater
6 fluctuates up to 2' bgs. See 1963 USGS Report; Lumos Geotech Report at 6 (“Therefore,
7 seasonal groundwater (water table) fluctuations should be anticipated at this site.”), *id.* (test pits
8 indicate water table fluctuations between 5 and 14 feet bgs).
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10 Despite evidence of building the ponds at the exact wrong location on its property, the
11 Operator then excavated the impoundments to a depth of up to 10 to 12 feet below grade. See
12 GR3. NDEP then used the summer and drought reduced water depth of 14 feet to conclude that
13 there would be a 4-foot separation between ground water and the ponds in order to be consistent
14 with its own guidance. However, the guidance directs that seasonal high ground water be used
15 for separation purposes. See WTS 37. And seasonal high groundwater is actually up to 8 to 10
16 feet **ABOVE** the bottom of the ponds. NDEP fails to establish how such a condition will not
17 lead to inundation and direct connection to groundwater. The Dairy exacerbated this threat by
18 constructing the ponds with only a single liner, rather than the two layers with sumps as called
19 for in WTS 37.
20

21 The Smith Valley Permit was also issued in violation of NRS § 40.140. Because of its
22 location and lack of protections from above (flood risk) and below (groundwater intrusion), the
23 Dairy constitutes a nuisance under NRS § 40.140(1) & (2) as the activity will have a substantial
24 adverse effect on the public health and safety. Additionally, the Dairy will interfere with the
25 comfortable enjoyment of life and property of its neighbors. Operation of the CAFO dairy will
26 be injurious to health and offensive to the senses. Animal waste from over 7,000 bovines will
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1 not only produce noxious odors, it will inevitably seep into the water supply and degrade the
2 limited supply of underground drinking water in the area. Silage stored on the ground may be
3 already leaching into the soil. A concrete slab without a liner is not sufficient to store the
4 amount of silage the Dairy will need.

5 Finally, climate change, increases the likelihood of flooding and must be addressed, not
6 ignored. Here, NDEP acquiesced to the Operator's already constructed plans and reduced the
7 limited flood protection standards from its own guidance documents (shifting from the 100-year
8 storm to only a 25-year occurrence) without explanation or justification.

9
10 In short, NDEP's decision to issue the Smith Valley Dairy Permit violated the provisions
11 listed above. Therefore, this permit appeal should be granted.

12 B. Operator and NDEP's Actions Denied Citizens Access and a Meaningful Public
13 Process

14 NDEP failed to make information obtained under NRS §§ 445A.300 - 445A.730 available
15 to the public for inspection and copying as provided by NRS § 445A.665. Citizens were told
16 that access to the application would not be granted because "it was not complete." This,
17 however, is an illegal denial of public access. This failure to comply with the public records
18 law makes the subsequent permit issuance unlawful. Citizens did not have a proper opportunity
19 to review the file and comment on the proposed draft and were provided inadequate public
20 participation. These citizens exhausted all avenues to participate in the public permitting
21 process, but were rebuffed. This effectively renders the post-hoc permit approval invalid.

22
23 C. Issuance of the Dairy Permit Was Clearly Erroneous and Arbitrary and Capricious

24 As described above, issuing the Smith Valley Permit is clearly erroneous in view of
25 reliable, probative and substantial record evidence. The allowable seepage rates and associated
26 mass loading of pollutants as designated in Dairy's groundwater monitoring plan, will violate
27 water quality standards in contravention of NRS § 445A.305. The issuance of the Smith Valley
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1 Permit is clearly erroneous in light of the potential substantial degradation of drinking water
2 from the surrounding wells when the total nitrogen concentration is allowed to reach 10.0mg/L
3 before ceasing activities.

4 Further, the decision to issue the permit was clearly erroneous in view of reliable,
5 probative and substantial evidence on the whole record because the permit is severely deficient
6 in many aspects. In addition to the siting and design errors set forth above, based upon expert
7 civil engineer Kathy J. Martin's review (Exhibit 26) , Smith Valley Permit has the following
8 deficiencies:
9

10 (a) The depth to water level requires a "daily maximum," however it should say "daily
11 minimum." A daily maximum would equate to the lowest depth to groundwater, however
12 knowledge of the highest water level to compare to the depth of the lagoons is necessary to
13 determine appropriate separation distance. *See* Smith Valley Permit, at page 2, 4, 5, and 6.
14

15 (b) The lagoon flow rate is calculated to average 0.80 million, or 800,000 gallons of
16 water per day. However, this number far exceeds AgPro's estimate of 0.15-0.18 million, or
17 150,000-180,000 gallons of water per day. *See* Smith Valley Permit, at page 7.

18 (c) The frequency of measuring pump output is vague and overbroad. *See* Smith
19 Valley Permit, at page 7.

20 (d) The groundwater monitoring parameters are vague and overbroad. The total
21 dissolved solids, pH, chloride, and total nitrogen are all based on a "daily maximum," however,
22 the sampling frequency is only "once per quarter." *See* Smith Valley Permit, at page 3, 4, 5,
23 and 6.
24

25 (e) The Smith Valley Permit fails to account for a weigh scale to measure wet tons of
26 manure. Estimating the weight of the manure should be done using cubic feet of manure based
27 on stack height in the manure storage area. Using book values is not a sufficient estimate
28

1 predictor of the actual amount of manure at the Dairy. *See* Smith Valley Permit, at page 8 and
2 15.

3 (f) The Smith Valley Permit’s monitoring location fails to consider the percentage of
4 solids affecting the pumping of wastewater. *See* Smith Valley Permit, at page 9 and 10.

5 (g) The frequency for total suspended solids and BOD5 are “annual” whereas the
6 remaining parameters are semi-annual. The notation on the bottom of the table on page 10 says
7 "annual measurements shall be conducted in the 4th quarter of each calendar year and submitted
8 with the annual report." However, there is no information about when the 4th quarter takes place.
9 Because BOD values are higher in winter, the lagoon liquid level should be at its lowest going
10 into the winter in anticipation of storage needs before spring land application can occur. *See*
11 Smith Valley Permit, at page 20.

12 (h) The monitoring of the dead animal compost does not include information about the
13 most important parameters – maximum temperature and moisture content. Without these
14 numbers the composting cannot be correctly monitored. *See* Smith Valley Permit, at page 13.

15 (i) The parameters for baseline water sampling should include e coli and fecal
16 coliform. *See* Smith Valley Permit, at page 15.

17 (j) The Smith Valley Permit has nine items that “do not apply” to the Dairy’s facility.
18 *See* Smith Valley Permit, at page 16.

19 (k) The Smith Valley Permit allows manure to be “stockpiled in and around the pens
20 and in places of the facility's production area that drain to the wastewater impoundments.”
21 Based on this language, manure can be stored anywhere, which would make it impossible to
22 control contaminated storm water runoff from the production area. *See* Smith Valley Permit, at
23 page 19.

24 (l) The Smith Valley Permit states that "any data point from the current year that is
25
26
27
28

1 greater than the limits identified in the applicable tables and conditions above must be explained
2 in the narrative." However, the laboratory methods chosen for each parameter must be
3 consistent throughout the permitted time frame and follow published EPA Laboratory Methods
4 in 40CFR 141 in order for the data to be comparable. Thus, only these two data points would
5 be explained. *See* Smith Valley Permit, at page 21.

6
7 (m) The Smith Valley Permit allows the operator to pick the "analytical technique or
8 methods used." However, the same laboratory method should be used for each parameter to be
9 analyzed to insure that all data is comparable. *See* Smith Valley Permit, at page 21 and 22.

10 (n) The Smith Valley Permit states that "all laboratory analyses conducted in
11 accordance with this discharge permit must have detection at or below the permit limits."
12 However, only one parameter, total nitrogen, has a detection limit. Traditional discharge permits
13 list the detection limits alongside each parameter and the detection limit should be significantly
14 lower than the permit limit. *See* Smith Valley Permit, at page 22.

15
16 (o) Smith Valley Permit allows total nitrogen to increase to 7.0mg/L before "an
17 alternative method of process wastewater and/or manure storage must be prepared and
18 submitted to the Division for review and approval." However, there are no other alternate
19 methods, beyond a plastic lined lagoon to fulfill this requirement. Additionally, the source of
20 the nitrogen pollution does not have to be identified and the nearby residents drinking the
21 groundwater do not have to be notified. This only compounds the problem without finding a
22 viable solution.

23
24 (p) The Smith Valley Permit requires manure storage methods that minimize dust
25 during high wind events. However, the Dairy has zero manure storage methods proposed to
26 prevent fecal dust from blowing during high storm events. *See* Smith Valley Permit, at page 28.

1 (q) The Smith Valley Permit animal mortality management plan is deficient because
2 there are no design plans or drawings and “animal carcasses shall not be disposed of in storage
3 or treatment facilities unless the facility is designed specifically to treat the carcasses.” *See*
4 Smith Valley Permit, at page 29.

5 NDEP’s decision to issue the Smith Valley Permit was arbitrary and capricious because it
6 did not adequately protect groundwater quality to prevent the degradation of underground
7 sources of drinking water for the protection of wildlife or public water supply. In fact, the
8 Smith Valley Permit states: “There shall be no discharge of substances that would cause the
9 groundwater quality to degrade below drinking water standards.” This blanket statement is not
10 an adequate regulatory control for NDEP to rely on in determining to issue the Smith Valley
11 Permit and was therefore, arbitrary and capricious, an abuse of discretion, and otherwise not in
12 accordance with law.
13
14

15 The Smith Valley Permit language is exceedingly vague with regards to groundwater
16 monitoring and pollution control. NDEP’s decision to issue the Smith Valley Permit without
17 site-specific pollution control standards to ensure that SVD does not create a nuisance or
18 interfere with the beneficial use of water is arbitrary, capricious, an abuse of discretion, and
19 otherwise not in accordance with law.
20

21 Moreover, Permits cannot be issued under NRS § 445A.490, if “any discharge ... would
22 result in the degradation of existing or potential underground sources of drinking water.” NAC §
23 445A.819 defines “degrade” to mean, “to cause or create an increase in the amount or
24 concentration of any substance in an underground source of drinking water to an extent that (1)
25 A regulation prescribing standards for primary drinking water is violated; or (2) The Director
26 finds that the existing or potential municipal, industrial, domestic or agricultural use of that
27 water is impaired.”
28

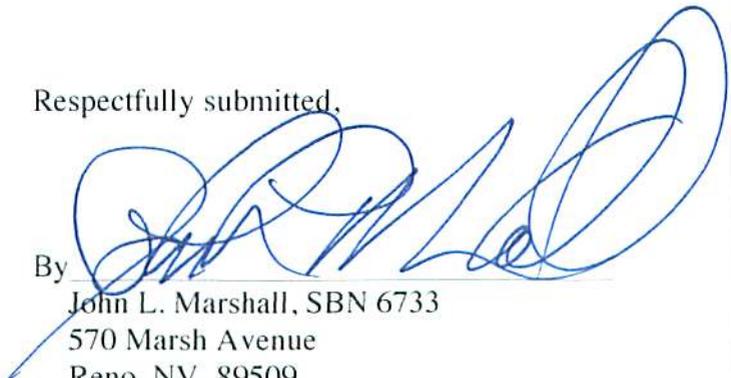
1 As a result of these deficiencies and those noted above in Sections III.A and B, NDEP's
2 decision to issue the Smith Valley permit was clearly erroneous, arbitrary and abuse of
3 discretion.

4 **IV. Conclusion**

5 A CAFO dairy represents an industrial behemoth capable of causing widespread
6 environmental pollution and adversely affecting rural communities. Extraordinary care must be
7 taken when permitting such facilities because of these very real and very dangerous threats. No
8 such care occurred here. In this case, NDEP was placed between a rock and hard place: the
9 Operator was recruited from California with promises of tax breaks and lax standards. The
10 Dairy then constructed its facility months before actually receiving a permit. The permit
11 reflected what the Operator built, not what NDEP's own guidance and common sense directed.
12 As demonstrated above, NDEP's permit was issued in violation of law, without meaningful
13 public participation, and contrary to the evidence before it. The Commission should remand the
14 matter back to NDEP with instructions to protect both Nevada economic and environmental
15 health interests.
16
17

18 Dated: May 8, 2015.

19 Respectfully submitted,

20
21
22 By 

23 John L. Marshall, SBN 6733
24 570 Marsh Avenue
25 Reno, NV 89509
26 775.303.4882

27 Attorney for Appellant SOS
28

CERTIFICATE OF SERVICE

Pursuant to NRS 239B.030, the undersigned affirms that the preceding document does not contain the social security number of any person. I hereby certify that the foregoing SOS's Opening Brief was served on the parties a copy thereof on the 8th day of May 2015, by electronic mail:

Valerie King, Executive Secretary
Nevada State Environmental Commission
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701
vking@ndep.nv.gov

Katie Armstrong
100 North Carson Street
Carson City, Nevada 89701
karmstrong@ag.nv.gov

Tom Haren
Patricia Spaine
AGPROfessionals
3050 67th Avenue
Greeley, Colorado 80634
tharen@agpros.com
pspaine@agpros.com



John L. Marshall